As part of an investigation from August 2017 to November 2018 into how to recruit more women into Jane Addams Resource Corporation’s (JARC) Careers in Manufacturing Programs (CMP), researchers from the Center for Urban Research and Learning (CURL) conducted 1) focus groups with women in the target population that JARC is interested in recruiting, 2) individual interviews with both current students and graduates of the JARC Women in Manufacturing program, 3) interviews with current partners of JARC, 4) a literature review on Adult Basic Education (ABE) and Bridge programming, 5) analysis of CMP applicant data, 6) informal interviews and observations of data management and client tracking, 7) observations of JARC application sessions, 8) observations of JARC tabling events, as well as informal interviews/focus groups regarding recruitment practices.

The goals of CURL’s research were to understand and assess and provide recommendations around:

- The number and characteristics of women who apply to JARC’s CMP training, as well as referral type.
- Potential JARC applicants’ impressions, questions, and general thoughts regarding JARC recruitment materials, and program characteristics that attract JARC students.
- The barriers and challenges JARC students and other women face in manufacturing job training and manufacturing careers, as well as the scope and impact of JARC support for female trainees, and overall benefits of manufacturing training.
- The nature and benefits of organizational partnerships with JARC including partner organization perspectives on the characteristics and motivations of clients interested in the WIM program, clients’ potential lack of information or misconceptions about JARC’s programming or careers in manufacturing, and potential actions to make the program more appealing and accessible.
- Best practices related to JARC’s adult basic education testing, and how these practices fit into a larger framework of recruiting women into JARC’s programs.
- Recruitment and application session materials used, how the materials are framed, staff interaction with potential applicants, as well as staff perspectives of recruitment.
- The goals and process of recruitment data tracking and management as well as data collection material such as applications and electronic data files.
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Overall Findings

Getting Women in the Door

CURL’s research determined that from July 2017 to Sept 2018 over two thirds of JARC’s applicants were men, while just under a third were women. Recruitment observations of JARC tabling events showed low attendance and interaction with potential female applicants. The most common referral sources for all applicants are the Internet (91%), friends and family (75%), and partner organizations (62%). These are also the categories with the highest sex disparities (Figure 1). The largest source of JARC referrals that see the most sex disparities are those that come from the internet (25% are women and 75% are men). When friends/family refer people to JARC, women are referred about 26% of the time. Partner organizations see less of a disparity, with four out of ten of their referrals being women. Although only one out of four internet referrals are women, the fact that so many people get their referrals from those three sources still presents a valuable opportunity.

![Figure 1: Sex by Top Seven Referral Types](n=328)*

While there were no statically significant differences across referral types, men are recruited more often, and through more avenues. In particular, female applicants are referred more often from partner organizations and by former JARC students as compared to men who are most commonly referred through the internet or via family/friends. This was reflected in the current and past JARC student interviews where most had heard

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1 The remaining referral sources have so few people that these results were not included.
about the program through other social services they were already using or word of mouth (they knew someone who had already gone through the training program).

**Partner Organizations**

Interviews with partner organizations demonstrate why this may be another common referral source among women. **Partner organizations view JARC as a cooperative partner in attracting more people (especially women) into manufacturing jobs, providing exceptional training, and feel comfortable referring clients to their programs.** However, while partner organizations are a common referral source for women, **this referral source may be ineffective overall.** For example, one partner mentioned that she gave JARC information to many women but has only actively referred a few clients and was unsure if any clients applied or were accepted to JARC’s training. The disparity between women who hear about JARC and the women who apply could be related to how partners frame JARC’s programs. For example, one partner mentioned not discussing their Women in Manufacturing program specifically when recruiting. This aligns with JARC staff’s comments that more targeted recruitment messaging, more broadly, may be helpful in recruiting more women. Yet, our findings showed that **demonstrating women as a specific target audience, by seeing women (especially older women) represented in JARC advertising, was an important influence in current and former students’ decisions to apply to the CMP training.** Thus, while many applicants are referred through this source, they may only represent a small amount of women who hear about JARC from a partner organization.

**Applicant Characteristics**

There did not appear to be “typical” reasons for why current and former female students joined JARC. However, a trait shared among most of the interviewees was that they felt that their life circumstances had limited their potential future options, and JARC was a way to expand their opportunities.² Considering the ways in which female applicants differ from male applicants, female applicants may experience distinct barriers to recruitment. **Participating full time in manufacturing job training may not be feasible for most women as they are currently receiving income from employment, may have more financial responsibility (as head of household), and increased costs related to childcare as compared to male applicants.**

JARC staff felt that recruitment materials do not provide enough information on the details and incentives of attending training part-time to female applicants, who may have to continue supporting themselves and others financially. JARC staff and organization partners noted that **lack of payment for participation in training programs, and time spent out of full-time employment are barriers for their clients and has resulted in a decrease in the number of folks they refer to JARC.** Partner organizations see successful recruitment as related to students’ practical socioeconomic concerns and abilities to access and participate in JARC programs and that students who have some financial support (usually through family), or those who do not have to leave paid employment to enroll are better able to access JARC programs.

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² For example, interviewees’ life circumstances ran the gamut from women in poverty who had spent time in prison and could not find employment post-release, to women with no criminal records who had college degrees but could not find employment in their respective fields of study.
Application Session to Enrollment

Benefits and Services Important to Recruitment

Many of the women interviewed from JARC’s target population were attracted to the wrap-around supports surrounding the job training that JARC offers, as well as job placement assistance provided by JARC upon successful completion of the various training programs. JARC partners also see successful recruitment as related to students’ awareness of the particular benefits that JARC offers as well as increased access to better paying jobs. Former and current JARC students spoke very highly of the services JARC offers outside of its welding and CNC training programs and noted that hearing about JARC’s supportive services as well as the success rate JARC had with placing women in jobs influenced their decision to apply. In many instances, students felt that it was these services like training for soft skills and continued support during employment that allowed them to be successful in training programs. However, some students said that they did not know about these services until after joining the training program. JARC staff indicated recruitment materials and messaging do not adequately highlight the benefits and supports provided to students. Application sessions outline the benefits and support services, but lack detail especially for supports like childcare (since female applicants tend to have children under school age).

JARC’s location near public transportation and job opportunities has an appeal to future, current, and former students. Some current and former students were drawn to the program’s low cost, relatively short length of time to completion, certification, as well as the individualized attention from teachers, if needed. However, the rolling enrollment is seen as both a positive and negative aspect of the program by current and former students.

