



Awarded by The Winston Churchill Memorial Trust

2023 Churchill Fellowship to investigate programs encouraging women and underrepresented others into skilled trade careers

International perspectives, methodology to address stereotypes and stigma, the design and execution of programs, and the practical solutions to implement in the recruitment, support and retention of women and underrepresented groups in male-dominated trades industries.

Report by Polly Britten Churchill Fellow



INDEMNITY CLAUSE

2023 Churchill Fellowship to investigate programs encouraging women and underrepresented others into skilled trade careers

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Signed: Polly Britten

Date: 18 / 11 / 2024



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ABOUT THE AUTHOR

After wanting to leave school at age 16, Polly Britten continued into her final school years without any clear direction or pathway, and a self-implemented weekly scheduled meeting with the school career guidance counsellor.

Polly strongly believes if the advice to partake in a program related to a career in skilled trades had been an option, with her stubborn nature and willingness to continually learn, she would have jumped at the opportunity.

Since leaving school, there has been plenty of time to reflect on past decisions and a continuous bounce between careers expanding knowledge, transferrable skills and ever fulfilling the itch to learn more.

After working in multiple male-dominated industries across the world, and returning to Australia in 2017, Polly started her career in education, promptly finding a passion for working alongside schools in offering opportunities to young people to expand their community network and skills. Polly has designed comprehensive hands-on learning, cultural and sports programs internationally and locally for young people.

After completing her Graduate Certificate in Logistics and Supply Chain Management in 2019 in addition to her Event Management Diploma, Polly recognised the connection between her training and the lack of exposure to industry for young people during their school years. Polly believes all young people (particularly women and minority groups) should have equal opportunity to pursue a career in any field of their choosing, through encouragement and guidance, therefore making informed decisions on their future.

Polly is passionate about the empowering of young women and minority groups through the “NextGen Tradies - Try a Trade” program, which reduces the barriers for young women to realise their career potential and the support available through Mentors for anyone looking at a career in non-traditional skilled trades. The success of Polly's programs, currently only running in the Ballarat region, has 15% of female participants re-considering their career paths at school or starting an apprenticeship post-school in a skilled trade career.

Polly's Churchill journey began after running a successful ‘NextGen Tradies – Try a Trade’ day at a local school, only to find out after the day that one of the female students had planned to self-harm before attending the program as she'd had no clear direction or pathway to consider within reach in her future. This grounding moment solidified Polly's mission to provide all young people with opportunities to try different jobs before the daunting moment of leaving school.

Polly likes to consider herself fluent in the difficult language of teenagers and plays translator in her current role as a Partnership Broker for Highlands Local Learning Employment Network.

Polly acknowledges the Traditional Custodians of country throughout Australia and recognises their continuing connection to land, waters and community. Polly pays respects to Elders past and present.



ACKNOWLEDGEMENTS

First and foremost, to the Victorian and National Selection Committees of the Winston Churchill Memorial Trust (Australia), thank you for seeing the importance of this project to the Australian community in addressing gender equality and for choosing to invest in me.

Secondly, I'd like to acknowledge my Team at the Highlands LLEN for allowing me this amazing opportunity to travel the world to expand our knowledge and expertise in the field of career exposure techniques to encourage women and underrepresented others into skilled trades. Also, to my parents who have been my biggest supporters through the entire process and continue to back me in all my career endeavours.

Thank you to everyone I met on my travels, who graciously shared their time and knowledge to provide insight and solutions to benefit the Australian community: Tamara Pongracz, Stacey Morrison, Rene Regetli, Mark Reid, Allison Zerr, Vanessa Miller, Desiree Raidoo, Tricia Berry, Sarah McLellan, Leaya Mullin, Mariam Parekhi, Ransford Lockhart, Amy Tompkins, Virgil Graham, Crystal Roberts, Chantal Paupin, Margaret Davidson, Jennifer Lambe, Chantal Paupin, Tanya Reddick, Adam Gilbert, Rosie Hessian, Angela Coldwell, Lindsay Chester, Jennifer Green, Nour Hachem, Pinky Sabhnani, Brandon Clarke, Priscilla McKenzie, Emily McCormick, Lisa Laronde, Paula Toulman, Jamie McMillan, Brandi Ferenc, Dee Durant, Mira Polski, Charlotte Thurston, Jude Waites, Derrick Otchere, Melissa Alexander, Shylah Nokusis, Pernille Brems, Duygu Cakir, Sini, Laura Heiberg, Anna Lary, Anita Webb, Frauke Kordtomeikel, Tabea Schroer, Gregory Makrides, Charmaine Charles, and Joshua Smith.

To my family and friends who provided moral support and a shoulder to lean on during my travels when homesickness kicked in and I got in my own head a little too much.

And finally, to the Women and Under-represented groups who need a clear pathway to follow, a helping hand to take that scary next step, and to the Tradeswomen and Men who are ready to catch them when they take that leap, having already paved the way, this is dedicated to you.



INTRODUCTION

“By working together, we can create a more sustainable and inclusive world for all.” – Mark Pearson, OECD Deputy Director of Directorate for Employment, Labour and Social Affairs

As I reflect on my journey as a Churchill Fellow, I am reminded of the stark reality that women in trades in Australia make up a mere 2.9% of the workforce ([BuildSkills Australia](#)).

When I departed Australia, the number of women in skilled trades was actually decreasing. It was this alarming statistic that prompted me to dedicate a significant portion of my research to the retention component of women in trades, exploring ways to address barriers, workforce culture, support for minority groups, incentives, and leadership opportunities.

Research conducted by Career Pathways of Women in Construction – [Boots on the Ground](#) (M. Turner, 2022) highlights the critical role that influencers, including parents, guardians, peers, and teachers, play in shaping young people's career aspirations. The study found that young women typically make their career decisions by the age of 14 (Year 8), while young men make their decisions by age 16 (Year 10).

Furthermore, [evidence suggests](#) that young people's perceptions of gendered roles are formed between the ages of 5 and 7 (Nick Chambers, 2018). If young people do not see themselves reflected in gender or culture by this time, they may not realize that these roles are opportunities for them. Therefore, addressing societal stereotypes is crucial in the early years of development.

My Fellowship provided me with the opportunity to travel across Canada, England, Denmark, Germany, and Portugal, exploring recruitment programs for women and underrepresented groups, curriculum-embedded career programs addressing stereotypes and stigma, complementary methods to our existing programs, and solutions to the barriers that face women and minority groups in the building, construction, and industrial industries.

I had the privilege of meeting program designers, educators, industry representatives, public servants, tradeswomen, and the next generation of up-and-coming advocate apprentices who generously shared their experiences, perspectives, barriers, and solutions in the crusade for gender equity. I also had the chance to participate in workshops that showcased a day in the life of a woman onsite, addressing worksite culture, and retention workshops that highlighted methods to retain a female workforce and males alike.

The four pillars of a successful program that I identified during my research are:

1. Exposure to different jobs (see what you can be)
2. Community impact
3. Mentoring
4. A supportive environment

My project aimed to discover best practices in program implementation, funding methods, inter-state roll-out, and embedding opportunities into the education curriculum.

A close scrutiny of statistics in each country enabled me to eliminate hairdressing, beauty, administration and office staff, allowing me to remove irrelevant statistics for non-traditional trades positions. The study tour allowed me to clarify the way statistics are compiled, therefore comparing on a like for like basis.

After removing these contaminants, a more realistic comparison is that these statistics confirm Australia is well behind countries such as Canada and Germany which are two to three times more successful than Australia and England and Denmark who also exceed Australia's numbers.

The statistics below represent the portion of women represented in non-traditional trades positions.

- Canada: 5% an increase of 3% in five year ([Statistics Canada, 2023](#))
- England: 5.7% (Office for National Statistics, 2020)
- Denmark: 4% (Laura.Heiberg, Log Ladies, 2024)
- Germany: 10.2% (Frauke Kordtomeikel, Kompetenzz Center for Technology, Diversity and Equal Opportunities, Germany, 2024)

These statistics serve as a stark reminder of the work that remains to be done to achieve gender equity in the trades. As we move forward, it is essential that we continue to prioritise exposure, community impact, mentoring, and a supportive environment to empower women and underrepresented groups to pursue careers in these industries.



AIMS

The aim of my project was to identify learnings that can be implemented in Australia to improve minority representation in skilled trade careers from currently approximately 2-3%, toward levels achieved by the world's best countries, while also learning the non-stigma-related language used in schools to avoid social norm discriminations.

I arranged an itinerary of meetings and experiences in selected best-practice countries hoping to gain insights into some of the strategies and approaches that may be causally related to the markedly better outcomes of minority representation in skilled trades.

My Fellowship aims have been established by the success of the NextGen Tradies program, now in its third year, and the need to learn more about best practices and successful methods of execution, in the need to scale up the program to meet the demand from schools and local community. I wanted to expand my knowledge on how we can make a broader impact for women and under-represented groups in considering a career in the skilled trades.

This Fellowship provided me the opportunity to research successful strategies on addressing societal stigma and stereotype shifts, industry movements and campaigns, and programs looking at recruitment and retention in the skilled trades for women and minority groups.

My aim of this project is to discover methodology in addressing stereotypes and stigma of gender dominated industries, looking at successful strategies in embedding career learning into education curriculum, and outstanding program models empowering women to take the next step towards a career in non-traditional trades.

Upon commencing my journey of discovery, it was brought to my attention the global need to plug the holes of women's retention in male dominated industries, while we continue to offer opportunities of employment in these fields. As a result, I decided to include in my research, the barriers women face in a male dominated environment, and the solutions available to employment agencies, companies and male employees to retain the female and under-represented groups workforce through marketing, promotion, benefits, and courses available to undertake.

With the roll out of the Building Equality Policy (BEP) in Victoria, I also wanted to explore how effective in recruitment and retention of women on-site quotas have been and what other methods might be useful to implement.

To address the narrative behind university being the primary pathway for young people and skilled trades to be the pathway for the academically challenged students.

I also want to address the lack of understanding of the link made in educating students on STEM and skilled trades careers simultaneously, a campaign Canada has done extremely well by including Skilled Trades and Tech in all promotional material.

Additionally, understanding there is a disconnect between Victorian Educators and Career Advisors, due to lack of personal development opportunities for Educators to understand the link to curriculum as well as limited resources and direct funding for Career Advisors to implement excursions and incursions during school hours. Past research has already showcased the limited relationship between industry and education and here, we can see two opportunities to address this disconnect.

With the national shortage of skilled workers upon us and the push for Net Zero Green Energy, which already exist in Skilled Trade workers, this report comes at a vital time in



economic environmental change. By closing the workforce participation gap between women and men it would increase Gross Domestic Product (GDP) [by 8.7 per cent or \\$353 billion by 2050](#). It will create an additional [one million](#) full-time equivalent workers with post-school qualifications (Economics, 2021) (Women, 2022).



ITINERARY

Dates	Organisation	Location	Primary Focus of Investigation/ Programs/ Events	Key Contacts
8 th - 10 th May 2024	British Columbia Institute of Technology (BCIT)	Vancouver, British Columbia, Canada	Trades Discovery for Women Program Jill of All Trades Event	Tamara Pongracz, Head of Department and Chief Instructor, Trades Access, British Columbia Institute of Technology
	Construction Foundation of British Columbia		In-School initiatives	Rene Regetli, Coordinator
	District Resource Teacher		Addressing unconscious bias	Mark Reid, District Resource Teacher
	BC for Women in the Trades		Be More Than A Bystander workshop	Coly Chau, Program Coordinator
	BCIT Electrical		Women's support initiatives	Anna Lary, Trades Teacher & Tradeswomen
12 th – 14 th May 2024	Saskatchewan Polytechnic	Saskatoon, Saskatchewan, Canada	Women in Trades Exploratory Workshops	Allison Zerr, Program Head Women in Trades & Tech (WITT), Saskatchewan Polytechnic
			Girls Exploring Trades & Technology (GETT) Camp	
	Women Building Futures		BHP Trades Readiness Program	Desiree Raidoo, Workforce Inclusion Lead, Women Building Futures (WBF)
	Office to Advance Women Apprentices		Support Programs	Vanessa Miller, Project Coordinator
	Osihchikewin Trades Training		Indigenous Trades Training	Shylah Nokusis, Founder & Director
15 th – 17 th May 2024	Career Connected Learning K-12	Fredericton, New Brunswick, Canada	Career Connected Learning K-12	Tricia Berry, Universal Design for Career Education, Education Support Services Department of Education & Early Childhood Development
			Centres of Excellence	Ransford Lockhart, Acting Director System Excellence and Innovation, Department of Education and Early



				Childhood Development
	New Brunswick Cooperative Education		Co-Op Program	Crystal Roberts, Experiential Learning Lead, System Excellence and Digital Learning, New Brunswick Department of Education and Early Childhood Development
23 rd May, 2024	Construction Association of Nova Scotia	Dartmouth, Nova Scotia, Canada	Building Futures for Youth (BFY) program	Tanya Reddick and Adam Gilbert, BFY Program Leads
	Skills Canada Nova Scotia		Women's initiatives	Jennifer Lambe, Partnerships Manager
27 th – 30 th May, 2024	Honour the Work	Toronto, Ontario, Canada	STEAMS Kits	Angela Coldwell, Founder & Director
	Skills Canada Ontario		WorldSkills Women and First Nations Initiatives	Lindsey Chester, Young Women's Initiatives Program Manager
			WorldSkills Trades & Tech unit & Government Advisor	Jennifer Green, Government Ministry Advisor & Director of Competitions and Business Development
	Build a Dream	Windsor, Ontario, Canada	Recruitment, retention and support Women's programs	Nour Hachem, Founder & Director Pinky Sabhnani, Lead Employment Programs
	Conestoga College	Cambridge, Ontario, Canada	Jill of All Trades program	Rosie Hessian, Chair, School of Interdisciplinary Studies, Director, Jill of All Trades at Conestoga College
	Ministry of Labour, Immigration, Training and Skills Development		Women's initiatives	Priscilla McKenzie, Senior Manager, Program Delivery Support Branch / Employment and Training Division
	ApprenticeSearch.com		National search engine for Employers and Employees	Emily McCormick
	Fair Trades Toolbox		Employer support workshop	Brandi Ferenc
Kick Ass Careers	Early childhood education methodologies		Jamie McMillan & Dee Durant	



	The Powerhouse Project, RSG International & Canadian Association of Women in Construction		Tradeswomen retention and support initiatives	Lisa Laronde
	Building Up		Building Up & Walls to Bridges Ambassador	Melissa Alexander, Tradeswomen Ambassador
	Ontario Youth Apprenticeship Program (OYAP)		Youth Apprenticeship Program	Anita Webb, Employment Program Consultant, Program Delivery Support Branch
	Office of Women's Social & Economic Opportunity in Ontario's Ministry of Children, Community and Social Services		Women's grant initiatives and support	Charmaine Charles, Manager, Programs and Integration Branch/Office of Women's Social and Economic Opportunity
	Tenaris		Company best practices & initiatives	Joshua Smith
4 th – 5 th June, 2024	Education & Employers	London, England	Redraw the Future & Primary Futures program, Inspire the Futures	Charlotte Thurston, Director of Programmes, Jude Waites, Senior Primary Schools Engagement Coordinator, Derrick Otchere, Coordinator
10 th – 13 th June, 2024	Tuborgfondet	Copenhagen, Denmark	Youth initiatives	Pernille Brems, Program Manager – Labour Market
	Divers		Boss Ladies	Duygu Cakir, International Advisor & Project Manager
	Log Ladies		Log Ladies women's initiatives	Sini & Laura Heiberg
19 th June, 2024	Kompetenzzentrum Technik-Diversity-Chancengleichheit	Bielefeld, Germany	Cliché Free initiative & Girls/Boys Day	Frauke Kordtomeikel, Service point of the Cliché Free Initiative & Scientific specialist & Tabea Schroer, Career and life planning Project management
25 th – 26 th June, 2024	Europeak Association of Erasmus Coordinators Congress	Porto, Portugal	STEAME Academy	Gregory Makrides, Professor of STEAME Education



KEYWORDS

DEI – Diversity, Equity and Inclusion

School boards, School Districts, School divisions, School county: Multiple high school areas across Canada

Skilled Trades/Trades – Non-traditional trades industries and jobs

STEAMES – Science, Technology, Engineering, Arts, Maths, Entrepreneurs and Skills

TVET - Vocational Education & Training institutions

VET – Vocational Education & Training

VICLLEN & NSW REIP – Victorian Local Learning and Employment Network and New South Wales Regional Education and Industry Partnership (liaison between schools and industry)

Vocational Training & Education Organisations – Privately funded Registered Training Organisations (RTO) and Government funded TAFE



EXECUTIVE SUMMARY/ REPORT OVERVIEW

The male-dominated trades industry (the “trades”) is facing a perfect storm of challenges, a looming labour shortage, a lack of young people pursuing careers in the trades, and a failure to recognise and promote the existing jobs and upskilling required to meet the demand for sustainable infrastructure projects. To help enhance the opportunities available in the trades, we must take a comprehensive approach to address these challenges.

Key Challenges:

- 8% of trades labour force are expected to leave the industry by 2030, and fewer young people pursuing careers in the trades ([Australian Government Department of Education, Skills and Employment, 2020](#)).
- Infrastructure, green energy and net zero national focus with leaky pipeline, skills gaps and unsustainable workforce.
- Tradeswomen being re-directed from trades job careers by society.
- Programs operate as a siloed approach between states, vocational education, non-for-profits and industry bodies.
- Misconceptions and stereotypes cemented in young people between the ages of 5 and 7 as well as emotional intelligence, and career pathways are decided by young women between the ages of 8 and 14.
- Complex policy landscape means that educators are limited in their ability and resourcing to understand the link between education and career pathways.

