

WOMEN IN SUSTAINABLE EMPLOYMENT (WISE)

Logic Model and Scalability

Introduction

Women are under-represented in many in-demand, well-paying technical careers. This is the result of a complex combination of challenges and factors. The Cornell HR Review found that lack of awareness and lack of support were two contributing factors inhibiting women’s participation in male-dominated careers¹. At the same time, companies across numerous industries are struggling to fill key technical roles. Closing the disparity between the percentage of women in the workforce and the percentage of women who pursue technical roles could make a significant impact on closing this workforce gap – and would provide enhanced financial stability to thousands of women and families. Drawing on evidence of what works², institutions need support to identify and adopt cost-effective, industry-engaged, and community-based approaches that focus on building a climate to help more women enter and advance in high demand careers where they are currently underrepresented.

Businesses face workforce gaps in many technical fields. The Manufacturing Institute, for example, estimates there could be as many as 2.4 million unfilled manufacturing jobs between 2018 and 2028 that will exact a steep cost on the industry.² Similar gaps exist in occupational fields including skilled construction trades, information technology, and utility workers.³ Given that women are under-represented in these fields, improved gender diversity is viewed by many businesses as an operational imperative⁴. This paper highlights a systemic approach called Women in Sustainable Employment or WISE developed by HHW Ohio (formerly Hard Hatted Women). Founded in 1979 by three tradeswomen, HHW Ohio is dedicated to accelerating women’s success in high-demand/high-wage occupations and industries in which they are often underrepresented. WISE leverages a “Find Out, Get In, Move Up, Give Back” model to building a supportive ecosystem for women, which has demonstrated its effectiveness in encouraging adult women to pursue high demand careers in technical fields.

¹ Gaines, Janelle. "Women in male-dominated careers." (2017).

³ NSF INCLUDES National Network. “Broadening Participation in STEM” (2022)

⁴ 2018 Deloitte and The Manufacturing Institute skills gap and future of work study. Retrieved from <https://www2.deloitte.com/us/en/pages/manufacturing/articles/future-of-manufacturing-skills-gap-study.html> on December 11, 2018.

² Associated General Contractors of America and Sage Construction and Real Estate. Expecting a Post-Election Bump: The 2017 Construction Industry Hiring and Business Outlook, Retrieved from <https://www.agc.org/news/2017/01/10/seventy-three-percent-construction-firms-plan-expand-headcount-2017-contractors> on December 11, 2018.

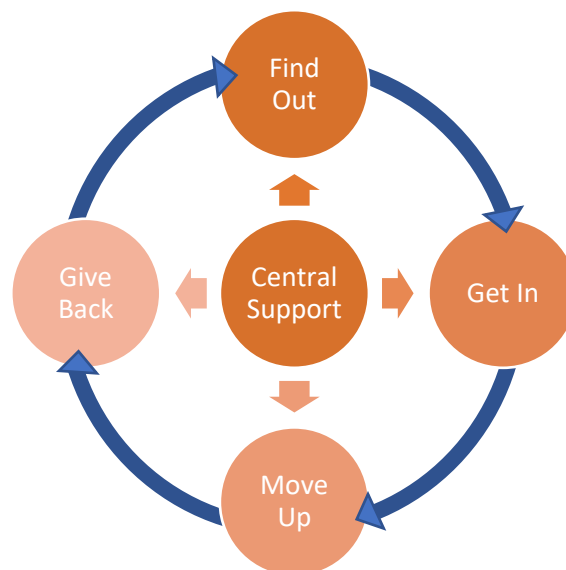
³ U.S. Department of Energy, Quadrennial Energy Review (QER) Task Force report second installment titled “Transforming the Nation’s Electricity System.” Chapter V: Electricity Workforce of the 21st-Century: Changing Needs and New Opportunities. January 2017. Retrieved from <https://energy.gov/epso/initiatives/quadrennial-energy-review-qer> on December 11, 2018.

⁴ Heeter, C. “The gender dividend: an urgent economic imperative.” OECD Observer. Retrieved from http://oecdobserver.org/news/fullstory.php/aid/3691/The_gender_dividend:_an_urgent_economic_imperative.html on December 11, 2018.

Focused on Women

WISE is a longitudinal approach to supporting women that engages them throughout their career. Intentional coordination and facilitation and a focus on continuous engagement of women are at the center of the WISE approach. It supports integrated programs and practices from career awareness to advancement. Two central support elements are essential to the success of WISE- a Dedicated Intermediary and Role Model Speakers recruited from industry partners.