Connecting Training to Manufacturing Careers

The largest gap in the recruitment materials and process seems to be relaying what the manufacturing careers students receive training for is actually like. Potential recruits wanted more information about what the day-to-day work for the different tracks required, as well as the pros and the cons of the various manufacturing career options, so they could be better informed in their decision making. This was echoed by JARC partner organizations who mentioned that only a few female clients know about manufacturing jobs due to a lack of communication regarding the viable career opportunities for women in manufacturing. As a result, per one partner organization, “[Women] just can’t see themselves in [manufacturing work].” In general, JARC partners see successful recruitment as related to students’ willingness to try a specialized career that is today seen as “nontraditional” work (especially for women). JARC staff feel the organization could provide more information about manufacturing jobs during recruitment including comparing manufacturing careers to careers typically held by women and emphasizing the potential for wage growth and promotion along with job security.

Additionally, JARC partners feel that successful students are passionate about the technical and high level training content, and not only want to work in the manufacturing field, but also look forward to getting more credentials to more adequately prepare them for their careers. Wanting to develop specific skills for a job influenced one current/former student’s decision to join, and many students interviewed had some sort of exposure to traditionally male-dominated career fields, including manufacturing. Some students expressed concerns about facing gender-based discrimination in the workplace. However, they did approve of how JARC prepares them for this possibility, as well as for the ongoing job services they can receive even after they...
graduate from the program. Generally, current and former female students choose to remain and complete the program because of the “on the job” training format (as opposed to sitting in a classroom) and because there was no previous manufacturing experience required.

**Leveraging Application Sessions**

Potential JARC students liked how the program is laid out from beginning to end in the application session slideshow presentation, providing a clear pathway from the start of the program to graduation. However, the application timeframe and process outlined at application sessions could be described in more detail. Potential recruits also had concerns about the training including wanting to know what would happen if they had to miss classes for a few weeks, or their own safety in the training program while taking classes.

JARC application sessions offer an opportunity to ask these questions, and sessions at the Ravenswood Training Center involve a tour of training facilities and exposure to JARC staff and current students. While the tour and application presentation are helpful, untapped opportunities exist to further improve the recruitment experience. The session does not detail what it’s like to work in manufacturing (beyond physical and mental requirements and challenges). Additionally, while students are present, student voices and experiences in training and on the job are not highlighted. Finally, there is minimal personal interaction between applicants and staff to build connections. JARC staff also felt that conversations during recruitment events do not focus on making personal connections and getting to know potential recruits, or highlighting current and past students’ experiences. Accessibility and approachability of JARC staff members influenced current and former female students’ decision to apply. One student noted the persistence with which JARC staff recruited her before she eventually said “yes” to the program. Consistent support from staff members, both the teachers and support staff, is also important to retention and completion of the program.

Some potential recruits spoke about their testing anxiety and the possible stigma of getting a low-score on the placement exams (TABE). JARC partners echoed this sentiment noting that some women may be turned off or intimidated by having to take qualifying exams (especially younger recruits). As is aligned with best practices for adult learners and reducing stereotype threat, during application sessions JARC staff frame the TABE as low-stakes and as gauging ‘learnable skills’. On the other hand, paper testing materials at the Austin location were photocopies that were difficult to read, potentially making it difficult for applicants to do their best on the exam.

**Evaluating Recruitment and Retention**

JARC has several process and actions in place to collect and track recruitment efforts, as well as applications and student progress. This is largely managed by the Intake Specialist & Database Administrator. Current processes to track recruitment are based in excel and paper forms. There is also another database that requires separate tracking (for funders). No set protocols exist (e.g. a common internal record identification number) to allow the data manager to connect application information to other forms and databases. During application sessions, the application form is not described in detail. Many questions on the application form may need further clarifications or definitions.
Recommendations

Getting Women in the Door

Go to where women are and focus messaging

Potential JARC recruits at Deborah’s Place mentioned that they preferred more direct, targeted recruitment because job fairs could be intimidating or overwhelming. Holding application sessions at female-only or female-focused sites and organizations may address the disproportionate amount of male applicants. Additionally, JARC could increase awareness of their desire for female applicants among the more active sources of recruitment such as social services, reentry programs, friends/family, and partner organizations. Interviews we conducted with community partners indicate a willingness to focus their resources on referring more women to JARC (with support and guidance from JARC staff members).

Explore untapped referral sources

Social service agencies are prominent sources for female applicants, JARC should expand and intensify outreach to other referral organizations as well as increase their efforts to reach more women through direct outreach.

Explore and support family and friend referrals

Since it is the referral category by which the second most respondents hear about JARC, developing strategies to address sex disparities among referrals by family/friends could go a long way toward convincing more women to consider joining JARC.

Create and support a network of female recruitment

JARC has existing relationships with community partners who are enthusiastic about and believe in the effectiveness of JARC’s programming. These results suggest that JARC may want to put more resources into maintaining relationships with current partners, but also building relationships with new kinds of partners (e.g., high schools with STEM programs).

Regular partner meetings are key sites for sharing information, resources, and collaborating to increase women’s participation in manufacturing. This could involve meeting on a regular basis with representatives from other organizations to talk about recruitment challenges and strategies. This will also help JARC to:

- Identify and solidify partnerships with organizations that have overlapping client bases or grants with JARC.
- Identify potential partnerships with organizations that have new or untapped client bases for example with public or private high schools or STEM related programs.
- Better equip partners to more effectively inform their clients about JARC. This involves ensuring that partners have enough information to identify candidates and communicate with clients in order to get them interested in the training program e.g. benefits and service options.
- Discuss the common challenges women face when going into manufacturing, share information with each other about barriers to recruitment, as well as recruitment best practices.
More community outreach with community partners would be helpful in getting the word out about the Women in Manufacturing Program including going to partner organizations to update them on program and application information, and provide updated recruitment materials.

Provide professional development and support for recruitment staff
JARC staff are key to successful recruitment of women. JARC should continue to support staff by providing trainings, meetings, and tools that focus on:

- Engaging participants enthusiastically and energetically, especially if the students are younger (ages 18-24).
- Establishing overall recruitment goals and procedures.
- Evaluating what’s working and what could be improved or modified.
- Matching staff to recruitment events or audiences that align with their interests or personal experience.
- Providing information on how to recruit different types of individuals (e.g. youth, older workers, women, etc.), highlighting the potential barriers, benefits, and motivators for each group.