Strategies to Address the Challenges:

1. **Invest in Education & Training through Partnerships and Collaboration:** Develop programs in partnership with education institutions, industries, non-for-profits, and state and governments to bridge the skills gap in state-wide and national programs for women and minority groups.
2. **Demonstrate the Trades as an attractive Career:** Highlight the trades as a fulfilling career that contributes to sustainable development goals.
3. **Address Misconceptions and Stereotypes:** Address the misunderstanding of STEM jobs and career opportunities in education, and address stereotypes and unconscious bias from daycare to professionals.
4. **Career Connected Learning:** Include career connected learning into all classrooms and education settings from kindergarten to high school, enhancing young people’s fundamental skills and dispositions such as grit, perseverance, innovation and curiosity while addressing transferrable skills and life skills with industry involvement.
5. **Diversity, Equity, and Inclusion:** Include diversity, equity, and inclusion into conversations throughout tertiary education and employment.
6. **Marketing and Recruitment:** Market to minority groups, highlighting their inclusion on the tools while completing the task, while promoting company policies and support programs.
7. **Support, Career advancement and Mentorship:** Provide clear pathways with supportive initiatives for career progression.

The target audience for this report are educators, government bodies, industry councils and industry alliances as well as companies, policy decision makers and individuals working in the field.

1) INVEST IN EDUCATION AND TRAINING THROUGH PARTNERSHIPS AND COLLABORATION

In understanding inter-state roll out of successful programs, I wanted to learn more about collaboration methods and partnerships.

British Columbia Institute of Technology (BCIT) women in trades presence at the institute started by “core” funding a Women in Trades Coordinator position in 1987, to provide advocacy and diversity training for students, faculty and staff, as well as input into BCIT policies.

The **Trades Exploration for Women** program has been a regular full-time program offered since 1995. Tamara Pongracz, a qualified tradeswoman, gave me an in-depth dive into the coordination and execution of the program and why it’s so successful.

Some of the industry donated machines for BCIT aerospace technology students.

Trades Discovery for Women program is a 16-week program comprising of up to 16 students and up to four cohorts in a term depending on human resources and physical plant availability. Recruitment includes individual career counselling undertaken through the BCIT High School Partnership programs to find suitable candidates as well as recruiting through Girls Exploring Trades and Technology (GETT) camps. GETT camps bring primary school aged young women to the institute for one-week long “day-camps” where they build go-carts under the support and supervision of tradeswomen. Also “Spend a Day,” where everyone can join a program for a day, in events such as “Jill of All Trades.” The success of the program has created word-of-mouth marketing, that provides the bulk of the participants.



BCIT Women in Trades outreach in community includes presentations to secondary school “Career Days,” Girls in Science, Technology, Engineering, and Mathematics (STEM), community groups, women’s penitentiaries, Skills Canada BC, Girl Guides of Canada, and events such as Girls Fly too.

Building on basic educational requirements and life experiences, the course is structured to combine the acquisition of employability, life, and technical skills to structure realistic and attainable personal training pathways, individualised for each participant.

Trades Discovery for Women provides women access to trades technical training, and apprenticeship/entry level employment opportunities. It is comprised of in-class

“The Trades Discovery for Women program is a consciously andragogical program integrating cognitive, psychomotor, and affective approaches to provide participating women full access of up to 30 trades and technical training options.” – Tamara Pongracz

sessions as well as hands-on activities training. A key component of the program is an integrated trades research project directed by the student within their chosen field or industry. Their own search for knowledge, expertise and individual contacts allows them the opportunity to realistically assess the actuality of their educational and/or employment choice.

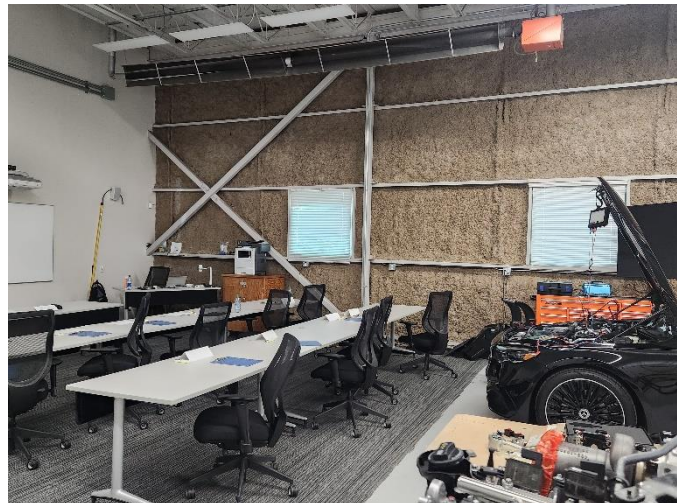
The program also involves work experience that relies on active commitment and participation by both businesses and union organisations. The work experience provides an opportunity for the participants to experience the day-to-day realities of a skilled trades workforce and contributes to the equity, diversity, and inclusion efforts of the host employer.

Host employers seek out graduates for permanent employment, further strengthening BCIT's connection to industry. Trades Discovery for Women program also employs tradeswomen as guest instructors (many are Trades Discovery Alumni). By providing professional development opportunities for tradeswomen to transition into educational careers, they have increased the number of female BCIT trades faculty through mentorship.

BCIT benefits from a constant infusion of industry funding including scholarships for the Trades Discovery for Women program participants and industry led donations such as electronic vehicles, tools and machinery to stay up to date with current industry practices.

Inside the automotive shop at BCIT,
vehicles donated by industry

The program has been the grateful recipient of funds to support participants as they pursue viable careers in skilled trades that improve the economic condition of the participant, their families, and their communities. BCIT offers training for a combination of students from paid participants to subsidised and free participants, depending on the individuals' circumstances. Benefits include a transport pass, dental and optical.



Every course conducted at BCIT includes an industry representative and advocate on the Board, to keep course curriculum aligned to industry expectations.

The Trades Discovery for Women program has demonstrated a strong track record of success, with a high percentage of graduates offered employment in the trades directly after completing the program. The program's emphasis on self-discovery, industry alignment, and credits earned has positioned it as a valuable stepping stone for students looking to launch their trades career. With a completion rate of 70-80% and less than 1% dropout rate, the program has shown its ability to engage and retain students. Furthermore, the program's credits, equivalent to an Associate Certificate, provide a significant advantage for students seeking to pursue further education or training in the trades. Overall, the Trades Discovery for Women program is a well-designed and an effective program in making a positive impact on the lives of its participants.

I also visited Saskatchewan Polytechnic to learn more about their camps and workshops for women, as well as their collaboration methods with industry bodies.

Saskatchewan Polytechnic College offers a range of opportunities for women of all ages to partake in skilled trades opportunities. **The WITT Powered by Orano program (Women in Trades and Technology)** works with instructors, employers, professionals and non-profits to build curriculum for camps, workshops and mentorship programs that teach women valuable skills, encourage women to think about different career options and address barriers that may limit women in trades and technology careers.

Photo of Saskatchewan Polytech Certificate Welding students Elizabeth Caron and Reese Adams inside welding shop.



The WITT program originally started as a support service for young women, but thanks to industry funding and involvement, the program has expanded to now include Young Women's Conferences for ages 13-15 (years 8 and 9), Indigenous Focussed Tours & Conferences, Exploratory Sessions, Weekend Workshops (ages 15+) and Summer Camps for ages 12-15 (years 6 to 9).

To promote a range of trades to participants, well known trades such as a welder, are run alongside lesser-known trades such as a Refrigeration Technician. Some of the programs also focus on either having a construction theme or industrial theme, to encourage research prior to commencement.

Some of the successful weekend and evening programs encourage mother/daughter participation, and Girl Guide groups to attend.

Program participants are also offered scholarship opportunities, mentoring opportunities, recognition of life skills that could be used at home, and a Statement of Achievement or Attainment to add to their resume portfolio.

Recognising the multiple vocation education institutions the Jill of All Trades program is held at across Canada, I also wanted to learn about the successful methods this program utilises for best practices.

Jill of All Trades is a North America wide non-for-profit organisation aiming to encourage and empower young women to pursue careers in under-represented and non-traditional occupations in the trades and technology sector. Launched in 2014 by Conestoga College, the program has since expanded to deliver over 120 events across Canada and the USA.

Rosie Hessian, one of the founders and program designer talked me through the program and feeder programs that lead into Jill of All Trades.



Jill of All Trades is designed for secondary school-aged young women, aged 15-18, and provides a hands-on, interactive experience in various trades and technologies. Participants can try out up to three different trades and tech activities throughout the day, and interact with industry representatives, pathway services, and in-school programs to expand their career networks.

The program has seen significant success, with 90% of participants deciding to pursue an apprenticeship after attending the event. The program has also led to an increase in the number of females taking up facilitator positions at Conestoga colleges.

The program is made possible through partnerships with industry, school boards, educators, government bodies, and community services. Funding is also provided by government bodies, including the Ministry of Labour, Immigration, Training and Skills Development.

With over 4,000 young women having participated in Jill of All Trades across North America by the end of 2024, Jill of All Trades is a recognised leading program for qualified Tradeswomen Ambassadors attendance (approx. 260), to showcase the See What You Can Be component.

Additionally, 44 different companies and pathway experts exhibit their companies during the event as career pathways which in turn provide the opportunity for young women participating to expand their career networks.

To complete the leaky pipeline of participants into the Jill of All Trades event, T&T is also offered for ages 13-14 (year 7 and 8), as Trades & Technology days before attending Jill of All Trades – three are run every year across different campus', and Trade-U-Cation is also offered to educate teachers and careers advisors about trades and tech with hands-on trades training full day program.

Overall, Jill of All Trades is a successful program that is making a positive impact on the lives of young women and encouraging them to pursue careers in the trades and technology sector across the continent.

Another program bridging the gap in the form of collaboration is **ApprenticeSearch.com**. Connecting employers with potential candidate apprentices across Canada.

Addressing one of the biggest barriers in finding an employer, ApprenticeSearch.com offers a comprehensive free online job/candidate matching platform with an exclusive focus on apprenticeships and trade positions Canada-wide. This platform and services offer both support and guidance to employers and apprentices.

The platform also offers free resources promoting trades as a viable career pathway, while educating the community.

Year 9-12 students at the
Jill of All Trades Day





Emily McCormick, the Program Coordinator and Facilitator at ApprenticeSearch.com attends the Jill of All Trades events to promote the non-for-profit social enterprise platform as a one-stop shop with a focus on job awareness, step-by-step guide for students, youth, educators and parents on apprenticeships, partnerships, financial supports available, mentorship and workforce development.

ApprenticeSearch.com even offers a monthly get together for women in skilled trades to share their stories, advise, guidance and insight for newcomers and qualified tradespeople alike. This network gives tradeswomen an opportunity to feel connected with others as they may be the only person of their gender on the job site or in their class in vocational education. This group hosts guest speakers excelling in their male-dominated field, but also provide an opportunity for other women to ask questions generating a feeling of inspiration by another women's journey.

ApprenticeSearch.com website, image
courtesy of ApprenticeSearch.com





2) DEMONSTRATE THE TRADES AS AN ATTRACTIVE CAREER

With research establishing career pathway decisions being made by young women by the age of 14, I visited multiple organisations to learn more about their encouraging initiatives.

In Germany, under the Kompetenzz Centre an Association of technique, diversity and equality, The Girls Day initiative was founded in 2001 and is recognised as an opportunity for young women, starting at age 10 (year 5) but primarily targeted to ages 14 & 15 (years 8 and 9) to experience a day in an industry underrepresented by women, every year.

With the success of Girls Day, Boys Day was also started 10 years later in 2011, and the programs are both run nationally, with the Boys Day initiative focusing on industries under-represented by men such as healthcare, aged care, daycares and education.

The Girls and Boys Days are funded by two Federal Ministries, Ministry for Family, Women and Youth, and the Ministry for Research and Education.

Tabea Schroer, the Project Lead, walked me through the project to understand more about how the initiative has been so successful, and what could be mirrored in Australia.

Both initiatives work together simultaneously, but the initial goal was to get more young women into STEM jobs. Recognising the under-representation of women the program offers one day per year where young women get a chance to go into companies to meet female role models, hear about their experiences, while addressing the “See what you can be” evidence driven component. The role models openly discuss any barriers the young women may feel are preventing them from pursuing their field of interest or societal barriers.

The Girls Day program includes a range of practical activities completed by the young women during the day, such as a new company creation, innovation or programming design. Schools also recognise the one day per year as an exemption day from school for all participants in the Girls Day program. Students find their placement opportunities for Girls Day and Boys Day using an online platform that works to connect through common interests’ companies and young people, providing an overview of the day’s activities at each company. In 2024, 135,455 placements were undertaken by young women with over 150,000 offered by companies. Recognising only 25% of industries are over-represented by women, the Boys Day initiative has less placements available. In 2024, the Boys Day offered 44,405 placements with over 5,000 companies involved.

With over 20 years success, there are over 10,000 companies who take part in the Girls Day program every year.



"Have courage! Try it out!"
Laura Wedel, VAG Transport Corporation

"I think it's important to give these kinds of spaces to young people where they experience a job, or a profession among girls, or among boys, because it's still a different atmosphere than when it's done in mixed (gendered) groups. One day we won't only talk about professional orientation, we'll talk about the gender aspect of the labour market." - Tabea Schroer, Girls Day



100 girls at 5 locations
Julian Lilie, Brose



The yearly date differs but is set as the fourth Thursday in April, so the schools and companies can plan in advance, and no exams or school programs take place on that day across Germany.

Schools encourage young people to partake in this program due to the long history of the program's success. Kompetenzz Centre an Association of technique also provides e-learning modules for teachers to educate students about gender segregation in the labour market, but it doesn't have the same impact as attending an in-person placement day, as part of the program.

The Girls Day and Boys Day program is included in some federal and state curriculums to encourage school involvement.

Evidence has shown an increase in the under-represented genders in the industries, now over 40% of the minority gender, as one of the results of the Girls Day, Boys Day initiative.

The enthusiasm of young people for Girls' Day and Boys' Day remains enormous: 95% of participating girls and 94% of participating boys found the 2023 action days very good or good. Studies and surveys completed by the Team at Kompetenzz Centre an Association of technique, diversity and equality as part of the Girls Day and Boys Day programs found that even though learned gender stereotypes still play a relatively common role in career and study choice, the majority of young people want an equal division of tasks for almost all housework and care work in a partnership.



"Girls'Day is an important contribution to changing the social and structural factors in career choice"

Annika Kühnle, kühnle'waiko

The **Construction Foundation of British Columbia** has also recognised school engagement opportunities are vital in encouraging pathways for young people into the skilled trades. Construction Foundation of British Columbia offers immersion Try a Trade programs which only run for 40-50 minutes (one period), include a presentation by a tradeswomen and can include up to three sessions across the school and year levels throughout the day.

Young people can build rapport and trust with Construction Foundation of British Columbia Facilitators while developing new skills in metal work with such items as building aluminium bowls and copper bracelets. For larger class based skilled trades projects, Construction Foundation of British Columbia provides schools the opportunity for young people to showcase their work to trades professionals and who provide project feedback. By providing this industry connection into education, it keeps school education current with new practices and technology relevant to industry and industry can monitor student talent and provide support.

"Industry recognised skills shortage so more likely to open doors for school engagement opportunities" – Rene Regetli, Construction Foundation of British Columbia

Personal development opportunities are also provided to teachers and education assistants to expand their knowledge of the skilled trades and to build a connection to classroom curriculum. Three to four personal development sessions are run yearly, including the opportunity to partake in workplace tours.



The Construction Foundation of British Columbia also offers a summer camp for young women aged 10 to 13 to partake in workshops building bee hives, iPad holders, ring boxes and toolboxes for 4-5 days, with one day as a trade sampler day. The Foundation is also paving the way by running a First Nations summer camp for all genders, focusing on at risk youth aged 14-18 with a focus on electrical, plumbing and culinary skills.

Another successful school engagement program enticing women to consider the trades is **Techsploration**. A four phased program running in the regional and rural areas in Nova Scotia and Prince Edward Island. This program was established to empower young women and gender diverse students to explore careers in science, technology, trades and engineering.

Margaret Davidson, Program Manager and an alumni of the Techsploration program of 1998, walked me through the four-phase approach of the program.

Phase one, Techsploration offers ages 15-18 (years 9 to 12) young women and gender diverse individuals, the opportunity to meet role models in-person or virtually and attend worksite tours and hands-on activities. In phase two students are then asked as a school team to share their knowledge and experiences with the students at school in a unique presentation, alongside all the role models running activity stations with props, tools of their trade and information about their careers. In phase three, all participants are encouraged to attend a 2-day event which involves student, teachers and role models participating in exciting inter-active workshops and presentations. This event gives students an opportunity to expand their networks further with more introductions to role models. The final phase, is an annual alumni conference for ages 16-18 (years 10, 11 and 12) who've already participated in the program, to meet more role models and gain further knowledge and skills in hands-on workshops. All the presentations completed by participants based around a role model are about encouraging creativity in the form of videos, songs and dances in addition to the tradition models, while showcasing their role models career from a youth perspective.

All Techsploration graduates are encouraged to stay actively involved in the program by participating in the annual "launch" conference. Many alumni have gone on to support the events or act as role models for the program and 60% of participants continue into skilled trades and STEM careers after completing the program.