- **Dedicated Intermediary:** A dedicated intermediary that is focused on supporting women is critical to the success of WISE Pathways. Many organizations and initiatives are interested in recruiting and retaining women within their programs or workforce, but their mission is not focused on the success of women. Having an organization, like HHW Ohio, who lives and breathes the success of women ensures that the throughline does not get lost and ensures a systemic rather than a programmatic approach. The role of the intermediary is to bring together partners to participate and support in WISE events and programs, support women on their pathway, monitor the effectiveness of interventions and programs through practicing continuous improvement, conduct research and evaluation to identify best practices for supporting women at every stage of their career, engage and train Role Model Speakers, provide technical assistance to companies on how best to recruit and retain women, support the scaling of efforts and identifying resources to support and sustain WISE.
- **Role Model Speakers recruited from Industry partners:** Role Model Speakers are the cornerstone of success for WISE. Role Model Speakers are volunteers working in targeted industries and occupations who inspire and inform others within their community to share their story. Role Model Speakers increase the visibility of women in a wide variety of roles and industries, especially those in which women are under-represented. Their stories help girls and women understand the opportunities, challenges, and strategies to enter and succeed in fields they may otherwise not consider. Role Model Speakers may also serve as formal or informal mentors for the girls and women they are connected with, helping build the network of support which is critical to helping women get in and stay in nontraditional fields. Additionally, serving as a Role Model Speaker is a form of leadership development. Role Model Speakers are provided with coaching and training on how to connect with different audiences, are able to hone their leadership skills through engagements, and are recognized as community and industry leaders. The intermediary is responsible for recruiting, training, connecting and supporting Role Model Speakers.



In addition to the central support of the Dedicated Intermediary and Role Model Speakers, three key stakeholder groups must be present to ensure the success of WISE- Engaged Industry, Community-based Partnerships, and Aligned Education and Training.

- **Industry Engagement:** Industry engagement is critical to the success of WISE. Industry partners may be industry sector partnerships, individual companies, or a consortium of companies. Industry partners are engaged for both advisory and practical roles. Advisory roles include providing guidance about hiring needs, wages, and skills/education needed to be successful; advising program and intervention development; and providing information about what practices are in place to recruit and retain women within their company/industry. Practically, industry partners help identify and recruit Role Model Speakers; participate in WISE programs and initiatives- which may include reviewing resumes, hosting site tours, conducting mock interviews, or hosting short-term work-experiences; and when beneficial to do so, hire women who have been directly supported by the ecosystem.
- **Community-based Partnerships:** Community-based partners are critical components of the WISE approach. Community-based partners may be faith-based organizations, mental health-focused organizations, organizations who support a specific population (such as women in recovery or new mothers), community development corporations, among many others. Community-based partners provide supportive services to help women overcome any challenges they may be facing, help recruit for interventions and programs, provide case management and follow-up support as needed, and share valuable information about the ecosystem through their networks.
- **Aligned Education and Training:** Education and Training providers who deliver programs which are aligned to the target industries are essential to WISE. They provide women access to their next step and often have learn and earn programs and apprenticeships which are beneficial to women. Education and Training providers may also lead WISE programs and initiatives.

Find Out, Get In, Move Up, Give Back

Find Out, Get In, Move Up, Give Back provides a longitudinal organizing framework for WISE. This framework helps to delineate partner contributions, helping each to understand where they can make the biggest contribution. When implemented properly, WISE become self-sustained, creating momentum that helps to move the needle on key outcomes such as women’s participation in high-wage/high-demand industries and occupations, the number of women in a region earning a family sustaining wage, and the number of women who are able to advance within nontraditional pathways. Each phase of the framework is necessary- many programs focus on one or two pieces and aren’t able to have the sustained success needed to make the systemic changes needed to truly enable women to enter into and succeed in male-dominated fields. Each step within the Find Out, Get In, Move Up, Give Back framework is interconnected. While each represents a different phase of a woman’s career journey in a non-traditional occupation or industry, they build on each other and when implemented correctly become a circular, self-sustained process.