Differentiate recruitment message for different audiences
JARC has already begun this process by highlighting women supporting their families on their CMP flyer. Yet, this messaging may not be as salient to other audiences, such as high school students and women without children. JARC should continue to create recruitment materials for many types of women, specifically for recruitment events in which there are more women attendees and younger women. JARC has also made efforts to tailor its presence on social media in ways that make its programs more interesting to women by highlighting the experiences of women. These efforts should be continued and assessed in order to understand scope and impact in increasing female applicants. Data provided by social media platforms should be used to understand who is accessing and viewing ads.

Grow the Application Session to Enrollment Pipeline
Focus on building relationships
JARC staff should engage recruitment event attendees with personal introductions in order to build trust. This could include asking them about why they were at the recruitment event or job fair and why they had stopped by the table. Potential recruits will be far more responsive to people they believe they can trust, which will in turn affect their decision to enter the program. By focusing on building trust and getting to know participants at recruitment events, JARC could highlight and encourage attendees to attend the upcoming application session date to learn more detailed information about the program. Additionally, during application sessions and tours, JARC should ensure that all trainers and students that interact with applicants are introduced and that current and potential students have an opportunity to connect.

Change how application sessions are organized
JARC should consider formatting recruitment presentations similar to CURL focus groups. During CURL focus groups at Deborah’s Place, since most of participants knew or were familiar with each other, they were more easily able to ask questions together and voice their concerns. It may be helpful to get clients in front of machines to (1) build excitement and (2) communicate what manufacturing jobs are like. After client interest has piqued, paperwork and tests can follow. Additionally, applications sessions could include more interactive
elements into the presentation overall, such as more discussion and opportunities for applicants to speak, connect, and question the material. When questions are asked in the presentation portion of the session, JARC staff should ensure that all applicants are able to hear the question and response. This is especially crucial for the facility tour portion of the session. Methods must be sought to allow all applicants to hear the staff and current trainees who are talking.

The application session presentation could be reorganized to increase interest for folks who have never worked in manufacturing by:

- **First**, describe what it’s like to work in manufacturing in CNC or Welding, including the elements of the job that CNC machinists and welders more commonly enjoy, as well as employment outlook information. This section should involve hearing from current workers either in person or by embedding videos in the presentation.

- **Second**, detail the training program, including its general format, process, completion time, and how it prepares students for a job. This section should include or be followed by the supports and benefits that JARC provide in helping students succeed in training, employment, and other goals.

- **Then towards the end**, frame good-fit requirements for applicants to consider their suitability for the training after they learn what the program entails and how JARC will help them overcome barriers. For example, although attendance is a key quality for success, emphasizing attendance before a student knows the more specific and typical attendance requirements of the job(s) available or training program, as well as the tools JARC has available to help them achieve this goal like transportation and childcare assistance, may deter those who may benefit most from the training and support, such as female applicants.

Finally, the CMP applicant interview could be reframed as an opportunity for applicants to 1) assess if their career goals align with the training and subsequent position and 2) discuss how JARC can support the student through anticipated barriers to completing the program and securing a job instead of being “just like another job interview.”

**Connecting JARC training to manufacturing careers**

As noted previously, application sessions should include more time outlining manufacturing jobs after training and using former trainee volunteers as resources – for instance, what it is like to work in manufacturing beyond the physical requirements. JARC should highlight how skills and experiences of training translate into the working environment, including experiences from those working in the field.

Additionally, JARC should emphasize that their training is a means by which trainees can expand their career options and improve their lives. Notably, when interviewees discussed what initially drew them to JARC, they did not mention a desire to see women more represented in manufacturing jobs (although they were cognizant of the gender gap in manufacturing). Instead, they said that the specific circumstances of their lives (e.g., criminal records, the inability to find jobs that could make ends meet, a desire to have a career instead of just a job, etc.) were more important in their decisions to join JARC. In terms of recruitment, this may require putting more emphasis on how the training can create changes in recruits’ lives that might appeal to them, such as stabilizing their current and future finances, providing a basis on which they can advance in a career, etc. JARC should focus on manufacturing as exciting opportunities to have a career, with their job training as an access point. During onboarding, Bridge training, or CMP training, emphasize career development
using career exploration and career planning to help applicants and students understand the future world of manufacturing work.

An important component of communicating the benefits of a career in manufacturing JARC should be more openly addressing the costs versus benefit of participation. This could be done by comparing a career in manufacturing salary to another more common salary. Or JARC could help students understand the long term return over the immediate costs of participation. When discussing prospective wages it may be helpful to provide more information about the overall gains that applicants may make if they delay income now in order to make a higher wage later, including discussing the general trends around wage earning in the field. This may be even especially important for female applicants, since (per our previous analysis of applicant data) they tend to more often be single heads of household with children under school-age who are currently working other jobs. It might be useful to mention the specific kinds of benefits available to graduates who go on to work in those careers, and especially as they relate to the things that respondents said they looked for in any career, including:

a. Money, healthcare benefits, retirement benefits, maternity leave, job security, and continuing education for employees (a survey of JARC alumni currently in manufacturing jobs might be helpful in this regard); and
b. Less tangible things like a sense of purpose and being part of a team (specifically unionized, if possible).

Additionally, recruitment should continue to emphasize job placement assistance provided by JARC upon successful completion of the various training programs, as well as the availability/relationship of JARC Manufacturing Training graduates with women-centered organizations or groups in manufacturing once they gain employment in manufacturing. This could help to diminish the fears of physical safety and sexism they might anticipate in a potential manufacturing career. JARC should highlight the supports they provide to former students such as transitional support (e.g. transportation costs in first two weeks) and access to training facilities. Finally, JARC may consider framing a career in manufacturing as redefining what “success” means in the professional world or describing it as a component of a larger mission of community development.

Emphasize benefits and supports provided during training
Continue to emphasize wrap-around supports surrounding the job training that JARC offers, including financial coaching, assistance with public benefits and transportation assistance. Within this JARC should continue emphasizing (1) the side benefits of training, especially the free work supplies for women and various forms of financial assistance, and (2) how these benefits are unique to their organization. JARC could make this information more central by spending more time discussing benefits and supports JARC provides during training and employment at job fairs and recruitment events as well as application sessions, using former students as a resource.

Clarify the application timeline and program logistics
JARC should continue to emphasize the timeline of the job training from beginning to end in the slideshow presentation. This should be extended to the application process as well, include the time length of each step outlined in the application process so that applicants may estimate how long the entire application process will take. JARC should give applicants a concrete idea of what participating in the training itself will be like, especially in terms of flexibility around scheduling vs. requirements. Program descriptions should be clear
about what steps trainees go through including benchmarks they will have to meet to graduate and get a job, as well as the culture of the program and trainees’ experiences. It may be beneficial to transport application session folks to the Ravenswood center who are interested in welding for a tour there. Alternatively, including a CNC demonstration at the Austin location will help limit the variability across sites and will allow all applicants to see what is involved in the operation of the CNC machine, as well as an opportunity to engage with current students.