The focus of the program is to enhance young people's networks while including diversity in the form of immigrants, culture, First Nations people and gender equality while impressing the importance of science and math in high school programs. The program also builds participants soft skills, such as public speaking, team building and problem solving along with career knowledge and pathway possibilities.

Construction Foundation of British Columbia bracelet made during in school workshop for young people



"Teachers have been a part of the program for 26 years, because they believe in the program" – Margaret Davidson, Manager, Techsploration



Young women are inspired to attend the program with the success of the video series “Women in Action” and “Power in Possibilities” which has expanded out across the world as a resource for teachers and families to open young women’s minds to pathway opportunities.

Another program strengthening young people’s awareness of pathways into trades is the **Canadian Cooperative Education (Co-Op) model**. Commencing in early 2000s, the Co-Op program is backed by the Department of Education as a school to industry link to magnetise young people’s understanding of jobs through courses, accreditation and placement opportunities within industry.

"Careers embedded in subject learning and through programmes of co-curricular activities strengthen relevance, diversify resources and provide real contexts for learning." - Collins and Barnes

Co-Op is offered to students throughout secondary school as an alternative core subject. Due to maturity levels, mainly ages 17-18 (year 12) students undertake the program to expand their job opportunities and outcomes post school. Co-Op is a standalone subject in curriculum, similar to other core subjects such as math or science, with credits accumulated through hours undertaken in class. For Example, three periods of Co-Op (morning only) equal three credits, two periods (afternoon only) equals two credits towards final year assessment and graduation.

The Co-Op program is available in four provinces across Canada; Alberta, British Columbia, New Brunswick and Nova Scotia, and Department of Educations Enhanced Co-Op Consultant, Crystal Roberts, provided an overview of the program.

Students have to apply for the positions with their resume, and interview with the employer before final decisions are made by the employer. Co-Op covers 2.5 weeks in the classroom with a Co-Op teacher learning about writing a resume and a cover letter, workplace policies and employer expectations, workplace health and safety, self-advocacy in the workplace, workplace etiquette, communication skills, transferable skills with the opportunity to complete training courses, followed by industry placements.

"You cannot do a skilled trade without having the STEM knowledge." – Crystal Roberts

The next 10-11 weeks as half day morning or afternoon placements have job specific tasks for the student to complete alongside their paired onsite mentor. Students can combine overseeing of tasks with guided completion of tasks, and once confident, undertaking a task or project alone. The placement is used for skill and confidence building.

There is a mid-point checklist for employers to complete to make sure the student is on track to complete the program. If not, the student is moved to another host employer. There is no payment for students, but they do have the opportunity to complete their Co-Op placement after school hours which would include onboarding as an employee, to be paid with their host employer.

At the end of the placement, students return to the school classroom to culminate their experiences, tasks and activities, skills and career pathways for a week, then present to their class and teacher during the second and final week.

As students are expected to complete 10 reflective journals during their placement, which are collected and marked weekly by their Co-Op teacher, the students have interesting



information to refer to in their final weeks. There are also a maximum 30 students per Co-Op teacher to make the program feasible.

Schools need to register with the Department of Education to be a part of the Co-Op Program, but it has been widely recognised as a successful program, with an example 90% of heavy equipment placements landing students summer holiday employment.

To encourage participation, schools run information sessions for ages 16-18 (years 10, 11 and 12) every year, and personal development workshops for teachers, so they understand the program and can promote it to their students. There is also a push from parents for their young people to participate in Co-op due to the long-standing success of the program, and for those students who may find school academically challenging.

Disengaged students are also incentivised by increasing their attendance rates to better their opportunity to get into the Co-Op program.

The complimentary program available to Co-Op students is the summer holiday program, with different titles across the provinces: **New Brunswick Teenage Apprenticeship Program (NBTAP), Ontario Youth Apprenticeship Program (OYAP) and Construction Association of Nova Scotia (CANS); Building Futures for Youth (construction) and Test Drive (automotive) programs.**

NBTAP, OYAP and CANS offers young people from age 15 (year 9) the opportunity to apply for the summer employment program completed during the school holidays.

I met with both the Skilled Trades Learning Specialist, Virgil Graham representing New Brunswick Teen Apprenticeship Program (NBTAP) and Construction Association of Nova Scotia (CANS), Building Futures for Youth (BFY) Project Leads, Tanya Reddick & Adam Gilbert.

The NBTAP program has been setup in partnership with the Apprenticeship Branch, consisting of 150 young people in years 10, 11 and 12 (ages 16-18) in 2024. The Pre-Apprenticeship Manager signs partnerships with companies to support the program, with promotion conducted through teachers in schools as NBTAP Champions, one per school, who also introduce a wide variety of activities to get students engaged and interested in the skilled trades.

The NBTAP program provides apprenticeship hours towards high school accreditation with graduation credits, as an all-encompassing part of the school curriculum. This model provides consistency amongst young people with students allocated a project to complete during their 10-week summer holidays program. Safety is a key component of mandatory training that precedes the paid summer work term including certification in Occupational Health and Safety (OH&S), Workplace Hazardous Materials Information System (WHMIS) and First Aid. Some learners are even trained in fall arrest (Control the risks of falls Unit) if it is required for the job, but this is not standard training provided to all.

In comparison the CANS, BFY Free program for young people aged 16+ (years 10 and 11) offers a fully supervised 6-week summer employment program, which also includes 6 days of safety training with safety tickets such as white cards, working at heights, fall protection while also completing hazard identification. All PPE is also provided to participants.

"Youth getting exposure to as much as they can, as early as they can is the key." – Tanya Reddick



The following summer employment includes a salary of no less than minimum wage, with the opportunity to undertake time and a half, or double time. The final two weeks of the program, the group returns together for reflection and an outcomes de-brief.

To apply, students must undertake an online application including producing a resume and cover letter with references, then undertake a panel interview for positions. Students are also expected to meet and be interviewed by their host employer, prior to commencing the summer employment program, as previous experience has shown that young people are more likely to complete the summer program, if this interview takes place.

"Finding the sweet spot between outside comfort zone to grow and

The Nova Scotia Department of Education supports the program in partnership by providing summer supervising teachers, who visit students once a week which in turn provides extra credits for teachers and days in lieu the following school year. The Department of Education covers all insurance for the students with their involvement in the program, much like our Work Experience and Structured Workplace Learning School to Work program in Victoria. Funding is also provided in partnership with Nova Scotia Apprenticeship Agency.

BFY Historical Datasets

	Program Graduates	Gender - Female	Gender - Male	# of Host Employers
2008	7	1	6	6
2009	33	4	29	22
2010	95	8	87	55
2011	67	8	59	43
2012	76	13	63	52
2013	74	10	64	53
2014	75	10	65	56
2015	75	9	66	53
2016	73	14	59	53
2017	74	10	64	60
2018	74	21	53	61
2019	84	19	76	77
2020	NA	NA	NA	NA
2021	88	16	72	57
2022	68	11	57	52
2023	80	12	68	60
2024	83	13	70	68
Totals	1126	179	958	828

***Please note the program was canceled in 2020 due to COVID.

Students are enticed by this form of hands-on industry learning as they can gain credit hours to graduate school with also apprentice hours post school. To satisfy the program requirements, students need to complete 200 hours or five weeks employment. In 95% of cases, students are employed by their host employer post program. 16% of the BFY participants successfully completing the 2023 program were young women.

"By the end of five weeks, young people have proven themselves as a contributing member onsite." – Adam Gilbert

With the success of the BFY program, host employers return year after year. Host employers reported feeling supported with the initial first 10-day pulse check, site inspections, activity and task suggestions as well as face to face meetings with BFY Project Leads and students. The BFY program leads also conduct exit interviews with all program participants to generate honest feedback.

On completion of the Building Futures for Youth program, students' achievements are recognised at a graduation ceremony with local dignitaries, host employers and teachers, for an in-person celebration.



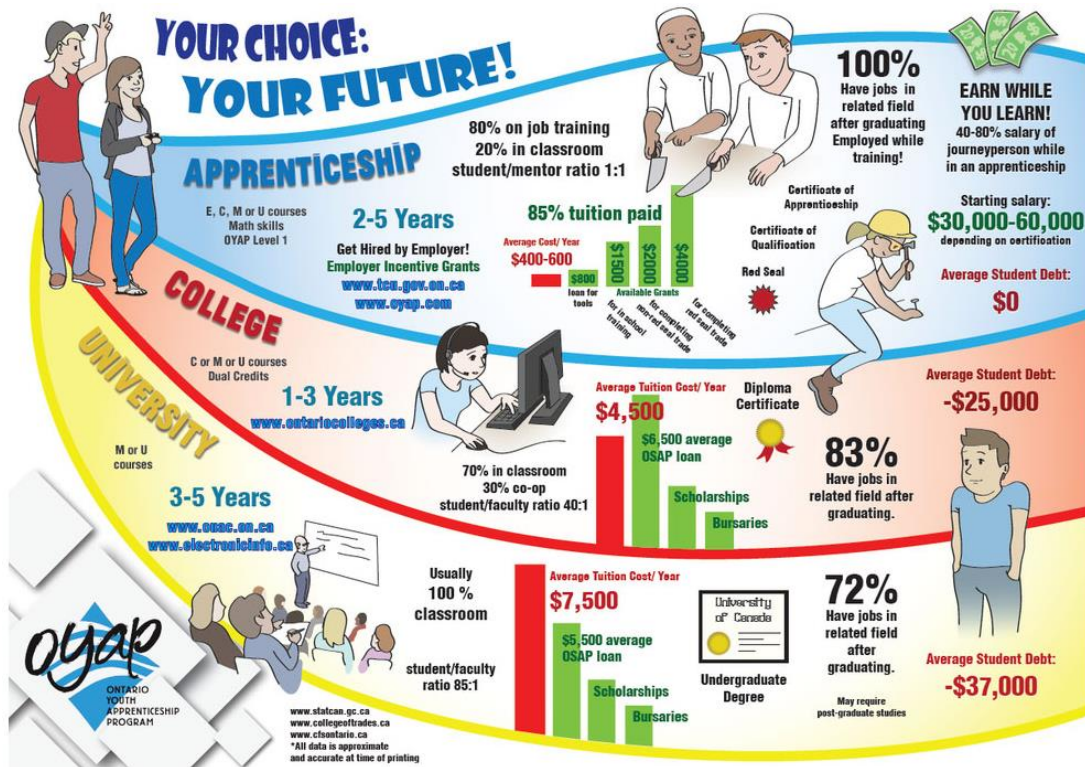
Tanya is also a part of the Nova Scotia Mentorship program with BFY for young women and African Nova Scotia youth, who meet three times throughout the program to entice successful completion.

“We impress upon the students this is universal training, therefore have an open mind to the possibilities that might spark an interest.” – Adam Gilbert

The feeder program for BFY is the **Options and Opportunities (O2) program**, has increased in popularity in the last five years. The Options and Opportunities (O2) Program chosen from age 15 (year 9) for commencement at age 16, in year 10, is a three-year program designed to help students navigate towards a career pathway in an environment that responds to their learning needs. Beginning in year 10, students in O2 must successfully complete five core courses (Career Development 10, Community Based Learning 11, as well as three Co-operative Education credits) to receive their O2 Certificate. Due to O2 smaller class sizes, students get more opportunities for industry visits, and activities relating to careers during secondary school. They’re also paired with similar teachers for the duration of the three-year program.

With collaboration across programs highly visible in Canada, Tanya is a prime example. Tanya, a member of Techsploration’s Planning Committee, and role model, reaches out to other demographics including the Indigenous youth, newcomers to Canada, and non-identifying youth to knock down any barriers they encounter.

OYAP Flyer provided to all young people at Careers Fairs and by Career Advisors





In promoting trades as an attractive career path for Indigenous People, Shylah Nokusis, a qualified tradeswomen who started **Osihcikewin Trades Exploratory Training** in Saskatchewan in 2021, offers exploration programs within Indigenous communities for women, youth and all genders.

Shylah recognised the lack of discussion around trade related pathways within her local communities and designed programs she would have enjoyed growing up. After volunteering as a tradeswomen at the Girls Exploring Trades and Technology (GETT) summer camp at Saskatchewan Polytechnic, Shylah became aware of the local impact these programs could have in her own community.

Shylah's programs are designed to provide youth opportunities they may never have tried before by combining her skills of training and supporting people to repair houses in their local Indigenous communities. Shylah's company offers individuals an opportunity to fix up their local community through renovations while receiving hands-on training. Her program is 100% hands-on learning, no theory, as most Indigenous learning is hands-on. She has designed her programs to suit Indigenous participants as prior experience taught her that theory was a major factor in non-completion of programs by participants. The safety portion is the only portion delivered with videos and "theory". Shylah's model is "I'll show you once, then it's your turn." Her training model is a part of land-based-learning that is being brought back to Indigenous communities for youth.

Shylah dedicates a quarter of her year to home renovation's, a quarter of the year to special youth projects such as building a youth bunk house and the remaining half of the year for women and youth programs.

The Indigenous communities of Canada have been waiting years for a solution to the housing issues and Shylah has identified that gap by encouraging more trades careers in young people locally, therefore encouraging communities to build their own workforce.

Shylah also recognises the inter-generational trauma is still prominent which can act as mental and spiritual barriers in chasing their dreams. Shylah makes a point that all efforts and work conducted is getting noticed and praised, therefore breaking the barrier in receiving compliments. Her programs teach participants to believe they're worthy and they can achieve what they put their minds to. It's all about changing mentality from negative to positive.

"During covid, (I reflected on) what can I do to help people on my own community? What skills and knowledge do I have that I can not only teach someone but give them hope and something to look forward to, so they don't turn to drugs or self-harm?" – Shylah Nokusis

"I want to give other people a chance to try the trades, where you can make a lot of money and not kill yourself working, but there are so many doors of opportunity that the trades can lead you into. My hope that (participants of) the program, go out, get their red seal, and come back to their communities to help people fix up their homes as good quality homes." – Shylah Nokusis



By completing these training programs in Indigenous communities, participants also have their support networks close by such as childcare, transportation and family members. This program offers a sense of belonging, and a sense of community while addressing mental health and empowerment for young people. Shylah is also addressing the suicide rate in rural communities and young people with her programs.

Shylah's training also addresses racism as a known problem in recruitment and retention of Indigenous employees outside of Indigenous communities. In addressing this, Shylah is currently working on an Indigenous mentorship program with the Carpenters Regional Council Local 1985, a Saskatchewan Union, to address recruitment, retention and advancement of Indigenous People. Shylah also includes reality talks in all her programs, and how to approach the issue of racism and stereotypes in a professional manner.

Although Shylah's programs are not affiliated with any Vocational Education & Training accreditation, her training programs are a gateway opportunity for young people to consider career pathways in any field by building confidence and resilience. And with her wide network of tradespeople, training institutions, employers and affiliated companies she can connect the interested participants with further opportunities if they chose to remain in the field.

Shylah's vision is truly inspiring and addresses the systemic barriers that Indigenous people face when leaving their communities. The lack of support systems, such as housing and childcare, can be a significant obstacle to success. Moreover, the prevalence of racism and microaggressions can be devastating, causing individuals to feel unwelcome and undervalued. A single rude comment or tone of voice can be the tipping point for an Indigenous person to leave a program or trade. It's crucial to create a safe and inclusive environment that acknowledges and respects Indigenous people. Shylah's goal of empowering Indigenous women to start their own construction companies is a powerful step towards creating positive change. By providing mentorship and job opportunities, she can help break the cycle of poverty and create a brighter future for Indigenous communities.

Shylah Nokusis with her Apprentice Ocean repairing local community houses



“Some Indigenous people have never left reserve so it can be a culture shock working with non-Indigenous people.” – Shylah Nokusis



In Denmark, young women can take part in the Girl Boss Garage for ages 9-15 under the Divers – Boss Ladies initiative. In groups of 10-20, young women participate in “building camps” where they can test their skills in a safe and supportive environment by building small pieces of furniture and practical products from recycled materials. These workshops take place across Denmark in community, private and school settings. All projects at school relate back to craft and design classes.

Log Ladies, an initiative that has previously been funded by the Tuborg Foundation, are the tradeswomen behind the program. The four tradeswomen founders saw a niche gap in the market in creating a safe, supportive, clean space, without sexism, racism or misogyny from Vocational Education Teachers, and the education they missed at their vocational institution. All the Log Ladies values lie in creating an interest in the skilled trades with lightbulb moments for young people, their parents and school educators.

While completing their own vocational education training, these entrepreneurial tradeswomen felt it was their responsibility to set boundaries, create a diverse and inclusive environment in the vocational education settings, and to train their peers and facilitators of expectations as female apprentices. Log Ladies also recognised the prejudice associated to skilled trades in the training setting with classroom equipment generally broken, old and dirty, versus the architectural and engineering training faculties receiving higher funding for new technology and equipment.

Log Ladies activities focus on using tools safely, mistakes are encouraged, and projects are designed to be completed during the workshops to promote a sense of satisfaction and provide confidence for future projects by participants. As innovative individuals, they only design items that will be of use and productive, like stools and shelves, but do also offer a go-cart workshop with students in the after school program, the Australian equivalent of year 10 boarding school.

Log Ladies during a building camp in Denmark





Melissa Alexander, a previously incarcerated individual, is now an advocate for the Building Up program within the correction centres. Melissa credits the Building Up program with helping her build confidence and in finding a new path in life. The program, offered by her case worker, provides 16 weeks of paid minimum wage salary training in construction, including soft skills, technical skills, and hands-on learning.