Find Out

In the Find Out phase, girls and women are introduced to careers and pathways that they might not have considered or have had the opportunity to find out about. Here Role Model Speakers are critical as they are often the first interaction with women in industry that participating girls and women may have- sparking the belief that they too can find success in a non-traditional pathway. Effective practices in this phase include Rosie’s Girls and WISE Information Sessions.

- **Rosie's Girls:** Rosie's Girls is a weeklong STEM, trades, and career exploration summer camp for middle school girls entering grades 6-8. Participants in Rosie's Girls are introduced to different technical career fields through hands-on learning in a supportive and empowering environment. Each participant has the opportunity to use power tools and technical equipment to experiment with the materials in the shop and connect with Role Model Speakers who help guide them through activities.

In addition to trades and technical learning, Rosie's Girls includes Power Skills. Power Skills are designed to help participants develop social and emotional skills to build healthy relationships, find their own voice, and think creatively about how to solve problems.

- **WISE Information Sessions:** WISE Information Sessions help women gain awareness of available career options and understanding of how to prepare for or enter these careers. The sessions also provide women with immediate next steps to apprenticeship and training opportunities and employers with immediate hiring needs. The sessions are ninety minutes long and feature introductions to up to three regionally in demand industries. The introductions to industry are provided by Role Model Speakers. These introductory sessions provide participating women with information about what opportunities are available within the industries, what it is like to work in the industry, and what the next steps are to securing employment. They also help to recruit for WISE Pathways programs, as applicable.

WISE Information Sessions provide participants with a "warm handoff" to the next step on their career pathway. This is done through a personal introduction to an aligned education or training provider, apprenticeship coordinator, hiring employer or WISE Pathways program. Additionally, women also have opportunities to connect community-based organizations who can provide or offer referrals to needed supports such as childcare and transportation assistance.

Get In

In the Get In phase, women are prepared to take the next step in their career journey, whether it is entering into the workforce, enrolling into education or training, or becoming an apprentice- all while accessing the supportive services they need to thrive. Industry, Community-based, and Education/training partners all work with the dedicated intermediary to support women in this phase, as well as Role Model Speakers who help to build the social capital and confidence of women. WISE Pathways is an evidence-based program that has proven effective at helping women get into their career pathway.

- **[WISE Pathways:](#)** WISE Pathways is a 40-hour career exploration and readiness course designed by HHW Ohio and honed as an industry resource in partnership with the Center for Energy Workforce Development (CEWD), a non-profit consortium of electric natural gas and nuclear utilities and their associations, the program has been used in a number of iterations that have demonstrated its successful impact. It is designed to be a low-cost, easy to implement program with a growing learning community providing continuous improvement. Free, open-education resources are available to host organizations that want to use WISE Pathways.

In WISE Pathways, participants receive an in-depth overview of high wage, in-demand careers in their region, with a particular focus on those where women remain significantly underrepresented. The course covers the realities of the featured careers, what to expect and how to be competitive in a hiring process, and where to get needed education and training. A suite of career development and supportive services tailored to meet the specific needs of women and families complements the course, often delivered by community partners. Depending on the delivering host, certifications such as the Tooling U SME's Certified Manufacturing Associate (CMfgA) credential have been embedded.

The delivery of the program heavily relies on partnerships with organizations providing complementary services such as training, career connections, and supportive services. ConxusNEO in the Greater Akron Region, for example, has delivered their WISE Pathways program in partnership with The Well CDC- a place-based community development corporation. Similarly, HHW Ohio, with the support of a grant from the US Department of Labor, partnered with three community colleges in Northeast Ohio to deliver the model between 2010 and 2012; and then reinvented the program in 2015 with funding from an initiative called the Honor Project to offer it in partnership with Oberlin Community Services (OCS), a community-based organization serving low-income residents in Lorain County, Ohio. Today, six communities across the state of Ohio (Lorain County, Mahoning Valley, Greater Akron Region, Dayton, Richland/Crawford Counties, and Scioto/Ross Counties) offer variations of WISE Pathways to suite their local economic and social contexts.

Move Up

In the Move Up phase, focus is on helping women not only retain their careers within nontraditional occupations and industries, but to advance. This is done through ensuring women have an ongoing network of support, mentoring and encouraging industry to offer company cultures which are supportive of all workers, including women. Here the dedicated intermediary works with community-based partners to provide ongoing support for WISE Pathways completers and coaches industry partners on best practices for supporting women to improve recruitment and retention.