Reduce the economic burden of participation
Some students are in a better socioeconomic position than others to go through and complete a full training program. Women applicants may be especially interested in being paid for participating in the training, or working at part-time jobs related to manufacturing while they are in JARC classes. If it is feasible, JARC might benefit from encouraging students to start working part-time at manufacturers while they are taking courses at JARC (similar to a work-study program). This would mean developing relationships with employers in the community and see about getting students part-time employment in manufacturing while they also go to JARC classes. This could alleviate some of the economic risks and concerns that get in the way of students committing to the program. If possible, JARC could also seek out scholarships or grants (funded by donors) for students who want to go into the program but cannot because of burdens associated with their need for employment, childcare, etc. If creating part-time employment or income earning is not possible, at minimum, JARC recruitment materials could discuss how attending part-time changes the training experience in more detail, asking former and current trainees to discuss their experiences.

Highlight student experiences
Former students are important sources for encouraging women to go into manufacturing. JARC should continue to support and highlight the experiences of JARC graduates who have gone on to manufacturing careers. This will allow potential recruits to interact with women in manufacturing careers and help them understand how a manufacturing career has benefited them. Current/past students could join JARC staff members at recruitment events to tell their stories and answer questions about what the program was like for them, the challenges they faced as women in the training program, and career opportunities, salaries, and benefits. Recruitment efforts could include a video that features interviews of JARC graduates in manufacturing careers and/or tours of their workplaces. It may be also helpful to connect graduates with recruitment audiences that match their experiences. JARC graduates could also conduct demonstrations of welding and/or CNC work (because of the nature of CNC, this may not be feasible).

Application sessions should provide more opportunities for potential recruits to talk to current and former Women in Manufacturing students. Staff could provide a Q/A with folks who are in the program or are now working. While women were present at every stage of the application session, there was no opportunity to discuss how things may be different for female applicants, or a connection point with a current trainee that is similar to them in age, working status, or parent status. It is important to include students with a diverse background and training experience, for example, students should meet former Bridge students who have been able to progress to CMP and/or employment.
Reframe Bridge and the TABE

The Bridge program (and its associated tests) should be more integrated into the general training for the CNC and welding programs and framed as a part of the overall programming aimed at developing learnable skills, so as to reduce the feeling among students that they have failed to “get in” to the program. Recruitment and retention efforts for folks beginning the CMP training with Bridge classes should be differentiated and diverse (Hayes 1988). A case-worker management style should continue to be used and should guide the initial recruitment of women once JARC has made contact, or when the students enter Bridge. The decision to participate in Bridge may be mediated by the relative importance of other types of barriers women experience (Hayes 1988). Recruitment into CMP, especially when beginning in Bridge, should address similar barriers in different ways for different groups of women.

The current literature on adult basic education and testing provides evidence that self-efficacy and stereotype threat influence testing and academic progress for adult learners. The TABE should continue to be framed as low-stakes. In addition to continuing to emphasize how JARC provides education to get applicants ready for job training, you can allay women’s fears around the potential stigma of low-scores on the placement exams by framing the exams in non-threatening ways. According to literature on test anxiety, non-white and female students struggle the most with test anxiety due to “stereotype threat” that can undercut their performance on exams. Framing should take care not to construct the exam as passing or failing into the ‘real program’ and/or measuring any innate abilities. A number of additional methods of reducing stereotype threat brought on by test anxiety are mentioned here: https://cesp.rutgers.edu/blog/how-teachers-can-reduce-stereotype-threat-classroom. As a first step, communications about exams should match the more integrated Bridge Program and aim to alleviate testing anxieties. Additionally, JARC should ensure that all paper copies of the TABE are clear and easy to read, it may be beneficial for all locations to provide an online exam if possible.

Shorten and streamline the application form

Staff should take time during application sessions to review the application form (online or paper) discussing each section and letting applicants know that they may ask for questions or clarifications at any time. JARC should provide applicants with JARC’s policies on confidentiality, or explanations of why the information is being collected when asking about potentially sensitive information. This will help ensure information is collected accurately and with higher completion rates. Staff may also wish to address a few frequently asked questions right away. Low literacy, English Language Learner status, or cultural barriers should be asked about early on the application in order to provide alternative methods for applying. This could mean providing the application in Spanish (if appropriate), or providing assistance in filling out the application.

The application itself should include clear written instructions for questions that may not apply to all applicants e.g. to skip subsequent follow-up questions and resume at the next appropriate question. It may help to orient response options so that they do not cut across columns or rows. Providing an online application may better allow applicants to answer follow up questions, skip questions not applicable to them, and standardize response options (https://uwmadison.co1.qualtrics.com/jfe/form/SV_4Ph0316m1vZOZFP)

Each application question should be reviewed to ensure that the question wording will elicit the appropriate response and if there is any opportunity for further clarification. Some questions may also be asked during

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3 Stereotype threat is the anxiety experienced by students in situations where they fear confirming negative stereotypes about their social groups.
the interview or later phase of the application process where JARC staff may help applicants think through the responses and collect more detailed and rich information from applicants (https://uidaho.co1.qualtrics.com/jfe/form/SV_6FD1VgvAlFDaWzz). A paper version of this application is provided in Appendix A.

Finally, while it is important to communicate clearly about the CMP training environment and conditions, applicants who have concerns around the topic of safety etc. should be given an opportunity to discuss their concerns and assess their ability to thrive in the training environment with more information with JARC staff.

From Recruitment to Retention and Persistence
Change JARC onboarding for retention
To increase retention, JARC should make adjustments to the intake experience. Intake could be modified to:

- Make students feel welcome and that the program is for them.
- First get students working at a machine or using welding equipment before any of the intake is completed, thus ensuring that students will be excited to join the program.
- Focus on building relationships between staff and students.
- Allow program staff to assess each student’s unique needs, as well as provide early advising and counseling.
- Help students understand expectations, and establish achievable goals.

Enhance JARC training practices for retention
It may be helpful to create a system for students who prefer a more structured schedule of learning, similar to that of a semester system using a syllabus instead of rolling enrollment. This may also include allowing students to opt out of the student/teacher role. The method of having more experienced students teaching newer students was a problem for some. Although some current students and alumni felt that this was an appropriate method of teaching and learning, others felt that it took away from their own learning in the program. They felt that adding more teachers or a teacher’s assistant could mitigate this issue. Some current and former students mentioned wanting more flexibility in training times. JARC should consider how it may offer more flexible training times such as longer hours during the day in which to train, and adding a second evening and/or morning shift. Other program changes current and former students mentioned included providing more individualized soft skills training (or the option to opt out of that training) and more outside reading materials and class resources.