The **Building Up** program is designed to help individuals with similar life challenges as Melissa to work with their hands and develop skills in construction. The program is flexible, recognising that participants may have other commitments, such as parole or medical appointments. Alumni coaches are also available to employees to assist with transition into other opportunities, such other career pathways and qualifications.

Melissa's goal is to become a foreman, taking on apprentices and teaching them important skills such as interpersonal relationships teamwork, work ethics, communication skills, and time management. She is also committed to mentoring up-and-coming tradespeople and has found a sense of belonging in her union, where she is provided opportunities for community work, public speaking, and advocating for justice.

The program has also helped Melissa to address her mental health, recognizing the therapeutic benefits of working with her hands. Melissa is passionate about promoting inclusivity and reducing stigma around incarceration and believes that programs like Building Up can help individuals to turn their lives around.

The program takes 100 trainees per year, with 200 waitlisted for the quarterly intake for those unsuccessful in the initial round.

Alumni events are also run by Melissa as picnics and quarterly wellness getaways for trainees to encourage team bonding.

Overall, Melissa's story is a powerful example of the impact that programs like Building Up can have on individuals and communities. By providing training, support, and opportunities for growth, the program has helped Melissa to turn her life around and find a new sense of purpose and belonging.

"My main goal is to have more inclusivity and not to be judged based on one's past."

– Melissa Alexander

Melissa Alexander on the tools as part of the Build Up program





I met with WorldSkills Nova Scotia and WorldSkills Ontario to understand more about the promotion both organisations are doing along the leaky pipeline to promote skilled trades to women, leading into the international competition.

Like Australia, WorldSkills in Canada has one National Office, and 13 regional offices across the provinces and has been operating for 25 years after recognising the labour skills gap.

Skills Canada Nova Scotia, the Australian state equivalent in Canada, is a non-for-profit organisation, working in partnerships with government agencies, educators, school boards and industry. Jennifer Lambe, Skills Canada Nova Scotia's Partnerships Manager provided insight into the successful initiatives they run to address the national skills gap in skilled trades and target young women and minority groups across Nova Scotia to eventually participate in the WorldSkills competition.

Consisting of 12 team members including one-two Co-Op students, Skills Canada Nova Scotia works state-wide to run workshops, activities, presentations including hands-on component, conferences, campaigns, and of course the state's yearly competition. During the presentations to young students from age six and above, presenters talk about the skills needed for success in the trades. Strong communication skills, digital knowledge, trouble shooting, and adaptability skills are all needed for a successful career.

"You just have to do one carpentry project before you realise how important measurements and math are." – Jennifer Lambe

The "Try a Trade Takeout" kits make up a large component of the introduction to trades careers into secondary schools. The kits (physical and digital) consist of information for teachers to learn how to complete an activity in the classroom and which career prospects the activity relates to. An example kit includes the materials to build a footstall. The only pre-requisite needed is a qualified conducting teacher pertaining the correct safety training. All the digital activities are available with video on YouTube including directions, and the supplies come in the kit box. Students can complete these activities in pairs, groups of three or individually, for up to 30 students in the classroom, but some teachers like to offer the same activity over multiple subjects to provide industry knowledge and perspective for more students. Last term, the kids reached over 7,500 students.

In the 2023/2024 school year, 18,000 young people participated in the "Try a Trade Takeout" kids, which are free for schools, and linked to the curriculum.

"Offering new skills and activities that might not have been considered before (in the classroom)". – Jennifer Lambe

Recognising the need for gamification in careers fairs, Skills Canada Nova Scotia also introduced the Careers Fair Passport. A bingo style activity for students to complete with questions and activities, to then swap for a bag of chips or something small on completion.

Libraries, scouts, girl guides and community centres are also now included in Skills Canada Nova Scotia outreach, with free activities such as fairy houses available for home-schooling kids and families, as well as young children as old as six, although 90% of outreach is completed through school system for ages 14-18 (years 8-12).

Skills Canada Nova Scotia works with the state Department of Education to focus on the secondary school stream of students interested in skilled trades. By providing approved curriculum linked activities free to the schools, the teacher-to-teacher word of mouth marketing kicked off with 500 students participating in the first year, to 4,000 students over



two years. Twelve activities are offered every spring and autumn, with activities changing yearly to keep students and teacher engaged and interested.

Funding is provided by the over-arching body of WorldSkills federally as well as state government departments to cover program operations and staffing. Private companies also assist with promotions, covering cost of supplies, and play a crucial part in inserting industry related literature into the activities providing industry awareness. The school board also addresses the barrier of transportation by providing reimbursements.

As well as offering summer camps, Skills Canada Nova Scotia has also started to make progress around the country is the pioneer program on accessibility. An awareness campaign on adapting competition, activities, and contests by pointing out key factors such as loud noises, strong smells and lighting that might affect some participants to make organisers aware. By recognising how Covid has impacted students' journeys and social grounding, Jennifer and her team are *"making everyone aware, as we've seen a large increase in anxiety and other related feelings when it comes to large events, and what barriers they may come across. Therefore, when these factors are addressed, participants feel comfortable in undertaking the tasks to the best of their ability."*

Skills Canada Ontario, another Australian equivalent to WorldSkills state-wide competition also offers a Young Women's Initiative.

Skills Canada Ontario, the original WorldSkills of Canada, established 35 years ago recognises tradeswomen see WorldSkills as the benchmark to strive towards in the career planning journey.

"This competition brings togetherness, much bigger than yourself, an experience for your life you didn't even know was possible." "The competition gave me my confidence back; the whole experience changed my life" – Jennifer Green, Skills Ontario

In recognising the gap between industry and educators, Skills Canada Ontario hosts a careers advisors conference yearly to help change mindset of the trades while also providing the opportunity for careers advisors to educate parents.

Additionally, the other successful programs being administered include International day of the girl for ages 12-14 (years 6-8), skilled trade and tech days for young women aged 13-17 (years 7-11) including young women, First Nations, Metis and Inuit students, the International women's day events for ages 12-18 (years 6 to 12) including networking, conferences and careers fairs, and the Young Women's Conference for ages 12-18 (years 6-12), plus Try a Trade days for ages 13-18 (years 7-12), as well as summer camps in trade and tech which include building items such as a camp chair, a coat hook, a pencil box, and a metal name plate.

16+ workshops are run throughout the school year as Skills Canada Ontario strives to change the mentality of teachers in the classroom who have great impact on young people's pathway decisions.

Partnerships with vocational training organisations are crucial to host the workshops, and campus tours, with each college highlighting their own faculties and courses.

The Try a Trade Day also includes exhibitors, employers, community services, resources, support groups, and different offerings and training/course opportunities. For example, Co-Op placements opportunities or forklift licences and courses available in the local area.



Additionally, parent and guardian days are hosted for ages 13-14 (year 7 and 8) girls to complete a try a trade activity alongside their adult influences to generate acceptance and exposure to the trades. The day is also completed with a keynote speaker and panel consisting of college facilitators and past students to talk about careers. A parent virtual series was also conducted during Covid, with each episode focusing on different sectors of the trades such as construction, manufacturing, and transportation plus the Ontario Youth Apprenticeship Pathway (OYAP), the local companies and vocational training organisations.

In the past, Teacher Personal Development Days have also included Try a Trade activities provided by Skills Canada Ontario to build awareness.

Skills Canada Ontario operates with 40-50 people including dedicated deliverers of the Young Women's Initiatives, a Diversity, Equity & Inclusion Department, the Summer Camp Department, the First Nations, Metis & Inuit Department plus the Trades & Tech mobile truck unit, funded by the Ministry of Labour and Skills Development.

Skills Canada Ontario operates 75 different contests in skilled trades and technologies across the state and is free and open to the public to attend.

Skills Canada Ontario pride themselves on using as much real-world trade machines and technology as possible with competitor alumni also heavily involved in staying industry current with evolving knowledge and to look for new talent while giving back to their community for an event they're passionate about.

Mental health training is also a priority in every career, so Skills Canada Ontario addresses stress, anxiety, apprehension, and workplace pressures for competitors, staff and volunteers.

Skills Canada Ontario also operates as a resource hub for any aspiring tradesperson with links on their website for all free pre-apprenticeship programs across the state, maternity workwear, bursaries, and skilled trades books for children. The Trades & Tech Truck is also used state-wide for inter-active school and community incursions, with over 34,500 participants involved in the last year and of those 30,617 students. Lesson plans linked to curriculum are also provided to educators when the truck is booked to attend events, and school engagement opportunities.

Due to the success of the Trades and Tech Truck, the Skills Development Fund under the Ministry of Labour is helping to

*"These are a good, honest approach to prepare women for the workplace environment and finding ways to counter-balance recruitment and retention." –
Lindsay Chester*

500 square foot Mobile Classroom Unit:
Trades and Tech Trucks, built by
Tradeswomen.





advance trades training programs and therefore fulfill the skills shortage by providing funding for three more in trucks to the fleet.

Skills Ontario also coordinates and runs Canada's largest Indigenous skilled trades conference and the entrepreneurs conference that had over 900 people attend in 2024.

To continue the career journey for a young women or gender diverse person in Canada, post attending the Skills Ontario events, they then can participate in **the Dreamer Day Fest**, offered by national non-for-profit organisation **Build a Dream**.

Established in 2014, Build a Dream recognises the barriers holding women back from pursuing their dream careers as their core focus as an organisation model. Build a Dream offers full wrap around support for women through attraction, recruitment, retention and advancement for women and gender diverse individuals in skilled trades, STEM, entrepreneurship, leadership and emergency response.

The **Build a Dream** model works with young women and minority groups from year 7 (ages 12-13) and above. Research is the foundation for all the programs and initiatives run as part of the organisation.

Working collaboratively across the nation, Build a Dream offers career discovery expos for young women ages 13-18 in years 7 to 12, which includes industry and company exhibitors, and a keynote speaker panel for questions, as well as the 'See What You Can Be' component of a young person's ability to see themselves in others. Dreamer Day, which invites young women and Educators is a unique event. Dreamer Day is a celebration of dreams and aspirations. Lively panel discussions and interactive stations focused on skilled trades, STEAM and emergency response, create a fun, empowering, and memorable educational experience for young women to learn about these male dominated sectors. 50+ exhibitors, and engaging workshops bring ambition to life. From inspirational speakers providing connection, inspiration and a role model for young women, to hands-on activities, Dreamer Day is all about turning dreams into reality.

*"It's in everyone's best interest to build a talent pipeline as its going to grow the economy" -
Nour Hachem*

Dreamer Day offers a vibrant, fun-filled day where the spotlight is on student empowerment and building confidence.

President and Founder Nour Hachem also acknowledges the importance of diversity across all workplaces, including the need for more men in female-dominated fields. Until gender balance becomes standard, some programs require a women and girl-focused approach. For example, rather than combining genders at events—a strategy that has proven less effective—Build a Dream advocates for targeted efforts to enhance each gender's representation in specific fields, working toward more balanced work environments

Another initiative offered to aspiring tradeswomen is the #HerPowerTools partnership with Milwaukee Tool and presented by Canadian Union of Skilled Workers. All women starting their career in STEM or skilled trades who write letter to Build a Dream, get shipped a starter #HerPowerTools tool bag and become part of the Build a Dream community. This initiative was established to remove financial barriers in acquiring tools and provides new tradeswomen with the first step to getting started in the trades.



Build a Dream has also just invested in skilled trade simulators that include all the make-up of multiple skilled trade vehicles. These simulations provide participants with an immersive opportunity to engage with heavy equipment in a safe, controlled environment, complete with scoring systems to track progress and skill development. This innovative approach not only enhances training but also serves as an exciting way to attract young individuals to the skilled trades, showcasing the field's dynamic and hands-on nature.



Multiple skilled trade vehicles simulators are available inside the skilled trades trailer



3) ADDRESS MISCONCEPTIONS AND STEREOTYPES

As stereotypes are determined by the age of seven, I wanted to learn more about the programs addressing societal bias globally.

The **Kompetenzz Centre an Association of Technique** in Germany, diversity and equality initiatives encourage young people to embrace gender equity under the national government.

The **Cliché Free initiative** which sits inside the Kompetenzz Centre is funded by the Ministry of Research and Education as well as Ministry of Families, Seniors and Youth, when the government recognised after extensive research, the segregation in the labour market on gender. The Girls Day initiative founded in 2001 also sits under the Kompetenzz Centre.

The Cliché Free initiative aims to target anyone who's in anyway involved in the decision process by young people, as stereotypes are the biggest influencer of choice. Their holistic approach aims to provide a wide variety of mechanisms to all the influencers in a young person's life.

Target groups of Initiative Klischeefrei



Partnerships are constantly evolving with the Cliché Free initiative as more and more daycares, schools, associations and businesses decide to implement and participate in the network. Cliché Free offers workshops and network meetings across all sectors and partnerships are free. Organisations are also advertised on the Cliché Free website, while also the Cliché Free logo is listed on the organisation's website. This method of publication encourages new potential employees who recognise the logo to apply for positions.

Organisations are met with initially to determine organisations goals, and pulse checked yearly. At the time of this meeting, Cliché Free had 620 organisations as partners in driving change.



Three Layers of Diversity

The Cliché Free initiative recognises societal stereotypes are learnt and studies have determined that parents have made stereotypical assumptions and the implementation of stereotypes before a child is even born.

The below graph reflects the fixed traits in the internal dimensions; personality, age, and race, that cannot be changed or impacted. But the external dimensions; geographic location, income and habits, provided the possibility of influence as less static and more dynamic. By recognising the dimensions more impacts can be made, and cliché's can be challenged.

Diversity & Dimensions



Source: "Four Layers of Diversity" (Gardenswartz & Rowe)

19.06.2024

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The Cliché Free Initiative in Germany did extensive research on the recognition within the workplace of female role-models part to play in addressing gender bias and making managers aware of attractiveness of all jobs within the industry for women and minority groups.

In Germany, on a societal level, when political measures are introduced such as parental leave, there's more likely to be a domestic equitable life. Approximately 15 years ago a new model was introduced favouring men to take two months of parental leave. For example, women can take 12 months of parental leave and men can take an additional two months of parental leave. The extra two months are only available for the fathers. Alternatively, the father could take the full 12 months parental leave, and the mother take the additional two months. It is mandatory for employers to offer these options in Germany but not all parents take them.

The Cliché Free Childcare initiative for ages 2-5, also addresses barriers the education system faces in implementing careers and future pathways into school curriculum.

Cliché Free has developed methodology such as diversity and inclusion books with matching cue cards, reflecting a range of jobs and domestic duties. All figures pictured below are from



a range of cultures, ethnicity, and genders. The methodology sets designed and published by the Cliché Free initiative, are introduced into childcare centres across Germany for teachers and educators. Songs are also available to showcase different jobs for all genders paired up with different activities teachers can introduce in the classroom. Some games include finding individuals or professionals within picture only books depicting a town centre of daily life, cliché free. As well as games recognising “be who you are” and encouragement to follow your own dreams. The songs also include positive affirmations to empower young people to embrace their individuality. By implementing these activities early, young people in primary school, recognise their talents and strengths and start to choose their career paths based on their own individual interests, rather than external societies’ pressures.

“It’s really important we have these measures, and structurally implementation by government, as some things will only move when it comes from the top.” - Frauke Kordtomeikel, Cliché Free initiative

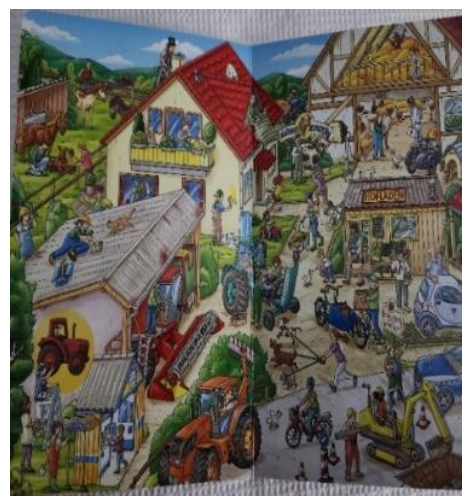
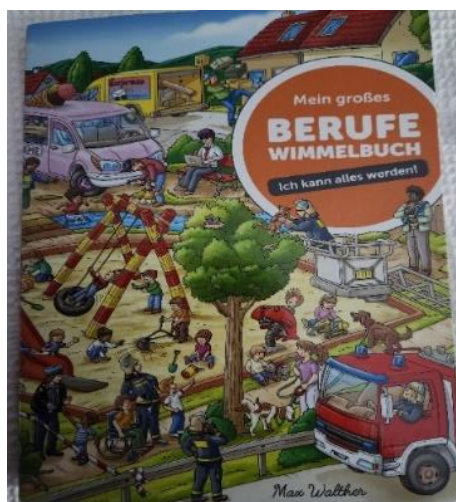
Another methodology used for both young people, and adults, is recognising unconscious bias in the form of pictures of professionals by addressing personal perception. A service provided to early childhood facilitators is a painting program encouraging young people to paint how they see different professionals, all focused on under-represented jobs.

Professional educators also have access to methodology that shows the professionals how they can reflect the topic of clichés within personal development workshops. Dual presentations at parent’s nights are also available. The Cliché Free team target parent groups to run these workshops to address unconscious bias, and to filter the message amongst all parents. The Cliché Free initiative works with all genders for equality, to address barriers for women, but also barriers for men.

In April 2024, 54 childcare centre leaders participated in training with Cliché Free as an introduction to the topic and methodologies, how it can be used in their institutions. Each leader taught their organisations facilitators how to use the materials provided.