- **WISE Mentors: Role Model Speakers** often act as informal mentors for girls and women. WISE Mentors are Role Model Speakers who have been provided with mentorship training to formalize their mentorship and provide mentorship support to women who have completed WISE Pathways. WISE Mentors are matched with up to three WISE Pathways completers and meet with them at least monthly for one year after the completion of WISE Pathways. WISE Mentors are provided with a mentorship guide that gives facilitation prompts, tactics for starting conversation, and methods to help mentees think creatively about meeting challenges. The dedicated intermediary checks-in with mentors to provide them support and to ensure that they are finding value out of the experience.
- **Industry Coaching:** It is the role of the dedicated intermediary to identify and deploy best practices for supporting women. As part of this, they should be providing industry partners coaching on how to make their environment more friendly for women. Coaching is provided in a variety of methods including the development and deployment of toolkits, webinars, learning communities, or on a one-on-one basis.

Give Back

Finally, in the Give Back phase, women who have benefited from participating in WISE are encouraged to join and help recruit new members for the Role Model Speakers Bureau. This helps to ensure that there are Role Model Speakers with diverse perspectives and experiences. Additionally, this also helps to grow WISE, creating a movement for larger impact and sustaining the program.

- **Role Model Speakers Bureau:** The Role Model Speakers Bureau is the cornerstone of WISE. It program provides support, training, and connection for Role Model Speakers. The dedicated intermediary helps Role Models develop their story, highlighting best practices for engaging with different audiences. Once Role Models have been trained, they are connected with opportunities to engage with girls and women in their community. Role Model Speakers connect with girls and women at WISE programs as well as in person events at various settings such as high schools, libraries, community colleges, or housing authorities. Role Models are often connected to virtual events as well, such as webinars or filmed interviews, which allow Role Model Speakers to connect with girls and women statewide.

Vision for Scaling and Replication

HHW Ohio along with Lorain County Community College (LCCC), a community college located in Elyria Ohio, 30 miles west of Cleveland, developed a partnership with leaders at California State University who manage a national platform called SkillsCommons to support national enhancement and replication of the WISE, as part of a national women’s outreach initiative. The goal is to shorten the learning curve for organizations that may consider adopting WISE and create a learning community around its use to support ongoing, open innovation and adoption.

SkillsCommons was established under a cooperative agreement with the US Department of Labor (USDOL). It curates a free and open online library of learning and program support materials – called Open Educational Resources (OER) - for use by education, training, and workforce development professionals. OER are freely accessible, openly licensed documents and media that are useful for teaching, learning, and assessing as well as for research purposes. They have been produced by community colleges across the nation and can be reused, revised, and redistributed by individuals, institutions, and industry. Drawing on its vast OER library, SkillsCommons assembles what are called *IMPACTcommunities*, virtual communities of organizations interested in leading and participating in collaborative problem solving around common issues.

In partnership with Lorain County Community College, which manages a statewide consortium of community colleges and others partners called Ohio TechNet focused on meeting the talent needs of Ohio’s manufacturing industry, the WISE Pathways program curriculum has been made available as an open education resource on SkillsCommons. In 2018, SkillsCommons adopted the same name to launch an *IMPACTcommunity* called [Women in Sustainable Employment \(WISE\) Pathways IMPACTcommunity](#) to focus on building a national learning community around the WISE Pathways program curriculum and other WISE strategies and materials to successfully engage women in high demand career pathways where women are underrepresented (<http://support.skillscommons.org/connect/impact-communities/wise>).

With support from a US DOL-ETA Scaling Apprenticeship Through Sector-Based Strategies grant, HHW Ohio, LCCC, and the National Laboratory for Education Transformation (NLET) developed a WISE Pathways website (www.wisecareerpathways.com). This website makes the WISE Pathways curriculum interactive, allows women seeking support to connect with HHW Ohio who can connect them with local resources, and provides a platform for engagement for the WISE Pathways IMPACTcommunity. This platform is supported by Slack and allows members to build community, share best practices, and collectively troubleshoot problems.

The long-term vision for the WISE Pathways IMPACT*community* is to establish a sustainable channel for scalable solutions through which women are supported to enter and advance in nontraditional careers. WISE and the Find Out, Get In, Move Up, Give Back model, by design, offer a low-cost, high impact set of strategies, built on a model of education- community-industry collaboration. The vision for sustainability involves the establishment of a culture to support the model. Additionally, sustained and expanding relationships between adopting organizations and businesses grounded in mutually beneficial outcomes around employment diversity are central to the long-term vision. Given that WISE is envisioned as a solution to challenges faced by businesses, sustained efforts to identify, align, and enhance business objectives around diversity is central. Finally, WISE intends to reach a national audience by working to engage organizations nationally to adopt and implement WISE and the Find Out, Get In, Move Up, Give Back model.