Increase access to benefits and supports
While JARC should continue to tailor student services to needs of their student population, including partnering with other organizations to provide student needs outside the scope of their organization, it may be helpful to consider where benefits and supports need to be increased in order to better support female trainees. Although JARC already provides referrals for childcare assistance, more resources developed along these lines would potentially be helpful in getting more women involved in the program.
Build an organizational persistence plan

Persistence plans ensure that recruitment provides enough information for potential students to make an informed decision about enrolling. Initial assessment tools should provide students and teachers with information on both cognitive and affective needs of students, are then integrated with future instruction, and inform the basis for measuring student progress through the program. Students should set specific goals and timelines as well as long term goals and with planned immediate next steps after training. Program staff should regularly meet with students to evaluate their progress toward their goals and increase student self-efficacy. From these meetings, students and staff should create written documentation of a student’s goals, potential barriers, and needed supports. Advising sessions with staff and instructors should discuss these items, as well as the skills, knowledge, and services needed to meet goals and overcome barriers.

Evaluating Recruitment

Though establishing an extensive data management and evaluation plan is a complicated and difficult task, it is among the top recommendations that CURL makes for JARC to bolster recruitment of women in manufacturing.

Protocols and procedures

JARC could assess and evaluate recruitment goals for each year, in terms of number of applicants, types of applicants, or other goals. In order to track the recruitment and success of female applicants, recruitment should be reframed as a process involving multiple steps with a goal toward persistence in a career in manufacturing. Because each of the steps to recruitment and retention, 1) recruitment, 2) application session, 3) interview 4) enrollment and funding and, 5) completion of the program and 6) job placement and persistence, has potential for recruits drop off, data collection and intervention needs to take place at every stage. A recruitment goal or outcome should be established for each stage in the process to facilitate the measurement and reporting, allowing the Intake Specialist & Database Administrator to create a ‘dashboard view’ of recruitment and retention trends, as well as track individual level details. This will help JARC connect existing data collection tools and practices to easily track and answer questions related to the effectiveness of recruitment efforts in obtaining female applicants, as well as the success and retention of female applicants in each stage of the application and training process. This is especially important as the barriers that women face in obtaining manufacturing training and careers is dynamic and may shift over time. Creating systems to track and report on recruiting women applicants will allow JARC to adapt to changes in their target population of under- and unemployed women.

Additionally, there are a few other process-related recommendations for JARCs evaluation:

- Determine when each applicant’s data record is ‘complete’ or ‘resolved’ and can be included in summary reports.
- Create a system in which each applicant’s records can be connected, for example, a unique Client ID that can be recorded across all databases and forms.
- Increase communication among all staff regarding data management and quality control. This includes protocols for communication, addressing missing data on applications, and the creation and improvement of data collection forms and procedures for each recruitment stage.
Content and data

Continued analysis and reporting of recruitment data should evaluate characteristics in conjunction with gender to understand how the women JARC accepts compare to the target population JARC serves. Data should be collected to make meaningful summaries regarding the characteristics of women JARC recruits, trains, and places in manufacturing careers. This will inform continued programing as well as address any continued structural barriers to participation. Additionally JARC staff should collaboratively review and modify the current data collection forms to determine what information is needed for JARC operation and what is needed to evaluate recruitment and persistence efforts at each program stage.

The JARC application should include more nuanced ways of measuring recruitment. JARC should ask about referral sources with a two part question and exhaustive list of referral source categories allowing applicants to select more than one response (see example applications). More specific information will allow JARC to better assess the returns on recruitment efforts. Finally, JARC should compare ‘applied’ and ‘accepted’ folks in order to understand what type of referrals yield more acceptances, who is accepted in terms of applicant demographics and what groups may be missing or under-enrolled. Low enrollment of certain groups may allow for more nuanced assessments of structural barriers in the application process.
Appendix A: Example Paper Application

Please answer all questions completely. All information will be kept confidential. Jane Addams Resource Corporation reserves the right to check the accuracy of the information you provide. JARC is an Equal Opportunity Provider. Auxiliary aids and services are available upon request to individuals with disabilities.

**Section I: Contact Information and Program Interest**

Today’s Date (mm/dd/yyyy): ____________________________

Social Security Number (required): ____________________________

Birth Date (mm/dd/yyyy): ____________________________

Last Name ________________ First Name ________________ MI ______

Address ____________________________ Apt # _____ City & State ____________________________

Zip Code ________________ County ____________________________

Home Phone ____________________________ Cell Phone ____________________________

Email ____________________________

Preferred Method of Contact (Circle one): Phone Email

How did you hear about our program? (Check all that apply) Provide follow up information indicated by ‘→’.

- [ ] Facebook ad
- [ ] Newspaper ad (online or print)
- [ ] Online ad (other than Facebook or news) → Website where advertised: ____________________________
- [ ] Radio ad
- [ ] Television ad
- [ ] A posted flyer → Location of flyer (bus stop, food bank etc.): ____________________________
- [ ] A JARC table (at job fair, food pantry, etc.) → Name of event and location: ____________________________
- [ ] A JARC event → Name of the event: ____________________________
- [ ] A JARC employee → First and last name of the employee: ____________________________
- [ ] Another organization or service → Name of the org or service: ____________________________
- [ ] My school → Name of the school: ____________________________
- [ ] Family member → Were they part of a JARC training program in the past or present? (Circle one): Yes  No  
  *If yes,* please provide their first and last name:
    - First name ____________________________ Last name ____________________________
- [ ] Friend/coworker → Were they part of a JARC training program in the past or present? (Circle one): Yes  No  
  *If yes,* please provide their first and last name:
    - First name ____________________________ Last name ____________________________
Which program are you interested in? (Check only one)

☐ Welding Fast Track (Ravenswood Only)
☐ CNC Fast Track
☐ Not sure

Which location(s) and time(s) is most convenient for you to attend? (Check all that apply)

☐ Ravenswood (4432 N. Ravenswood Ave., Chicago, IL 60640) - Daytime hours 9:30am-3:00pm
☐ Austin (231 N. Pine Ave., Chicago, IL 60644 - Austin College & Career Academy) Evening hours 4:30pm-8:30pm

Are you considering attending part-time or full-time? (Check only one)

☐ Part-time
☐ Full-time
☐ Not sure

Section II: Demographic Information

The following information is required by our program funders. Applicants are considered without regard to race, ethnicity, age, gender, national origin, or national status.