All materials are free through the Cliché Free website as the German Federal Government has provided funding to support this initiative.

The front cover and inside pages of the cliché free children’s book used in Daycares





4) CAREER CONNECTED LEARNING

Tabea Schroer, Career and life planning project management, Polly Britten, Frauke Kordtomeikel, Service point of the Cliché Free Initiative & Scientific specialist



A recent study conducted by CERIC - Advancing Career Development in Canada (L.Godden, 2024) surveyed students and found that 75% felt career learning either “interesting” or “super interesting”, yet in our Australian schools, the opportunity to partake in career learning isn’t put at the forefront of the curriculum or teacher’s wish list of excursions or incursions to under-take during school hours due to the overwhelming amount of assessment based learning that needs to be taught in classrooms.

"Advancing Career Development in Canada: A National Framework for Career Development" by Laura Godden, published in 2024 by the Canadian Career Development Foundation (CCDF).

90% of Canadian parents surveyed recognised the discussions they had had with their children aged 10-12 (years 4-6) about jobs but these opportunities for career connected learning are not emphasised in the Canadian curriculum nationally. The most interesting finding was the recognition that 100% of primary school teachers in Canada advised they are teaching careers in the classroom, yet only 28% of parents said their child is talking about the interesting jobs or careers they have learnt about at school. The most common teaching strategy in primary school according to this study is showing videos (mainly on YouTube).

Formulating an idea of a career begins very early on in a child’s life. Children begin by associating jobs with the people they’re meeting in their everyday services, such individuals as doctors, hairdressers, hospitality workers and dentists. In some ways we can act against these gender stereotype by using services of a non-traditionally gendered role such as employing female or gender diverse tradies to fix breakages around the house or seeing a female doctor.

Evidence based research has recognised that young women’s and young men’s decisions about jobs conducted by adults are made between the ages of 5 and 7 (Nick Chambers,



2018). In recognising this evidence and addressing under-represented gender roles through the Girls Day and Boys Day programs, the Cliché Free initiative also provides educational materials such as quizzes for young people to gain life perspective professionally and privately. For example, do you want to have children, who takes care of the children? This gives young people an opportunity to consider their choices and think about the future and who plays what role in that future planning, while considering how career and my private life goals.

Additionally, as part of the **Girls Day and Boys Day** surveys, 86% of girls and 80% of boys want career guidance to be part of school lessons. Most of them see school as an important institution in its preparatory function for future working life.

Books are a fantastic tool for addressing bias and promoting equity and diversity. **Honour the Work** has recognised the gap in the primary school curriculum, ages 6-12 (years 1 to 6), and the founder, Angela Coldwell, as a prior secondary school science teacher, is writing activities that align to existing books to implement and support primary school teachers as part of the curriculum in schools across Canada.

Honour the Work is supporting teachers in the classroom by also providing opportunities to partake in industry tours alongside hands-on learning activities to showcase the jobs associated to that industry. By preparing teachers with these tools, it has built confidence to replicate these activities in the classroom for students, alongside the associated curriculum.

Angela has a unique story in that her work led her to recognise the unconscious bias felt in the classroom towards the trades. Angela spoke to me about her lightbulb moment in recognising her own innocent blind spot as a teacher, only promoting university pathways to her students, after one of her students discussed his burning desire to be a tradie, and her suggestion to him to take up engineering through a university degree.

Angela and I discussed the limited opportunities for pre-service teachers completing their undergraduate degree to learn anything about workforce connection. Angela has spoken to the Canadian Construction Association and individuals from the Ministries of Education in different provinces about this disconnect, and the opportunity to include more than just pedagogy, collegian and curriculum into a pre-service teachers program. Angela feels this workforce knowledge is essential, not just for teachers in the classroom, but also career advisors.

Angela has recognised that teaching methods haven't progressed since she graduated in 2004, and teaching has become even more siloed and stagnant in education with limited new resources available. There is also limited understanding of labour market

“As a teacher there is so much curriculum to teach, you can't afford the disruption, unless there is a value add. By embedding into curriculum, and the use of the curricula outcome, it takes away the workload of a teacher prepping a lesson by providing all the resources. The model needs to be lesson plans that fit directly into the curriculum for ease on teachers.” – Angela Coldwell

“In order to break the cycle, it's essential that pre-service teachers get the opportunity to take a tour of a nearby technical college, learn the pathways and courses available, use the tools and understand the career opportunities available.” – Angela Coldwell, Honour the Work



progression and skills gaps. Angela suggests a connection between the trifacta; industry, vocational education institutions and universities is needed to address labour market skills and knowledge gaps, while linking to real-life workforce development.

Honour the Work runs “Explore The Trades” events in partnership with local vocational colleges for Primary School Teachers which includes a panel of skilled trades members from under-represented groups. She hosts a number of workshops to learn and practice using the material being offered to classroom teachers, directly tied to curriculum. Alongside the tour and the practical hands-on learning activities known as STEAMS Kits (Science, Technology, Engineering, Arts, Maths and Skills), Honour the Work also recognised one of the biggest drivers for change within teachers is giving them the statistics. For example, in Australia, 1.2 million homes need to be built across Australia in the next five years or 650 homes built per day to meet the [housing shortage](#) (Australian Government The Treasury, 2024), and 8% or 100,000 tradies are looking to retire or depart the workforce [per year](#) (Alex Waldren, 2024), the “skills retirement cliff”, so who’s going to do that job?

“Teachers are hungry for resources.” – Angela Coldwell

In the primary school teacher workshops, Honour the Work also addresses the educational research that teachers may not realise, that gender bias is determined between the ages of five and seven in childhood development, and that if young people don’t see themselves reflected in gender or culture, they don’t see those jobs as viable options for future employment. Additionally, young women’s confidence in STEM drops by age eight. Research also shows that young people and their parents are most engaged and curious about career learning between the ages of 10 to 12 but then it drops off and the peer group becomes more important from age 13 onward.

Primary School Educators undertaking professional development



Angela’s workshops include personal development for primary school teachers, that can be understood easily and contextualized to workforce activities while in the classroom, so teachers can repeat the activities and learnings back at school. Books and materials, including lesson plans mapped to curriculum, are gifted free to the schools after consultation with the teachers. This methodology was widely accepted by teachers as it isn’t an add-on in the curriculum, there is no fee, and they get to keep everything plus the contextualised learnings from the activities undertaken during the site tour and workshops.



100 schools will be piloting this program in Alberta come September, after the success in Ontario.

By providing the materials and the hands-on component and showing how easy it is to embed these activities into curriculum, it ignites the spark in the teachers, giving teachers confidence to conduct these activities on their own in the classroom. The participating teachers then champion the program to other teachers and parents to generate momentum.

With this turnkey model, teachers literally just have to cut and paste into a slide deck to roll out the program while being provided the opportunity to enhance and adapt the program. Teachers are realising more and more, that neuro-diverse students exist in their classrooms, and they don't learn through pen and paper, these hands-on learning opportunities are essential to meet the needs of every student in the classroom.

"In order for young people to make good decisions of what pathway options they're going to take, they need years to figure their pathway out and being exposed to opportunities, not just from years 7 or 8, and there is a real communications gap, and dissemination of information within school communications and education playing a huge barrier for young people." – Angela Coldwell

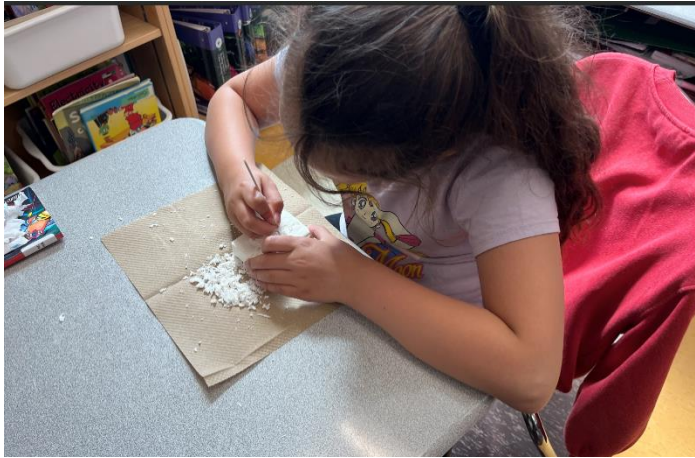
Angela has worked tirelessly to implement diversity and equity into primary schools. Through books, reading material and activities, all mapped to the education curriculum, Angela has provided teachers with the foundation and confidence to educate their young students about cultural inclusion, gender job stereotypes while normalising women in traditionally male dominated roles and addressing unconscious bias in our society.

Honour the Work
children's books
distributed across
Canada





Images below provide examples of STEAMS kits, provided to a Primary School Teacher by Honour the Work, and a kit in action in the classroom.



STEAMS Kits (Science, Technology, Education, Art, Mathematics, & Skills) Feedback:

- *My knowledge of the skilled trades has changed in that I can see how the skilled trades goes beyond electrician, welders, and plumbers and can also include many areas of the arts.*
- *How very simple tasks that I already have resources for can be linked to the skilled trades.*
- *The students are interested in these activities because they are hands-on, and the books teach them how these hands-on activities have practical applications in the world.*
- *First and foremost, it has been great to see the kids excited to share their own personal experiences with the trades. When we first began digging into the activities, they would get excited when they heard me mention a trade their parents worked in. They were eager to share what they already knew, and they were thrilled to learn more about what their parents did for a living. This was a great starting point to get the entire class wanting to learn more. Throughout the year they would make connections to their learning by pointing out trades workers they saw in our community or made connections through books for videos we were exploring.*

Feedback about the diverse children's picture books from educators.

- *They love listening to stories and being able to identify objects in the stories.*
- *The books have been excellent for many reasons. To begin, I didn't have to go looking for a copy of each book. Secondly, my students each found something that they could relate to, and it helped them see all the different areas they could choose from for a career in the future.*





Jamie McMillan Founder of **Kick Ass Careers**, tradeswoman, author, educator, school presenter and ambassador for women in the skilled trades, alongside fellow tradeswomen F.J Pette and Pat Williams published their first of five books containing approximately 80 skilled trades jobs, *All the Kids on Builder Street* colouring book, to showcase the trades to the younger generation, written in both English, Ojibwe (the Indigenous language of North America) and French.

Jamie started her career working with young people by designing and producing the colouring book. Jamie recognised the “see what you can be” component needed to be more widely into young people’s lives, to address the stereotypes and stigma associated with a career in the trades. The colouring book looks into young children’s personal connections in their local community of tradespeople, representing aunt’s, fathers, sisters, cousins, grandparents and mothers, and what each job entails, in an easy-to-understand context. The book concludes by recognising that these young people can’t wait to join the skilled trades, as a job of their futures.

Jamie’s presentations in schools for years 1 to 5 (ages 6-11) includes the gift of this colouring book. Schools and businesses partner with Jamie to customise the colouring book to depict 18 different trades. The colouring book showcases jobs that are not usually front of mind, is planting the seed for parents in young people’s excitement after attending Jamie’s in school presentations.

Young people have limited ability to understand the different trades jobs that might be in front of them, says Jamie.

Jamie asks, “Do you know what a Boilermaker is?” to get answers like “Do you work in a kitchen? Do you boil potatoes?”

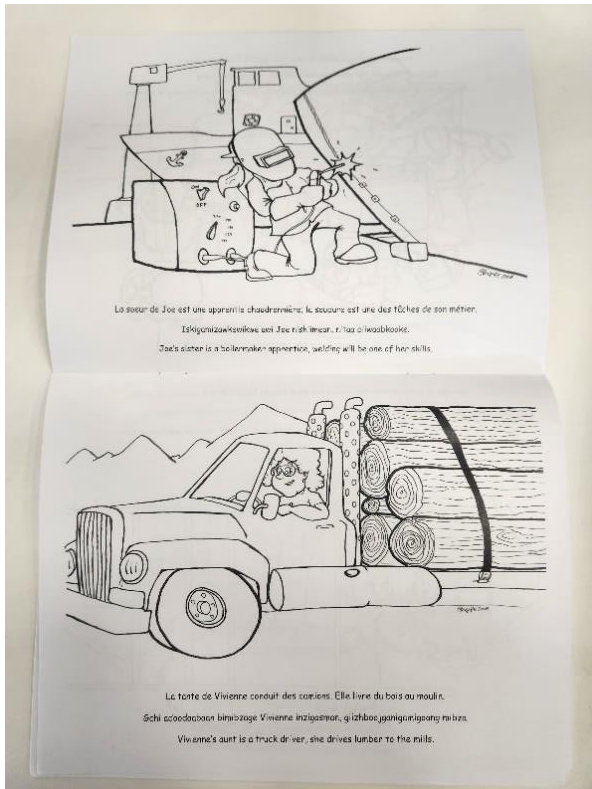
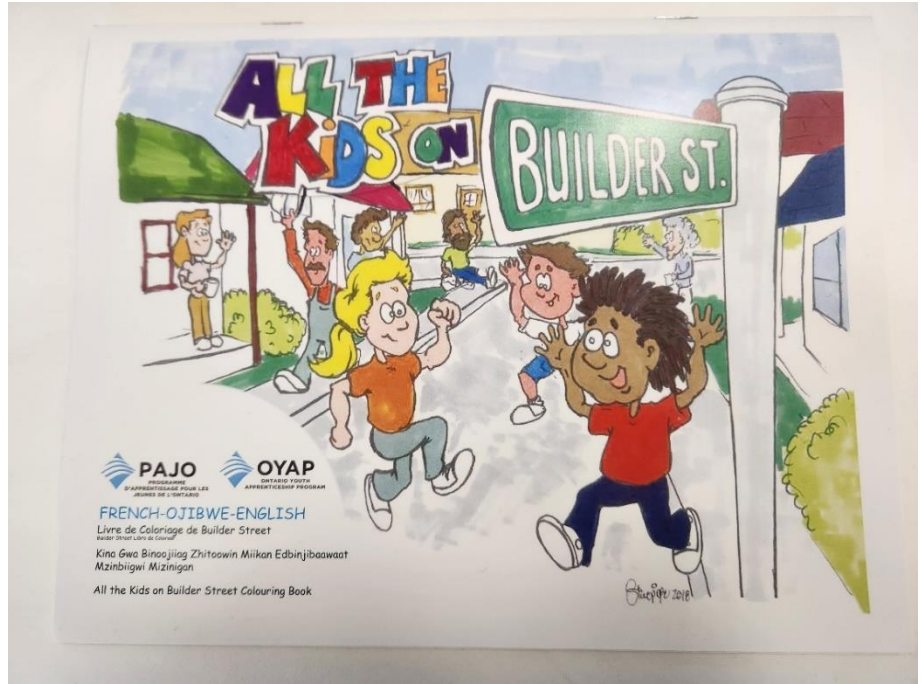
In the presentations, Jamie also discusses her learning difficulties in school, attending special needs classes, and the moment she was diagnosed with ADHD. Her presentation also points to the one in 38 recent statistics relating to people with autism, trying to normalise neurodiversity, and how she deals with being picked on and bullied, while over-coming challenges, and smiling in the face of adversity. Jamie tells young people that ADHD is her super-power in the trades. Jamie works with 72 school boards across Ontario and has expanded into the United States with her presentations.

Jamie also opens the door for other tradeswomen to get involved in Kick Ass Careers as presenters, most of these tradeswomen are apprentices, so have a long and fruitful career ahead of them advocating for the trades, and are full of energy, stories and real-world experiences.

Jamie is currently working with Career Advisor Forums as a keynote speaker, to pinpoint the link teachers can recognise in young people who are going to be the future of trades. Her presentation also covers how to support neurodiverse students, who may not have the marks or engagement level at school that constitute an educated and progressive student in the eye of the school system, and therefore miss out on attending off school hands-on learning opportunities. The impactful statistic, 60% of people with ADHD and Autism, who failed at school, now own and run successful companies, is true recognition of alternative learning styles. Jamie is working through new tactics and models to address young people’s 20 second attention span and lack of ability to sit still unless provided with exciting, energetic and interesting content.



Children's books provided to primary school aged children as part of the Ambassador presentation by Jamie McMillan





Using evidence-based school-employer engagement, **Education & Employers** Director of Programmes Charlotte Thurston and Senior Primary Schools Engagement Coordinator Jude Waites discussed the 70 research reports which lay the foundation for the methodology used at Education & Employers in London, England. Funded privately and by the UK Government.

*“Diversity and exploration, making learning fun” - Jude Waites,
Education & Employers*

Founded in 2009, the charity’s research reports showcase a very clear economic case, and the impact employers make by going into schools. Beginning their research in secondary schools they found the impact was helping young people to earn more money when they left high school, provided young people with motivation in the subjects they’re studying, school completion increased, and this evidence has now influenced UK policy in terms of best practice and in informing the Gatsby benchmarks.

Looking at the impact data collected and research conducted after activities completed by schools show that students feel the career related activities have shown them how core subjects such as English, Science, and Math are used in the real world, and after hearing from volunteers, they can see the relevance of those subjects for future learning.

Through this evidence, Education and Employers then recognised the need for a mechanism to increase the opportunities of bringing employer engagement into schools for primary and secondary students. By using technology to connect schools and volunteers from the world of work across the country, the free online platforms Primary Futures & Inspire the Futures was developed which gives teachers and workforce volunteers the opportunity to sign up to assist with school-employer engagement. 14,000 educators have now registered alongside 80,000+ volunteers to now be matched locally for school-engagement opportunities.