A sustainable package of support for national adoption, including new adopter coaching and tools, is envisioned. Plus, a vibrant feedback and best practices community among adopting organizations is envisioned to support continuous improvement and adaptability of the model.

Several critical short and intermediate term outcomes will build toward this long-term vision -namely, provision of support leading to the successful implementation of WISE in communities around Ohio and participants' gaining employment or enrolling in education/ training programs in targeted fields. Business engagement activities are intended to provide measurable value for businesses. Currently, LCCC and HHW Ohio are working with New Growth Group, a national workforce development consulting firm, on capturing and documenting this value in a third-party evaluation. As this evaluation progresses tools will be developed and shared first with Ohio TechNet communities for validation and refinement, then with a larger audience via SkillsCommons. Additionally, HHW Ohio is engaging and supporting a community of adopters in throughout Ohio. These communities have varied socio-economic contexts leading to vibrant models and practices is the preferred method for engaging and impacting women nationally.

The end goal is to increase women's share of the workforce in nontraditional technical fields. To do this, the IMPACT*community* needs to grow and WISE needs to spread in communities throughout the United States. National goals include:

- Expanding and piloting of the WISE Pathways program to four additional sites throughout Ohio, bringing the total to 10 communities statewide.
- Growing the IMPACT*community* to at least two new states.
- Updating open education resources (OER) with tools from other WISE strategies such as WISE Mentoring and WISE Information Sessions.

To become involved in the WISE Pathways community, contact:

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Figure 1: WISE Logic Model

Challenges	Strategies	Activities	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes
<p>Industry:</p> <ul style="list-style-type: none"> Face a growing talent shortage that threatens competitiveness Struggle to recruit, retain, and promote women Often do not have access to gender-specific workforce development resources <p>Women:</p> <ul style="list-style-type: none"> Under-represented in many STEM careers Disproportionally impacted by jobs lost due to Covid-19 Lack access to mentors and role models in apprenticeship and other non-traditional fields <p>Organizations:</p> <ul style="list-style-type: none"> Unfamiliar with successful solutions for supporting women 	<p>Rosie’s Girls</p> <p>WISE Information Sessions</p> <p>WISE Pathways</p> <p>WISE Mentors</p> <p>WISE Website Expansion</p> <p>WISE Learning Community</p> <p>Statewide and National Expansion</p>	<p>Support business engagement through coaching and demonstration of ROI</p> <p>Engage new WISE host organizations and partners</p> <p>Provide technical assistance on WISE implementation and sustainability</p> <p>Develop new content for WISE Pathways website</p> <p>Facilitate WISE IMPACTCommunity</p> <p>Share best practices with expansion partners</p>	<p>New industry partners participate in WISE programs statewide</p> <p>New Role Model Speakers identified and trained throughout Ohio by HHW Ohio</p> <p>At least 10 partners throughout Ohio are provided technical assistance for WISE implementation</p> <p>3 new modules developed for WISE Pathways website</p> <p>WISE implementation sites join IMPACTCommunity</p>	<p>Case studies and tools developed from third-party evaluation of WISE</p> <p>Role Model Speakers are trained as WISE Mentors</p> <p>Women from at least 10 communities in Ohio participate in WISE Pathways programs</p> <p>Increase the number of women in Ohio who enroll in apprenticeship or learn and earn programs</p> <p>Increase the number of women in Ohio complete apprenticeship or nontraditional training program</p> <p>At least 2 national expansion sites replicate WISE</p>	<p>Build a talent pipeline of women for Ohio’s businesses</p> <p>Increase the number of women in Ohio who are placed into apprenticeable or non-traditional occupations</p> <p>Increase the number of women who advance in their career in an apprenticeable or non-traditional occupation</p> <p>More women in Ohio secure a higher wage</p> <p>Communities throughout Ohio are able to sustainably support WISE programs</p> <p>Partners nationwide adopt effective practices for recruitment, retention and completion into aligned education and training programs shared through IMPACTCommunity</p>