1. What is your gender? (Check only one)

☐ Male ☐ Female ☐ Transgender ☐ Other: ______________________

2. How would you like staff to address you? (Check only one)

☐ He/him ☐ She/her ☐ They/their

3. What is your marital status? (Check only one)

☐ Single ☐ Domestic partner
☐ Married (living together) ☐ Widowed
☐ Married (living separately) ☐ Divorced
☐ Common law

4. How do you identify racially? (Check all that apply)

☐ Black/African American ☐ Hawaiian/Pacific Islander
☐ Asian ☐ Native American
☐ White ☐ Other: ____________________________________________
5. What is your ethnicity? (Check only one)

☐ Hispanic  ☐ Non-Hispanic

6. What is your primary language? (Check only one)

☐ English  ☐ Polish  ☐ Chinese
☐ Spanish  ☐ Arabic  ☐ Other:

7. What additional languages do you speak? (Check all that apply)

☐ None  ☐ Spanish  ☐ Arabic
☐ English  ☐ Polish  ☐ Chinese
☐ Other: __________________________

8. JARC is committed to partnering with students to overcome barriers to employment. What barriers to securing employment do you think you face? (Check all that apply)

☐ English language learner, low literacy levels, or cultural barriers
☐ I previously provided unpaid services to my family (e.g., a stay-at-home mom or dad), but am no longer supported by my family due to unemployment or underemployment
☐ My disability(ies)
☐ My prison, jail or arrest record
☐ I am exhausting TANF within two years
☐ My Veteran status
☐ I’ve been unemployed for 27 weeks or more
☐ I am a migrant/seasonal farmworker
☐ I have a very low income
☐ I am a single parent
☐ I do not have housing
☐ Other: __________________________

☐ I do not believe I experience barriers to securing employment.

9. What is the highest grade level you have completed in school? (Check only one)

☐ Less than high school, no diploma; the last grade I completed was ________  → Continue to Question 14
☐ High school diploma  ☐ Associate’s degree
☐ GED  ☐ Bachelor’s degree
☐ Some college  ☐ Master’s degree or higher
10. **If you have received your high school diploma/GED, please specify**

Year of completion ____________  Name of School ________________________________

11. **If you have attended college, please specify:**

Name of College ________________________________  Dates Attended ________________

Course of Study ________________________________  Did you graduate? (Circle one)  Yes  No

*If you did not graduate from college, what is your reason for leaving?*

________________________________________________________________________

________________________________________________________________________

12. **If you have attended business or trade school, please specify.**

Name of College ________________________________  Dates Attended ________________

Course of Study ________________________________  Did you graduate? (Circle one)  Yes  No

*If you did not graduate from business or trade school, what is your reason for leaving?*

________________________________________________________________________

________________________________________________________________________

13. **If you completed college, business school, or trade school, did you complete it in the United States? (Check only one)**

☐ I have not completed college, business school, or trade school  ☐ Yes  ☐ No, I completed it outside the U.S.

14. Are you currently enrolled in a school or training program? (Check only one)

☐ No  →  **Continue to Question 15**  ☐ Yes  →  Please provide the following information about your school or training program:

a. Name of Institution ________________________________

Start Date (mm/yyyy) _______  /  Expected Graduation Date (mm/yyyy) _______ /__________

b. Which of the following levels of education are you trying to achieve? (Check only one)

☐ Basic skills (ABE, ESL)  ☐ Associate’s degree
☐ High School  ☐ Bachelor’s degree
☐ GED  ☐ Master’s degree or higher
☐ Vocational training  ☐ Other: ________________________________
c. Are you currently enrolled or receiving funding from the Workforce Innovation and Opportunity Act (WIOA)? (Check only one)

☐ Yes  ☐ No  ☐ Not sure

15. Where do you live? (Check only one)

☐ In a house/apartment that is **owned** by you or a member of your household
☐ In a house/apartment that is **rented** by you or a member of your household and is **NOT** subsidized
☐ In a house/apartment that is **rented** by you or a member of your household and **IS** subsidized (i.e. Section 8, CH)
☐ I do not have housing and/or I am living in a shelter
☐ I do not have housing but am temporarily staying with a friend/relative
☐ I am staying at halfway house/transitional housing

16. Are you a U.S. citizen? (Check only one) **All information shared with JARC is confidential.**

☐ Yes, I can provide proof that I am a U.S. citizen
☐ No, but I can provide proof of authorization to work in the United States
☐ No, and neither of the above apply to me

17. If you are a male U.S. citizen born **after** December 31, 1959: Have you registered for the selective service?

☐ Yes  ☐ No

18. Have you served in the military? (Check only one)

☐ No
☐ Yes → Please specify:
   - Branch of Service ____________________________
   - Enlistment Date ________________  Discharge Date ________________
   - Type of Discharge ____________________________  Rank at Discharge ________________

19. Is your spouse currently serving in the military or a veteran of the military? (Check only one)

☐ I do not have a spouse
☐ Yes, currently serving
☐ Yes, a veteran
☐ No, my spouse is not currently serving nor a veteran
Section III: Household and Income Information

20. What is the **TOTAL** number of people in your household (including yourself)? ___________

21. How many of the people in your household are children (under age 18)? ___________

22. How many children (under age 18) **that currently live with you** do you support financially? ___________
   a. How many of these children are under school age? __________
   b. How many of these children are in school but under 14 years of age? __________

23. How many children (under the age of 18) do you have that you provide with child care or support **but do not live with you**? __________
   a. For how many of these children do you have full custody? _______
   b. For how many of these children do you have partial custody? _______
   c. How many of these children are under school age? __________
   d. How many of these children are in school but under 14 years of age? __________

24. How many of the people in your household are adults (18 years or older)? __________
   a. How many of these adults do you financially support? __________
   b. How many of these adults make their own income working full-time? __________
   c. How many of these adults make their own income working part-time? __________
   d. How many of these adults make their own income but are not working? __________

25. What was your **total household income** in the past 12 months? (Estimate) $______________

26. How many months have **YOU** worked in the past 12 months? __________ months

27. Are you currently employed?
   - [ ] Yes, full-time → Hourly wage $____________
   - [ ] Yes, part-time → Hourly wage $____________
   - [ ] No, I was laid off from most recent job due to company closure, downsizing, etc.
   - [ ] No, I quit most recent job
   - [ ] No, I was terminated/fired from most recent job
28. What was your **personal earned income in the past 12 months**, after taxes? (Estimate) $____________________