Primary and secondary schools are offered volunteers as guest speakers, and differential activities depending on the cohort of young people. Primary Futures has recognised that primary school students need exciting activities to interest them, while challenging stereotypes. The Secondary School Inspire the Futures program addresses pathways, routes into jobs, local employers and the labour market. Training is provided by the Education and Employers team for the volunteers and the teachers, as well as the resources for each activity and presentation available on the platform.

Education & Employers has also found the same barriers as Australia in the risks and regulations with taking young people onto a worksite, such as construction, but have been able to attend worksite visits into bicycle manufacturing plants by completing risk assessments prior to secondary schools’ arrival. To counter-act this barrier, Employers and Education have run several virtual activities where employers provide a virtual tour of the workplace.

To address the disconnect between industry and schools, “Teacher Encounters” have also started in the UK to provide teachers with exposure to industry and the jobs available, in the form of speed networking events, and how these jobs relate to classroom subjects.

In primary schools, Education and Employers has recognised it’s not about careers, it’s about bringing learning to life, and linking learning to real world. Positioning the opportunities not as an add-on, as part of the daily lessons to enhance the learning experience.

A popular game conducted by the volunteers is “What’s my line?”. A job guessing game where children ask yes or no questions, available for both primary and secondary students.



Workplace visits are also available for school groups to showcase different workplace environments and jobs including a workplace activity.

One of the projects that does require more in-depth training for volunteers is the Redraw the Balance program.

A program introducing the under-represented industries into the classroom for young children to meet women who have followed a career into a non-traditional industry. This program has primary school students draw people doing different jobs and their understanding of the gender associated to that role. For example, a firefighter. Approximately 90% of students will draw a male as a firefighter, due to the role being dominated by men but also the understanding by children of who fits that stereotype. The program then introduces the women dressed up in their workwear, to smash the stigma and stereotypes of a child's understanding of a job having a gender.

The Gatsby benchmarks in the UK make it a statutory requirement to complete careers guidance activities in secondary schools and mandatory to allow students to employer worksites while employers are also invited into school visits. Schools having to meet benchmarks and report back on their incursions and excursions completed as part of their career activities. Each school still prioritises what they want to do and how they interpret the benchmarks.

Career Connected Learning K-12, a model program embedded by the Department of Education in New Brunswick, in collaboration with the OECD global research results, recognising the need for evidence-based frameworks for teachers and educators in kindergartens to year 12 classrooms to embed career education in schools. Intentionally incorporating careers into curriculum at a provincial level, through equitable, inclusion and accessible methods, recognising that career education advantages learners.

Tricia Berry, the Learning Specialist for Education and Early Childhood Development of New Brunswick, speaks to the dissipation of jobs bound to gender once career connected learning is introduced throughout the entire education journey from early childhood through kindergarten into senior school. Through intentional work there is opportunity to change the bias and career education can be used as mental health intervention.

One of the goals of the Career Education Strategy is to present all the pathways equally, so apprenticeships, university and vocational education, by identifying personal bias with educators and recognising all the pathway opportunities available to young people.

The newly introduced strategy for New Brunswick Department of Education was to look at how to systemically advance career education, prioritising what K-12 learning looks like. Recognising the aging population, the skills gap between what education credentials are providing and what employers need, while also recognising the world of work is constantly changing and pivoting so learning on the job is essential. Young people are really struggling to have a plan, purpose and to make choices, therefore causing uncertainty.

The online module series is designed to help educators deliver career education, regardless of year level or subject. The series provides an abundance of practical resources, ideas and strategies for intentionally incorporating these practices into the classroom. All good educators care about young people's success now and into the future, and this methodology provides the innovation and necessary steps for young people to be happy, healthy and productive citizens.



The Portrait of a Learner framework is designed as the guiding focus and has a toolkit for curriculum writers to modernise curricula by including careers education, First Nations and black nations as modern-day learnings for young people, changing and updating the curricula every five years. This framework is presented to teachers as a professional development opportunity in changing mindset to represent every educator as a careers teacher, and why every individual would want to include these methods in the classroom. Free children's books are offered during professional development workshops, representing challenging gender stereotypes and reinforced social and emotional learning as skills needed to prepare for the future.

Evidence shows that the sooner we start to help students plan and prepare for their future, the smoother all transitions will be from primary to high school and then onto post-secondary education. What has been endorsed in New Brunswick is that career education needs to be happening from day one, from early childhood through early education and into adulthood.

The Hopeful Transitions initiative is reimagining transition planning where each learner years 6 to 12 (ages 11-18), is actively engaged in career pathway transition planning. This model provides every student with support regardless of their stage of career decision making. This strategy also recognises the impact a lack of direction for a young person has on their mental health and addresses the mental health component in young people's education with individualised support. With bi-yearly surveys conducted at schools in New Brunswick, only 16% of students had ideas about different careers they can do after high school and only 20% were hopeful about their futures.

Transition coaches have been implemented in participating schools to support educators in introducing the Hopeful Transition model. In recognising the majority of educators have gone from school to university, the pathways most prominently discussed are university, as teachers don't feel confident or competent to talk about apprenticeship or vocational pathways to students, unless they take the time to upskill themselves, which is where the transition coaches play a big part.

These transition coaches provide guidance and support for educators in relating classroom curriculum to onsite tours of industry, hands-on activities and additional personalised support and resources. Transition coaches work as an industry connection to schools, in recognising the local pathway career opportunities available and building connections into these employment streams for the students.

In recognising the disconnect between the education system and industry, the provincial movement called Future New Brunswick (NB), is also used to compliment the work of the transition coaches, providing the bridging mechanism through experiential learning, starting in kindergarten, through to public universities and colleges, therefore targeting ages five to 25, creating a true experiential learning ecosystem for the province.

The Future New Brunswick program strategies include partnerships, Centres of Excellence, Enhanced Co-Operative Education model, Essential Skills Achievement Pathway program, and NBTAP Pre-Apprenticeship program starting in year 10 (age 16). The strategy of re-imagining education by providing and facilitating innovative opportunities for educators and students to partake in.

The Centre of Excellence model started in 2019 with the first industry partnership. Then the centres began in 2021, focusing on energy, health, entrepreneurship, digital innovation, skilled trades and manufacturing and language learning.



The Centre of Excellence model is part of the state-wide movement, Future NB. This movement is designed to increase the connection between education and community members by utilising experiential learning as the bridging mechanism. The Centre of Excellence model is part of Future NB K-12. Future NB K-12's mission is to help students discover their passions through providing experiential learning opportunities prior to graduation.

The Centre of Excellence model is supported by industry partnerships. The department of education and the partners agree to complete deliverables that support and create virtual and experiential learning opportunities. These opportunities are connected to state-wide curriculum and are made available to the entire school system from kindergarten to year 12, therefore making it educationalised and digestible for every teacher to use. Each centre is guided by a centre lead who is a certified New Brunswick teacher. They are tasked to educationalise the expertise of their partners and make it available to classrooms across the State.

This model provides industry exposure events as virtual onsite tours, where kits are sent to schools in boxes with activities and the children's book with a lesson plan to match, all prior to the live industry virtual tour with an industry employee. These events are made available to every teacher in the province that teach within the events year cohort range. These virtual events can reach upwards of 3,000 students in an hour. These virtual lessons created internally by Department of Education Centres of Excellence provide free resources including a reflection tool with every lesson, all linked to New Brunswick careers and mapped to curriculum.

This method covers more reach to schools, with an authentic use of technology, with the opportunity for educators to expand these teachings on their own in the classroom and return to video recordings at any time.

The model is designed to provide blended experiential learning and career development for students. Opportunities are available for K-12 students to increase focus on career connected learning, making learning more authentic by connecting to industry therefore making it easier for educators and outside experts to connect and collaborate. OECD has recognised the model as an example of best practice to engage employers from a system perspective.

Inside a Centre of Excellence Teacher's kit, showcasing Energy





5) DIVERSITY, EQUITY AND INCLUSION

Tuborg Foundation is the long-standing partnership, founded in 1931, recognising target areas in communities' young people between the ages of 16 to 30 in entrepreneurship, labour market, creative business and democracy, and working alongside vocational training centres to empower young people, for young people and run by young people.

Tuborg Foundation partners with vocational training organisations to look at structural issues, using the ABC strategy of Act, Belong and Connect to empower meaningful social movements and solutions with international focus for young peoples and the components needed. Indirectly supporting the vocational schools to help young people thrive and excel in their environment.

The initiatives sponsored by Tuborg Foundation indirectly support mental health through support and empowering young people and their ideas in doing things together with others.

Denmark has also recognised within vocational education the link to STEM through vocational school play as an important role in addressing climate change solutions.

Young people (students organisations) can apply for funding for individual projects of up to 100,000 kr, and most receive 30,000 kr, mostly for food and materials costs.

By providing this funding opportunity, the strategy is the benchmark in creating good frameworks to be a volunteer, gain competence and be empowered to make a difference in the areas that are important to young people.

Tuborg Foundation provided the initial funding for Log Ladies to commence their venture to provide opportunities for young women to try their hands on the tools, using recycled materials and the connections with schools across Denmark.

Additionally, **Divers** in Denmark, established in 2018, has recognised that community togetherness is the key to success in making change by providing safe, supported environments for under-represented groups, therefore making it easier to conquer some of the challenges faced at work or training.

Divers recognises Allies create the greatest change and have partnered with unions, municipalities, business associations, foundations, higher education institutions, vocational education institutions, enterprises, and construction clients, to change the structural problems in society.

Divers **Boss Ladies** project includes the ambassador corps program, which recruits and supports tradeswomen at all levels of their career journey. Ambassador tradeswomen work across Denmark to participate as role models to advocate for change within policy, vocational education institutions, media as well as the 'See What You Can Be' component in all education settings, speaking about their career journey alongside trades activities to break unconscious barriers. In return, ambassadors are provided with assistance in personal

Her Royal Highness Queen Mary of Denmark – “Paving the way for greater gender equality depends on political dedication, a public commitment and legislation, but it also takes knowledge and experience, best practices and inspiration if we are to fill the potential of every girl and boy, women and man.”

“Highest segregation of genders in youth education programs is in TVET (Vocational education) in Denmark. Nordic countries are seen as the leaders in equity and inclusion but if we tap into the industries, there are a lot of stereotypes still to address, and it's a multi layered approach. ” – Duygu Cakir, Boss Ladies



development, new competencies, upskilling and company recruitment. Boss Ladies has empowered more than 400 young women, who are female students, apprentices and craftworkers in the building, construction, installation, and water industry. Currently, Boss Ladies is engaged at 30 Danish TVET (Vocational Education) institutions to promote diversity. Moreover, they work to promote and secure structural diversity in a range of enterprises and at a political level. In addition, Divers has strong expertise in strategic communication, including through the press and at social media.

Vocational educational female and gender diverse students are provided the opportunity to become ambassadors during their first few weeks of commencing vocation training, as the likelihood of females dropping out is 74% higher risk than men in a gender dominated field. The Boss Ladies Road Trip Program includes two people from Boss Ladies, meeting with all the new female students at TVET schools in male dominated courses. Some females are then recruited into ambassadorship, and to join Facebook groups as an active or passive ambassador. Ambassadors are also given the opportunity to attend social gatherings that are not usually offered through vocational education.

Boss Ladies has approximately 440 ambassadors who receive twice a year community pulse check with Boss Ladies, as well as help finding apprenticeships and helping to establish their own networks through talent programs, entrepreneurial knowledge sharing workshops, local network groups and community activities.

The Boss Ladies Vocational Education Diversity Development initiative program with two schools for 3-4 years has just concluded. The initiative includes a gender screening, followed by looking at recruitment materials, in-house policies, facilities, teaching methods, and pathway guiding structure for students transitioning to work for all students, with a particular focus on females. One vocational education institution has had a 106% increase in the proportion of women since completing the program.

Another project 'Diverse Technical Schools' helps schools to make guidelines and policies against sexism. Currently working with five schools in 2024 to make sustainable change, seminars are conducted with leaders, students and teachers so everyone knows what's acceptable and what's not. These seminars include methods to implement within practice and how to discuss sexism with students and staff through theory, exercises and case studies with practical examples. This program addresses everyday sexism versus sexual harassment and the language used.

“Structural change is needed to address sexism, misogyny and racism in the TVET system, for all teachers, and students. Change needs to come from leadership in setting boundaries, language and expectations as well as in employing teachers and facilitators.” – Laura Heiberg, Log Ladies

Divers undertakes strategic collaborations with construction clients include policy change reviews, Diversity Walks (on building sites) alongside Boss Ladies ambassadors who review and recognise low hanging fruit such as missing female showers, locks on doors, lighting during winter months of darkness.



One Construction Client is the Danish Government's development project for approximately 18km of underwater tunnel between Denmark and Germany. Divers met with the governing body to help them develop requirements in tender material to make it more attractive and inclusive: ensuring naked photos are not displayed in common areas, employee surveys include questions about sexual harassment (anonymously) and have a whistle blower in-house. Boss Ladies collaborate with companies to include promises to take on women as apprentices.

Divers holistic approach in changing the system with a 360-degree perspective, focuses on changing the narrative behind becoming a skilled worker, alongside community activities, engagement and relations.

Polly Britten, Duygu Cakir, International advisor & Project Manager



Build a Dream also works as a holistic approach with industry partners in the form of Environmental scans and Equity, Diversity and Inclusion training.

This method addresses how many women are onsite, in leadership positions and in gender diverse roles, while scanning the suitability of the workplace for women. The team then helps to implement company policies or a plan for a policy.

Environmental scans address employers' opportunity to provide childcare support, assisting in providing gender inclusive bathrooms, flexible work schedules, establishing mentorships programs or making job descriptions for women and gender diverse people more incentivised to apply, as some examples.

"If you see something say something" – Pinky Sabhnani

Build a Dream also offers Yearly Sensitivity and Awareness Training, support in establishing peer mentorship groups, and train the trainer/supervisor workshops on how to effectively work with youth, women and minority groups who may be under-represented within the companies. This training model assists in creating an open and safe space of belonging to ensure women and male allies feel comfortable to speak up and take action towards increased inclusivity.

Build a Dream is also using the research company SRDC to help collect, compile and analyse the collected data, to provide outcomes and best practices for industry and as an advisory for government policy and practices.

6) MARKETING AND RECRUITMENT

The research completed by the Cliché Free initiative in Germany has recognised women are always depicted standing next to the work, but never actually on the tools, whereas men are depicted completing the task. Women are never in an active position; the man is always providing the explanation as the power figure in an image.

A campaign completed by an electrical engineering company in Germany, also included a survey to the participants to determine which image resonated with them personally, I've included the results below.

The top left image was found during studies conducted in Germany to be the most influential for both women (43%) and men (29%).



Divers marketing research in Denmark also established the best methods of communication techniques were images depicting women seen on the tools, rather than posing next to them.

Digital recruitment material at a Vocational Education organisation in Denmark.



In Germany and Australia, professions with the largest gender imbalance are also the industries with the highest skills shortage. From an economic perspective, diversity and equity is an advantage. Employees are more productive if they are in a job they enjoy which could apply to all genders, if given the opportunity to shine.



7) SUPPORT, CAREER ADVANCEMENT AND MENTORSHIP

Women Building Futures, founded in 1999, is an inter-provincial program rolled out in partnership with federal and state governments as well as trade businesses. Women Building Futures is a free pre-apprenticeship training program to support the under-represented and under-employed women and gender diverse people across Canada in providing economic security. The programs differ in duration but generally run for 4-12 weeks, as an introductory course into a known trade such as an electrician, alongside a less known trade such as a steamfitter/pipefitter but can also include up to four trades as an introductory course. The program provides training, support services, skills, knowledge and certificates, plus networking opportunities and connections to take the next step in their careers. Post program, women and gender diverse individuals are directly hired into their first-year apprenticeship with the corresponding company sponsoring the program and their existing projects. Company projects are located across the country and could also include fly in fly out work.

The pre-apprenticeship program includes essential safety certification, hands-on skills and workplace readiness and awareness, prior to beginning an apprenticeship, paid over 1.3 times above the award wage. Each program has approximately 12 participants.

Information sessions are held for unsure candidates, alongside a supportive recruitment team who work directly with individuals to determine if trades are a good career path for them, and if a particular trade would be the right fit.

Office to Advance Women Apprentices (OAWA) currently located in seven provinces across Canada, focuses on providing support for women including areas of intersectionality represented by but not limited to youth, disabled, and Indigenous individuals. OAWA prioritises increasing entry opportunities and advancement to Journey Level (Qualified Tradesperson) and Red Seal Certification (National Certification) for women in the trades. This program is a supportive individualised one on one initiative which provides resources in discussing how to overcome and address barriers with the opportunity to learn how to obtain the skills they need for career advancement. This program also links women to existing Women in Trades programs across Canada while also offering support to women partaking in Women in Trades and Tech (WITT) programs as a collaborative and wrap around guidance. OAWA believes the success of their clients is determined by the collaboration between multiple services to ensure the full scope of barriers are being addressed. The program has been implemented to support retention in the trades.

Women Building Futures and Office to Advance Women Apprentices work collaboratively to offer support and pathway programs to individuals to provide exposure and lightbulb moments.

Women Building Futures: Signage located at a bus stop in Calgary, Alberta





The Women's Entrepreneurship Initiative program offered by Women Building Futures aims to break down barriers to increase economic opportunities for women to be successful now and in the future.

Women Building Futures provided 18 employment training programs throughout 2024, and in that 188 participants have graduated in 2024 as of May. 38% of these graduates were previously unemployed, the rest largely under-employed, while one in five were single parents. 21% of graduates were Indigenous, and 63% of the graduates needed additional financial support, provided by these initiatives.

Recognising the need to support women in advancing and staying in skilled trades, **Build a Dream** has embedded two Qualified tradeswomen as Career Support Specialists within its Women in Skilled Trades (WIST) services. These experts provide invaluable guidance and mentorship, drawing on their own experiences to help women navigate and succeed in their career journeys, ultimately fostering greater retention and growth within the industry."

WIST, a federally funded initiative was provided \$2.1 million investment for the national three-year project, finishing in 2026.

Once in the trades, the career coaching services offered by qualified tradeswomen as Career Support Specialists, assist fellow tradeswomen to move into higher roles through development of skills to ask for promotions and higher salaries while building personal growth. The program also includes financial assistance with up to CAD\$375 towards PPE, dependent care and transportation on a case-by-case basis. Resources such as mental health support post consultation are also available.

WIST Career Support Specialists were established to invest in tradeswomen's journeys, providing support if they want to leave the trades or change between employers, while equipping them with resources to advocate for themselves, softening the mental load and feeling a part of a community. Financial independency has also been established with support in funding for PPE, upskilling opportunities, and unexpected childcare expenses.

Build a Dream also hosts professional development weekends—national conferences where tradeswomen from across Canada come together to connect, gain mentorship, and build confidence. These weekends, along with virtual/in-person networking chapters and workshops, create long-term support networks, linking tradeswomen across regions for ongoing mentorship. By investing in women's professional development beyond their trade qualifications, these events show participants that their career paths can extend far beyond apprenticeship; they can start their own businesses, advance to managerial roles, or even teach at a training facility, all while strengthening communication skills and enhancing their resumes. Best of all, the weekends are free for attendees.

By encouraging financial and economic independence for women, the more women we will have in the workforce, taking the strain off the social safety nets therefore putting the money back into the economy. The more women in the workforce, the more contribution to society in the form of home ownership, purchasing vehicles, paying taxes therefore coming full

"Women don't leave the trades because they can't do the work, they leave because of harassment, subliminal messages and constantly being challenged why they chose this field and daily having to prove themselves to the circle around them" – Nour Hachem



cycle. Companies also get their investment back tenfold, as well as breaking the societal cycle.

Recognising financial independence and professional development needs are the key differences with this program.

To support women throughout the trades pipeline, Build a Dream partners with the Millwright Regional Council on their **Introduction to Millwrighting (ITM) program**, launched in October 2021 under their **Canadian Apprenticeship Strategy's Union Training and Innovation Program (UTIP) services**. Through this collaboration, Build a Dream assists with recruitment and provides wrap-around support services, working to shift mindsets and foster a more inclusive pipeline for women considering careers in trades.

This program addresses a critical need for skilled workers in the trades by providing a platform for individuals, particularly those in equity deserving groups, to enter the field. Millwrights (Mechanical Fitters) are in high demand across the energy sector, particularly with ongoing refurbishment projects across the nuclear industry. Build a Dream partnered with the Union by offering recruitment and wrap around supports to the participants. Build a Dream works closely with their partners to set the participants up to be successful in these placements.

The pre-apprenticeship program offers five weeks training in partnership with the local union. The first program offered resulted in 40 applicants, for which 10 started, 10 finished, and 10 went onto work in the industry. Build a Dream provided the funding for transportation and childcare barriers.

"Research shows that the best entry into the skilled trades for women is the pre-apprenticeship program, because it provides wrap around services that women have as they train." – Nour Hachem

The UTIP's goal is to elevate the standard of training in skilled trades, fostering a workforce that is competent, diverse, certified, and highly productive. It also focuses on removing obstacles that limit the opportunities for underrepresented groups—particularly women and Indigenous people—to thrive in trade careers.

Fair Trades Toolbox Founder, CEO and tradeswomen Brandi Ferenc, brings real-life stories from men and women into the company-wide workshops to help paint the picture of concerns and solutions through scenarios and examples for men and women.

For forward thinking employers who want to break out of the mould and embrace the future workforce, we need to tap into 51% of the population, women. By shifting the mindsets, it allows for a viable career path for women and under-represented groups. Brandi provides workshops for companies to embrace change in recruiting women or address loss of talent to a competitor.

Where can we see our workforce evolving in the next five to 10 years? As an employer, people are your most valuable asset in this rapidly evolving workforce. The next generation want to feel valuable but also, as employers, you can capitalise on the innovation they bring to the table.

Strategies Brandi emphasises include onboarding for women needs a welcoming environment, a comprehensive orientation program (remove any unknowns), offer a mentorship program (link up with another tradie lady), inclusion of policies and practices evident (accommodating pregnancies pre and post), and having a safe and comfortable

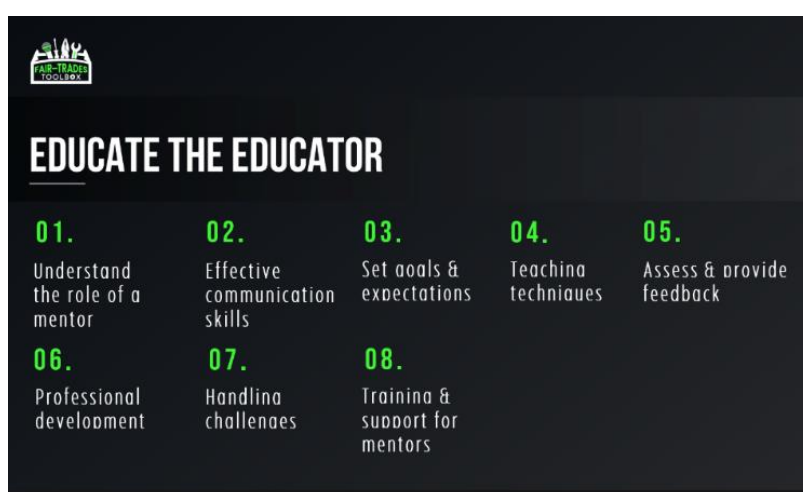


environment (including PPE, tools and harnesses that fit). Your workforce will appreciate the individuality provided.

Brandi discusses techniques to retain women by providing a clear pathway for advancement, flexible work arrangements (add one extra shift for carer duties), a supportive workplace culture (a sense of belonging and lead by example), create a feedback loop (from the top down, and the bottom up, always acknowledge and/or act upon), recognition and visibility of employees and a zero-tolerance policy (transparent & reviewed regularly relating to discrimination, harassment and bullying) with consequences also written into policy.

“The numbers don’t lie, when employee satisfaction increases, retention goes up and the business makes more money.” – Brandi Ferenc

Educating the Educator steps to enhance the workforce.



Brandi covers a range of strategies to address recruitment, retention and support for employers and employees to understand best practices to embrace to take the next steps in diversity, equity and inclusion within the trades, while also providing resourcing for women’s workwear and support networks. The workshops, approximately one-hour long, are run onsite or online in an informative, anecdotal manner, to help understand the possibilities available.

British Columbia Centre for Women in the Trades (BCCWITT) Be More than a Bystander initiative was discussed at every program I visited across Canada.

Be More than a Bystander is an online workshop discussing the context of bullying, harassment and violence, bystander intervention tools and skill-based learning through scenarios.

To make these workshops sustainable, participants are provided the opportunity to become a project coordinator and therefore the ability to run the workshop for other organisations or interested parties.

The BCCWITT program aims to coordinate and support community based anti-violence programs and initiatives across British Columbia while driving a necessary culture shift to increase the proportion of under-represented people entering and advancing careers in the



trades, while providing connection, resources and supports for under-represented tradespeople across the state.

Tenaris, a Canadian business, is working to address the need for industrial and trade roles in the community. To achieve this, they are focusing on diversity and inclusion, particularly for women and First Nations youth.

Tenaris invests in programs to encourage women and First Nations youth to pursue STEM education and skilled trades. They sponsor the University of Alberta's DiscoverE program and offer scholarships to high school and university students. Tenaris also provides exposure to the industry through mill tours, robotics programs, and school tours of their manufacturing facility. They also offer mentorship opportunities through their new graduate program. Tenaris are also heavily involved in Skills Canada Ontario.

Tenaris engages with the community through speaking opportunities, classroom participation, and fundraising efforts. They also support local childcare centres and invest in STEM labs at local schools. In recognising the importance of investing in the local community, Tenaris has established a talent pipeline.

Tenaris also offers a supportive work environment, with a full female leadership team and staged maternity returns for staff. By investing in programs that promote diversity and inclusion, the company is working to address the skills gap in industrial and skilled trade roles within the local communities.

With daycare provided by law to every child under the age of one but resourcing this right impossible with the staff shortages of childcare workers, German companies have found providing in-house childcare facilities the only solution. One employer as an example is Hugo Boss, a retail employer who recognised the need for a sustainable workforce through providing a childcare facility onsite. Introducing their own system of childcare to meet employee needs have benefited their employees by allowing employees to continue bonding with the children at break times and lunch, and are available quickly, if the need to involve a parent becomes necessary.

Parents in Germany by law, are provided one hour each day, paid time, until the child's first birthday and are also provided a nursery style room setup to provide a safe and supported space to breastfeed or pump.

In Germany, studies have shown 50% of men want to take more responsibility for domestic duties such as childcare, but they're afraid to ask for it from their male bosses and that their male colleagues will think they're not masculine enough to delegate it to their wives. There needs to be a company shift in encouraging male participation in childcare and domestic duties, communicated clearly by leadership that men are invited and encouraged to take parental leave.

"We need to embed this into a societal mindset shift, that's everyone walking into a new way of looking at the role of gender and society influences." – Nour Hachem

Statistics do show that men fear career disadvantages, as do women, but women bear the brunt of the domestic duties regardless. It also shows it will take a women 10 years or never to play catch up after having children, to her male counterparts, following the stereotype that men must be the providers for the family, and employers follow this trend in providing a higher salary to male employers upon having a family.



I met with 20 tradeswomen and male allies across the world to discuss their recommendations on the topic of recruitment and retention in the trades and here are their suggestions.

- Concentrate on educating the younger generations in early childhood, to address societies bias before it becomes ingrained – Jamie McMillan
- Use the acronym JDEI; Justice, Diversity, Equity and Inclusion – Tamara Pongracz
- Providing mandatory Diversity, Equity and Inclusion training for all new workers as part of induction – Lisa Laronde
- Provide training and education for women and minority groups prior to entering the workforce on the worksite culture, reactions, how to speak up, be confident and find an ally – Lisa Laronde
- We can recognise the need for a company’s cultural shift to be more inclusive towards women in the field, but women also need to take the reins in becoming self-aware, as society has taught women to hold themselves back – Brandi Ferenc
- Training new apprentices about their own healthy boundaries in the workplace – Dee Durant
- Employer and employee workshops – Brandi Ferenc
 - Attend inclusive and diversity training to inform employers of practical solutions and methods
 - “Be more than a Bystander” workshop mandatory for all new employees during induction and apprentices, as well as current employees
 - Include mental health and supportive workplace culture workshops
- Addressing psychological safety in the workplace, understanding that we all belong here in any workforce, working alongside each other – Jamie McMillan
- Recognising and addressing inter-generational communication styles in vocation education training and train the trainer workshops – Dee Durant
- How to promote your skills training provided in any educational setting – Jamie McMillan
- Reverse mentoring – those coming in showing leaders what’s needed in the workplace, everyone has a seat at the table - Dee Durant & Jamie McMillan
- Include mandatory requirements of DEI in tender process to increase female representation and voices – Lisa Laronde
 - “Recognising this is how a movement starts, there is nothing wrong with ticking a box or being the token women, it’s what you do with that, it’s about being empowered to use our voices and walking through the open doors.”
- Providing supported networking opportunities for apprentices and presentation opportunities to the next generation of tradespeople – All Tradeswomen
- Promotion of government subsidy programs for bringing on apprentices, working alongside the education system, unions and associations – Lisa Laronde
- Find an equal medium, include men in the conversation, bring the conversation to everyone, so everyone is impacted from an early age and can make change in the future – Jamie McMillan
- Help young people connect with themselves as emotional intelligence is missing in the workplace. – Jamie McMillan

“Women feel they need to work twice as hard to prove themselves ” – Chantel Paupin



- Provide visibility of accomplishments – Jamie McMillan
- Childcare onsite trailer or 24-hour childcare for any shift workers, or in-house nanny for employees – Lisa Laronde
- An industry-wide levy that subsidises childcare – Lisa Laronde
- Mandatory toilets for women close-by on jobsites – Jennifer Green & Allison Zerr
- Mentoring (one on one) and sponsorship (opening the doors to networking opportunities) – Lisa Laronde
- Provide free networking sessions for women on the tools, and access to round tables and conferences – Lisa Laronde
- Provide modified work for women who want to have children – Lisa Laronde
- Weekend Getaway – Dee Durant – including personal and professional development – Jennifer Green
- Advocating and providing clear trades pathways and careers in correction centres – Melissa Alexander
- Provide practical versus theoretical learning with industry input while in education as an incursion or excursion, including pre-service teachers – Lisa Laronde
 - “Recognising there will always be a need for building with the human touch”
- First Nations Trades Programs in local Indigenous communities and schools – Shylah Nokusis
- Increase community support and investment – Joshua Smith, Tenaris
- Anonymous reporting service as an association paid into by companies as a gold seal top level employer, monitored by external labour lawyers – Jamie McMillan
- Host equity events through vocational education and training institutions – Anna Lary
- Mandatory annual training in unions on diversity, equity and inclusion for all workers
- Offer a national mentorship program for women and gender diverse trade workers across Australia – Anna Lary
- Provide opportunities to women who've already walked down the trades path who are going to encourage more women into trades. For example, grants, scholarships, business start-ups for women to start their own businesses in the construction industry. Don't just look at continuing education, look at increasing resources such as female mentorships of female business owners in construction – Shylah Nokusis
- Peer to peer relationships is crucial to make sure someone has your back onsite – Chantal Paupin
- Addressing vocational education facilities and gender bias inside the training facilities – Log Ladies
- We need more accountability on the jobsites, all the nepotism, favouritism, and cronyism need to go – Jamie McMillan
- The apprenticeship youth advisors report written by Jennifer Green, advised the strategies taken by the Ontario Government to implement a supportive, inclusive [skilled trades and apprenticeship system](#):

“We need a culture reset” – Jamie McMillan

“Networking and support are learning from lived experience” - Jessica Gemmell, Tradeswoman



Recommendations

Department of Education and Educators

1. Providing support and direction in the form of presentations and seminars to educators in how to look for signs of a tradesperson coming through the system, and how to provide assistance to that student in their pathway journey.
2. Department of Education to conduct a course on mapping to the Australian curriculum for industry, non-for-profits and community groups.
3. Mandatory career school engagement activities aligning to curriculum as statutory requirements by the governing body and leadership school team. Asking teachers to include more in an already over-loaded curriculum is a burden. Therefore, provide programs which have already been embedded into the syllabus and provide wrap around support for the teacher to implement in the classroom and already established resources and materials.
4. Ensuring a whole-of-school approach for careers education by instilling career service benchmarking in school principals' key responsibilities.
5. Utilise the LLEN (Local Learning and Employment) network in Victoria and REIP (Regional Education and Industry Partnerships) network in NSW to implement career connected learning from K-12 with collaborative partnerships to impact young people with curriculum-based activities, alongside a transition coach to support educators in schools.
6. Introduce a yearly designated day of opportunity from year 5, such as Girls/Boys Day for young people to experience a different company year on year, reducing company resourcing pressures. Students are also introduced to multiple companies to help make an informed decision about their future employment pathways. In Germany, the majority of classroom teachers recognise the importance of real-life exposure to industry, therefore encourage students to partake in opportunities outside the classroom including Girls Day. We need to address this disconnect in Australia.
7. Career advisors receive specific careers funding to provide opportunities relating to career pathways to students, either incursions or excursions. Health and wellbeing, and mental health funding should be used for career guidance activities.
8. Reduce the regulatory burden from schools and industry around providing access to workplace experiences.
9. Micro-internships, one day placement in industry, task focused and immersion including onboarding, tour of facility, introductory to team/department, complete one project/task.
10. Female-only school engagement try a trade programs, incursions and excursions, without creating barriers by excluding the men, we need to offer separate programs for men as well.
11. Skilled trades exploratory program for teachers to teach skilled trades and tech at school to cover safety, equipment setup and adjustments, hands-on skilled based educating, project builds, run by vocational training organisations.
12. Career education as a whole school approach, recognising that every individual in a young person's life has an impact in their career decisions.
13. STEM – Described by a career's advisor in Canada as a “dysfunctional acronym”. There would be no need for STEM if career education was included in the curriculum from kindergarten as a career life journey, discussing roles and needs of jobs around us from early childhood, including but not limited to content information and experiences. If keeping STEM, campaign to inform educators about connection of STEM to trades, recognising pathway into vocational education and higher education as equal.