29. In the last 12 months, did you provide income for **more than half of your total household expenses**?

- [ ] Yes
- [ ] No → Who provided income for more than half of your total household expenses, if anyone? *(Check only one)*
  - [ ] Spouse or partner
  - [ ] Adult child
  - [ ] Parent
  - [ ] Other: ___________________________

30. What are the sources of your **household income**? *(Please check all that apply.)*

- [ ] Employment
- [ ] Supplemental Security Income (SSI)
- [ ] Social Security pension
- [ ] Temporary Aid to Needy Families (TANF)
- [ ] Social Security Disability Income (SSDI)
- [ ] Unemployment compensation
- [ ] Child support
- [ ] Food stamps
- [ ] Other: _______________________________________

31. How will you financially support yourself during training? *(Please be as specific as possible)*

- [ ]
- [ ]
- [ ]
- [ ]
- [ ]

32. Have you ever collected unemployment benefits?

- [ ] No
- [ ] Yes → When was the last time you collected them? *(Please be as specific as possible)*

33. How will you get to class every day on time? *(Please check all that apply)*

- [ ] Car
- [ ] Friend/family member
- [ ] Public transportation
- [ ] Other: ___________________________
34. Do you currently have health insurance?

☐ No
☐ Yes → What kind of health insurance do you have? (Check one)
  ☐ Public health insurance (Medicaid, Medicare, AllKids, etc.)
  ☐ Private health insurance, through your employer or a household member’s employer
  ☐ Private health insurance, NOT through an employer or a household member’s employer

Section IV: Previous and Pending Convictions

35. Have you ever been convicted of a felony?

☐ No
☐ Yes → If you have ever been convicted of a felony, please describe. (Please be as specific as possible)

<table>
<thead>
<tr>
<th>Nature of Felony Offense</th>
<th>Year of Conviction</th>
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36. Have you ever been convicted of a misdemeanor?

☐ No
☐ Yes → If you have ever been convicted of a misdemeanor, please describe. (Please be as specific as possible)

<table>
<thead>
<tr>
<th>Nature of Misdemeanor Offense</th>
<th>Year of Conviction</th>
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</thead>
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</tbody>
</table>
**Section V: Attendance**

37. Do you have *criminal offense related reasons* why you might need to miss class during the program, for court dates, meetings with parole or probation officers, etc.? *(Please be as specific as possible)*

<table>
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<tr>
<th>Reasons for Missing Class</th>
<th>Date</th>
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38. Do you have *health related reasons* why you might need to miss class during the program for doctor appointments, therapy sessions, etc.? If so, please specify dates and reasons. *(Please be as specific as possible)*

<table>
<thead>
<tr>
<th>Reasons for Missing Class</th>
<th>Date</th>
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39. Do you *have any other reasons why you might need to miss class during the program*? If so, please specify dates and reasons as specifically as possible: *(Please be as specific as possible)*

<table>
<thead>
<tr>
<th>Reasons for Missing Class</th>
<th>Date</th>
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</table>
Section VI: Employment Background and Skills

Please list your complete work history by adding your most recent employment history on line 1, followed by your previous employer and so on.

1. Name of most recent (or current) employer ____________________________________________________________

   Address ____________________________________ City __________________ State ______

   Job Title ________________________________________________________________

   Supervisor ____________________________ Phone Number ___________________________

   Start Date (mm/yyyy) __________________________ End Date (mm/yyyy) __________________________

   Starting Pay ___________________________ Ending Pay __________________________

   Number of Hours Worked Per Week ________________ Do/did you receive benefits? ________________

   Responsibilities _________________________________________________________________

   Why did you leave? _______________________________________________________________________

2. Name of previous employer ____________________________________________________________

   Address ____________________________________ City __________________ State ______

   Job Title ________________________________________________________________

   Supervisor ____________________________ Phone Number ___________________________

   Start Date (mm/yyyy) __________________________ End Date (mm/yyyy) __________________________

   Starting Pay ___________________________ Ending Pay __________________________

   Number of Hours Worked Per Week ________________ Do/did you receive benefits? ________________

   Responsibilities _________________________________________________________________

   Why did you leave? _______________________________________________________________________

3. Name of previous employer ____________________________________________________________

   Address ____________________________________ City __________________ State ______

   Job Title ________________________________________________________________

   Supervisor ____________________________ Phone Number ___________________________

   Start Date (mm/yyyy) __________________________ End Date (mm/yyyy) __________________________

   Starting Pay ___________________________ Ending Pay __________________________

   Number of Hours Worked Per Week ________________ Do/did you receive benefits? ________________

   Responsibilities _________________________________________________________________
Why did you leave? ____________________________________________________________

4. Name of previous employer __________________________________________________

Address ___________________________ City ___________________________ State _______

Job Title ________________________________________________________________

Supervisor ___________________________ Phone Number ______________________

Start Date (mm/yyyy) ___________________________ End Date (mm/yyyy) ________________

Starting Pay ___________________________ Ending Pay _________________________

Number of Hours Worked Per Week ______________ Do/did you receive benefits? ______________

Responsibilities _____________________________________________________________

Why did you leave? _________________________________________________________

Section VII: Additional Skills/Abilities

Describe any additional skills, talents, or hobbies you have. For example, do you work on cars, sew, repair small appliances, fix plumbing, or play a musical instrument? Please be specific.

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

What abilities and strengths do you have that will help you succeed in this training?

___________________________________________________________________________

___________________________________________________________________________

___________________________________________________________________________

Section VIII: Professional References *Please do NOT list friends or family members*

1. Last Name ___________________________ First Name ___________________________

Name of Company/Agency ____________________________________________________

City/State ___________________________ Nature of Relationship ___________________

Phone ___________________________ Email ___________________________
2. Last Name ___________________________   First Name ___________________________
Name of Company/Agency ____________________________________________________________
City/State ___________________________    Nature of Relationship _____________________
Phone ___________________________    Email ___________________________

3. Last Name ___________________________   First Name ___________________________
Name of Company/Agency ____________________________________________________________
City/State ___________________________    Nature of Relationship _____________________
Phone ___________________________    Email ___________________________

**Section IX: Emergency Contacts**   *Required*

1. Last Name ___________________________   First Name ___________________________   MI____
Street Address ___________________________    City/State ___________________________    Zip _____
Phone ___________________________    Email ___________________________
Nature of Relationship ___________________________