14. Amend the Department of Education excursion requirements policy in addressing an easier way for young people to participate in industry engagement career education and pathway discovery programs.
15. Department of Education to provide excursion funding specific for careers education and pathway discovery programs.
16. Implementation of mandatory 'Personal Development Day' for careers advisors and educators on skilled trades, complete with accountability impact.
17. Centres of Excellence, providing the exploratory and experiential learning for young people, linked to education, under the Department of Education.
18. Increase student engagement and encourage re-engagement for disengaged students by providing career connected learning and hands-on activities relating directly to career pathways, virtually into every classroom, while providing resources for teachers directly linking to curriculum.
19. Provide an opportunity in secondary school to complete entire schooling with skilled trades courses.
20. Federal Department of Education to assist in design of school curriculum mapping workshops for industry, non-for-profits and school careers advisors. Externally provided to address the barrier between schools and industry with the design of activities suitable to implement within schools.
21. Collection of students trajectory data across education duration (K-12) by data analyst to monitor the impact of student career programs as longitudinal data.
22. Use marketing campaigns to educate parents, teachers and careers advisors on the apprenticeship process and the apprenticeship support network available to them nationally. Improve nationally recognised process for completion by the apprentice by introducing life skills such as "having phone conversations" and "how to talk to a potential employer" into education.

Unions/Employers

1. Industry employers to use marketing campaigns that have imagery depicting women on the tools or involved in the task.
2. Provide a national hotline for employers and educators who are worried about women's boundaries or having women onsite, to address any questions or concerns.
3. Diversity Walks: Reviewing construction, manufacturing and industrial worksites for inclusive worksite facilities, employee communication on diversity in the workplace and examination of terms of employment and workers' rights.
4. Including role models has an aspiration impact, so by providing ambassador funding to tradeswomen and employers to compensate out of office time. This could be an education fund for each employee, much like superannuation.
5. Addressing risk management and safety with WorkSafe approved hard hats and toe caps alongside safety inductions completed before or at site for all visitors attending site tours and activities.
6. Women would be more inclined to return to work earlier if facilities and benefits were provided. Retrofitting and renovated space to include nursing room, with sink, chairs,

Steel toecaps





- and curtains. Conference and Congress events to provide a nursery style room for breastfeeding and pumping. This should be a mandatory regulation for every event, dictated by Government bodies and/or Unions.
7. For events that require travel, employees with a child should be provided an allowance to bring an additional person as a carer to look after the child for the duration of the work-related event.
 8. Give women on maternity an opportunity for career progression, such as a promotion or advancement.
 9. Give all parents the option of job part-time positions such as job sharing. This would benefit childcaring or aged caring.
 10. Standard Marital Status relief provides couples with one person on a high salary, and one person on a low salary, tax breaks. If the tax system was re-addressed to provide tax breaks also for two high paid working parents, this would be another enticement for parents to return to the workforce.
 11. Introduce company-wide strategy for school engagement to encourage a talent pipeline.
 12. Mandatory training provided on diversity, equity and inclusion to all employers who are partner in the Women in Trade programs.
 13. Create a 'Diversity, Equity and Inclusion Committee' for every project to identify employers that are invested in the future of an apprentice, and the career advancement opportunities made visible, and companies are made accountable for inability to meet DEI requirements.
 14. Provide training for leadership and employees on inclusivity, psychological safety and neurodiversity awareness through self-assessment, as a free initiative for companies. Provide training for both ends of a company, top leadership and boots on the ground supervisors and employees to prevent escalating of a problem.
 15. Employers introduce mandatory bathrooms onsite, conveniently located close to worksite including soap, bins and menstrual products.
 16. Being public about all internal diversity, equity and inclusion programs undertaken in construction, industrial, manufacturing and clean energy companies for underrepresented groups. Proactive and preventative internal actions taking place as public knowledge.
 17. Male Allies: Encourage male CEOs, executive directors, business owners to attend women in trade events to hear solutions to implement within business practices for the recruitment, retention and support of women in nontraditional trades.
 18. Childcare: Onsite childcare or sponsorship of childcare resources in local communities.
 19. Recognise in-company cultural differences where individuals may not believe women should be on worksites but are expected to train a female apprentice.
 20. Small and medium enterprises; tier 2,3 and 4 provided with foundational templates for policies and procedures alongside guidance and support to keep businesses accountable, monitored and administered by over-arching entity.

*"We need to have men learning at the same time as women simultaneously, where women and men are defined in society to avoid building resentment in men by asking to be equal" –
Nour Hachem*

"If you retain a women, you retain 20% of your costs, instead of 40% cost to employ a new person." – Pinky Sabhnani



21. Women's networking events should include personal and professional development workshops and upskilling. Membership paid for by the employer, as long as there is a key component that helps an employee in their role within the company.
22. Encouraging Tradeswomen, as the official company representation, to attend networking events to promote opportunities within the company for employment of women in trades. The same opportunity applies for men.
23. Sponsorship (inviting a new employee to attend events and introduction to new people) versus mentorship seen as a one-on-one support system. Employers to offer both options.
24. Women want to see their career progression path, so it's essential the career progression opportunities are advertised through recruitment or online presence to candidates or current employees.
25. Industry and union sponsorship opportunities to include summer camps, exploratory sessions and weekend workshops.
26. To increase positive wellbeing and mental health outcomes, include networking in all business strategic plans to address mental health effects.

Peak Bodies

1. Similar to universities incentivising pathways, vocational education and industry could also incentivise trades pathways through financial assistance and school engagement participation.
2. Minority group presence in all community projects, renovation and lifestyle television, media, peer-to-peer support and role model opportunities.
3. By providing a whole community approach, including non-for-profits, educators, registered training organisations, industry and youth, this offers opportunities for women and gender diverse individuals to partake in programs that enhance their knowledge in a career in trades.
4. Provide resourcing tools for current and future program participants to find scholarships, bursaries or financial assistance, tax credits and incentives, tool credits and loans in one place such as a website resource hub.
5. Provide free pre-apprenticeship programs for women and minority groups that filter directly into a guaranteed job on completion. A collaboration between government, registered training organisations and industry.
6. Collaboration between organisations and states to address the industry skills gaps; federal government, state government, vocational training organisations, industry bodies (private and public), non-for-profits, and Youth Voice.
7. As part of all programs, women need to be provided with training on how they should be treated, what they should be paid, what the environment should look like and how to establish their own individual boundaries.
8. Global Recognised Standard of Diversity, Equity and Inclusion: Implementing an international standard of Diversity, Equity and Inclusion for all companies to have in their internal policy and procedures. The International standard would have a standard Company framework including employee recognition as well as holding employees accountable for actions. Incorporate Be More than a Bystander Workshop as the international standard for all businesses.



Community Organisations

Collection of songs, books, curriculum-based learning, available for parents' information nights and teacher workshops with industry tours all included in personal development.

Training Organisations

1. Pre-service teachers' exposure to industry through hands-on learning programs aligning to curriculum including company site tours.
2. Vocational Education & Training organisations to use marketing campaigns that have imagery depicting women on the tools or involved in the task.
3. Ambassador program introduced at all vocational education institutions, along with networking and social gatherings, opportunity for upskilling, personal and professional development as well as advocate positions.
4. Free pre-apprenticeship programs for women and gender diverse individuals only, alongside support services with guaranteed jobs on completion. Funding retention programs in the form of supportive programs, for skill advancement, being competitive in the market, individualised mentoring opportunities and linking to existing resources and programs not already spotlighted.
5. Skilled trades exploratory program for teachers to teach skilled trades and tech at school to cover safety, equipment setup and adjustments, hands-on skilled based educating, project builds, run by vocational training organisations.
6. Networking opportunities and social gatherings at vocational education provides safe space to discuss common language for what should be expected and what's not allowed and to discuss what harassment means, personal welfare, personal boundaries and get support. Sponsored by vocation education training providers.
7. Women in trades and First Nations initiatives included in WorldSkills regionally, state-wide and national competitions.
8. Off school try a trade program hosted at colleges and unions, as anecdotal evidence shows students are better behaved and engaged off school campus in a neutral setting.
9. Loop in technology awareness into trades programs to address advancement in manufacturing, new technology, while highlighting the changing environments, safety aspects and policies.
10. Provide as much real-life knowledge and examples of working in trades, but also provide training on setting up personal boundaries and established support networks, as well as DEI training for vocational trainers, site trainers and site supervisors.
11. Collaboration between registered training organisations to deliver successful national trades and tech programs such as Jill of All Trades.
12. Disconnect between intergenerational learning styles: Educators need to be taught how to teach, but zero resources are provided to qualified tradespeople to teach apprentices. Train the Trainer.
13. Vocational education teacher- upskilling individuals wanting to learn more, introduce biannual "new technology" workshops into classrooms in the form of product demonstrations, to stay up to date with industry. These could be masterclasses.
14. Program advisory committees where industries can address what training organisations need to include or expand to enhance student knowledge. An example could be the implementation of a one-hour workshop or presentation during training at vocational school.



15. Clean energy and renewable energy, include pathway education for training organisations by recognising and marketing transferrable skills between trades as well as minimum standards in specialised training required by industry during vocational education and training completion.
16. Free women only pre-apprenticeship programs available at all vocational training organisations, not just TAFE's, to increase participation and accessibility.
17. Multiple stakeholder involvement, industry bodies, youth, and non-for-profits, in course curriculum and unit design for vocational training organisations.

Government and Policies

Canada was the front-runner during my Fellowship in recognising the skills shortage in the building and construction industry on a governing level, and how inclusivity and diversity can help to rectify the gaps. Canada had implemented compulsory skilled trades and tech programs as a core subject in year 9 classes, in addition to the roll-out of career connected learning from kindergarten to year 12, and by recognising the highly successful vocation education college programs rolled out across the country.

1. Government project quotas.
 - a. Provide an effective change strategy report for a 10-year goal.
 - b. Implementing long-term programs to meet the 10-year goal.
2. Trades Recognition Australia to include renewable energy trades.
3. Collaborative effort between Ministries of Labour, Education, Women's and Economic Affairs and Vocational Education in showcasing the deficit in skilled trades and funding progressive programs.
4. Offering apprentices scholarships, bursaries or financial assistance, tax credits and incentives, tool credits and loans.
5. Ministry Officer face-to-face attendance at funded recruitment, retention and support programs to monitor execution, speak to participants, industry stakeholders and tradeswomen ambassadors.
6. Change the vocational accreditation wording to all be "degree" to match higher education wording, rather than certificate, therefore addressing unconscious bias around the trades.
7. Paid maternity and paternity leave, nine months for mum and three months for dad. Mandatory for employer for one year.
 - i. Parental leave model re-addressed, Germany offers 12:2, Sweden offers 6:6 and Denmark offers 6:3 for mother and father to discuss as a family unit.
8. "The Future is Female/Equal" or "#Togetheritsbetter" – commercials for apprenticeships, transport wrapping advertising and social media.
9. Exposure to industry for pre-service teachers through opportunity to complete hands-on activities and upskill across all subjects.
10. Aboriginal Community Career Employment Services Society; apprenticeship incentive grant for First Nations people.
11. Increase technical schools across the nation for secondary school students.
12. Invest in trades workshops on secondary school campus.
13. Implementation by Department of Education of an 'Options & Opportunities' and Cooperative Education Programs.



14. Implementation of School Holiday Employment program alongside partnership with industries, vocational training organisations, secondary schools and department of education. Delivered in partnership with Apprenticeships Australia, unions, associations and industry. Victorian Local Learning Employment Network (LLEN) and New South Wales Regional Industry Education Partnerships (RIEP) to coordinate and manage students, teachers and partnerships for employment programs.
15. Offer e-learning career advisory tools to pre-service teachers to be integrated into the education environment as a cross-sectional topic with existing curriculum.
16. Change the narrative of renewable trades positions to reflect that positions within the industry are existing jobs, with the need for minor upskilling through industry run courses and workshops.
17. Provide sustainable funding so community groups such as Non-For-Profits, don't have to spend their time lobbying for grants and can spend their time continually providing successful services. Recognise that longevity creates impact, and impact creates change therefore investing long term in an initiative for change is crucial.
18. All organisations nationally to introduce hands on workshops to address unconscious bias, and methods to implement policy change.
19. An ambassador program introduced into Australian Defence Force to encourage recruitment of minority groups.
20. Introduce e-learning module training into federal and state Employment Agencies for jobseekers, for new agency employees helping with job placements, who are instructed to complete the training which addresses the recognition of stereotypes and stigma in traditional job roles. This e-learning training is provided in the induction of a new employee but also offered to existing employees.
21. State or federally funded grant opportunities for women, gender diverse and minority group entrepreneurs through business start-up funding, mentorship and support opportunities.
22. Federal or State Government funded mental health training a priority in every industry career, addressing stress, anxiety, apprehension, workplace pressures for students, educators, employees, trainers and new apprentices.
23. Include a construction, industrial, manufacturing and clean energy levy of funding through government projects put into educational and talent acquisition initiatives to promote and encourage women and minority groups into trades.
24. Incentives for women and minority groups for a career in the trades - subsidies for tools, transport, childcare, healthcare and tax-free salaries.
25. Federal and State Governments to provide grants, scholarships, and business start-ups for women to start their own businesses in the construction industry. Don't just look at continuing education, look at increasing resources such as female mentorships of female business owners in construction.



Society Changes

The summary highlights several societal changes aimed at promoting gender equality and challenging traditional gender roles. These changes include:

1. Separating baby change rooms from gendered toilets to provide a more inclusive and accessible environment for all parents.
2. Encouraging children to call their fathers first when needing assistance from daycare or school, rather than their mothers, to promote a more equal distribution of parental responsibilities.
3. Reducing the burden of domestic duties on women in heterosexual relationships, which currently account for 60-75% of household chores (Time use and gender inequality: A cross-country analysis" by Maria S. Floro and others, Social Indicators Research, Vol. 143, Issue 2, 2019).
4. Adding a female word for "emasculate" to dictionaries to provide a more inclusive and accurate representation of language.
5. Introducing young people to individuals working in under-represented jobs, such as male nurses, female doctors, female electricians, male childcare workers, and female firefighters, to promote greater understanding and appreciation of diverse career paths.

"We often task women, as a society, in solving the issues that were created by society not women themselves to solve the issues impacting them." – Nour Hachem

These changes aim to promote greater gender equality, challenge traditional gender roles, and provide more opportunities for individuals to pursue their passions and interests regardless of their gender.



CONCLUSION AND KEY FINDINGS

In conclusion, the Churchill Fellowship has provided a unique opportunity to delve into the complexities of addressing stereotypes and stigma, and to develop a comprehensive approach to encouraging women into trades while supporting and retaining our current workforce. The multi-levelled approach to addressing unconscious bias, from early childhood development to professional life, is a crucial step in breaking down barriers and creating a more inclusive industry.

The proposed solutions including comprehensive collaboration between industry and education providers, long-term investment in recruitment, retention and support programs as well as demonstrating the trades as an attractive career for any gender while addressing misconceptions and stereotypes. The aim is to remove the school-to-industry barrier and provide a clear pathway for young women to enter the trades. The inclusion of career-connected learning for pre-service teachers, career education in all levels of education, and a national online portal to tap into female and minority group ambassadors will help to raise awareness and provide resources for students and educators.

The emphasis on providing wrap-around support, networking opportunities, and personal and professional development will help to address the unique challenges faced by women and minority groups in the trades. The recognition of the importance of supportive programs for tradeswomen in industry, including a feedback loop, recognition and visibility of employees and a zero-tolerance policy is a critical step in creating a more inclusive and supportive environment.

The proposed pipeline training program, guaranteed job placement, and wrap-around support will provide a clear pathway for women and minority groups to enter the trades and succeed. The campaign to educate educators about the link between STEM and trades, or the rebranding of STEM to "Trades & Tech", will help to shift the narrative and provide a more inclusive and accurate representation of the trades.

Ultimately, the solutions proposed aim to create a more inclusive and supportive environment for women and minority groups in the trades, and to provide a clear pathway for young women to enter and succeed in these industries. By working together, we can create a more equitable and diverse workforce and provide opportunities for all individuals to thrive and succeed.

"This is a global issue, we're fighting for the same people, someone needs to create these people, and build this capacity. Tap into the other 50% of the population should be as important, if not more important than immigration. Invest in the future of current residents who have already put down roots." – Nour Hachem



DISSEMINATION & IMPLEMENTATION

I am the Founder and Chairperson for the Hard Hats & High Hopes Working Group including Vocation Training Organisations, Apprenticeship providers, Non-for-Profits, Government agencies, Educators, Department of Education and Tradeswomen.

I shall also:

- Discuss findings with WorldSkills Australia.
- Discuss findings with the Federal and State Departments of Education.
- Discuss findings with the Victorian Skills Authority under Department of Jobs, Skills, Industry and Regions.
- Promote in media through ABC radio interviews and LinkedIn network.
- Discuss findings with key influential groups nationally including the Manufacturing Alliance, Clean Energy Council, Australian Manufacturing Workers Union, Master Builders Victoria and Powering Skills Organisation.

REFERENCES

Alex Waldren, N. D. (2024). BuildSkills; apprenticeships; labour shortages; skills; training. *Launch of BuildSkills Australia*. Canberra.

Australian Government The Treasury. (2024). Retrieved from Delivering the National Housing Accord: <https://treasury.gov.au/policy-topics/housing/accord>

Authority, V. C. (2022). *VCE Vocational Major Work Related Skills, Study Design*. Melbourne: Victorian Curriculum and Assessment Authority.

Economics, E. (2021). *Back of the Pack - How Australia's parenting policies are failing women and our economy*.

L.Godden, S. (2024). *Exploring Possibilities! Journeying Through Career-Related Learning in Grades 4-6*. CERIC.

M.Turner, S. &. (2022). *Career pathways of women in construction: Boots on the ground*. Melbourne: RMIT University.

Nick Chambers, D. E. (2018). *Drawing the future*. London: Education & Employers.

Women, C. E. (2022). *Addressing Australia's critical skill shortages: Unlocking women's economic participation*. Sydney.