2. Last Name ___________________________   First Name ___________________________   MI____
Street Address ___________________________    City/State ___________________________    Zip _____
Phone ___________________________    Email ___________________________
Nature of Relationship ___________________________

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**For Office Use Only**

<table>
<thead>
<tr>
<th>TABE Grade Level</th>
<th>Reading</th>
<th>Math</th>
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</thead>
<tbody>
<tr>
<td>Scale Score</td>
<td>Reading</td>
<td>Math</td>
</tr>
<tr>
<td>Test Type</td>
<td>Letter:</td>
<td>Number:</td>
</tr>
</tbody>
</table>
**Section X: Health and Safety Disclaimer**

If accepted into JARC, you will be required to operate heavy machinery and potentially dangerous manufacturing equipment. Students are regularly exposed to moving mechanical parts and may also be exposed to wet and/or humid conditions. Students are occasionally exposed to fumes and airborne particles. The work environment is usually loud and can be hot. Students are provided with safety guidelines and materials i.e. safety goggles, ear plugs etc. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

*If you are currently taking prescribed medications, please speak with your doctor about operating heavy machinery.*

If accepted to JARC, can you mentally, emotionally, and physically perform in this working environment?

- [ ] Yes
- [ ] Not sure, I’d like to discuss this more with JARC staff
- [ ] No
Appendix B: Online Application Guidelines

Using an online interface requires managing the user experience on one end and the data output on the other. Additionally an online data collection form is dynamic and will require some maintenance, and troubleshooting when errors or issues inevitably happen.

Goal: User experience should be simple, intuitive, quick, and not overly burdensome.

Actions:

✓ Write questions...
  □ That aim at attaining information appropriate for applicants (rather than enrollees, etc.)
  □ Simply and clearly to ensure maximum understanding
  □ That have mostly close-ended and/or forced choice response options
  □ That each ask only about one thing (avoid double-barreled questions)
  □ That avoid duplication of questions/information asked
  □ That are only relevant and absolutely necessary
  □ ...but not too many (“survey fatigue” is common, whereby folks may be less accurate towards the end of long surveys or forms)

✓ Pre-test online forms and applications:
  □ Receive and review feedback from users
  □ Review data for incorrect/incomplete responses that may be an indication that a question could be improved
  □ Review every possible question combination/skip pattern to check for errors

✓ Monitor early collection
  □ Continue to review data for incorrect/incomplete responses that may be an indication that a question is unclear or could be improved
  □ Check on the time spent filling out the application by real applicants

✓ Continue tracking and make plans for edits to the form
  □ Create and come back to a plan to intermittently review the user experience, receiving feedback from applicants or participants and checking data.
  □ Set dates for updates and re-deployment of online applications that incorporate needed changes and new or different questions. Periodically close out and archive applications in order to create a new one. This will allow you to correct errors, update questions, and to allow data export to be less cumbersome. This could follow fiscal years, months, whatever works best. It may be helpful to create bit.ly links to new and updated forms/surveys e.g. bit.ly/JARCAppl2019Jan, or bit.ly/JARCApplV0013

Goal: Data output should reduce errors and increase efficiency. The online system exports the data you need in a format that is as close to usable as possible. However, there will be some inevitable amount of cleaning.

Actions:
✓ Establish the data collection goals or insights to generate (e.g. you want to know how many women apply or if female applicants qualitatively different than male applicants and does this impact their application outcome).
✓ Create a written plan for exporting and storing data, ensuring that records don’t get counted twice, and that no applications get ‘lost’.
✓ Create a standardized process for cleaning and running analyses on the data, checking for applicant errors or system errors.

Other things to consider when using online forms:

✓ When creating alternative versions of online questionnaires, e.g. Spanish or paper versions, ensure that the data variable names, codes, order, match each other exactly. This could be done through formatting and/or by-hand data entry procedures.
✓ Use the option to ‘force response’ on important/needed questions and on those that dictate skip patterns, or that make the application/data unusable. Don’t include the ‘force response’ where there may be a legitimate reason of why the data may not be available (e.g. the third personal reference questions when only two are required).
✓ In order to standardize data and reduce errors ‘Validate’ response options to force a specific format for question responses (e.g. dates, numbers, and emails).
Appendix C: Revised Application PowerPoint Slides

See next few pages.
Please turn the sound off on your cell phones!
Today’s Schedule

Tour the Training Center

Manufacturing Training Programs
Careers in Manufacturing; CNC, Welding, Press Brake

Math and Reading Assessments
Careers in Manufacturing Program

What it’s like to be a CNC machinist

What it’s like to be a welder
Careers in Manufacturing Program

Training Programs

All of our training programs include:

- Small class sizes
- Employment coaching
- Financial coaching
- Transportation assistance
- Job placement assistance
Careers in Manufacturing Programs

Manufacturing Bridge

Program details:
• 12 weeks in length, on average
• Open entry, open exit
• For those with math and reading levels between 5th – 8th grade
• Self-paced
• Prepares you for advanced training

“A bridge is something that takes you from where you’re at to where you want to be”

Math in Context
Fractions/Decimals
Algebra
Geometry

Print Reading
Blueprints
Measurements
Metrology

Reading in Context
Topics in the manufacturing field
Careers in Manufacturing Programs

CNC Computer Numerical Control

Employment outlook

• $14.92/hour avg. starting wage

• Strong advancement opportunities with the potential to earn $30k - $70k

• Plenty of overtime at time and a half

• Jobs in the suburbs and in the city

Working women can attend training part-time!

$15 \times 1.5 = $22.50/hr means 10 hours of overtime/week \times $22.50 = $225.00!
CNC Computer Numerical Control

Program details:
- 20 weeks in length, on average, 500 hrs.
- Open entry, open exit
- 9th grade reading and math
- OSHA & NIMS Milling I

How CNC works
Read a blueprint
Write your G-Code
Mill your part!
Careers in Manufacturing Programs - CNC

Training Prepares You for the Job

Job skill

- Training skill
- Training skill

Job skill

- Training skill
Employment outlook

- $14.42 hour avg. starting wage
- Room to grow, including entry into trades union
- Plenty of overtime at time and a half
- Jobs in the suburbs and in the city

$13 x 1.5 = $19.50/hr means 10 hours of overtime/week x $19.50 = $195!
Careers in Manufacturing Programs

Welding

Program details:

- 14 weeks in length, on average, 350 hrs.
- Open entry, open exit
- 9th grade reading and math
- OSHA and AWS
- Focus on MIG with exposure to TIG and stick

Working women can attend training part-time!
Training Prepares You for the Job

Job skill

- Training skill
- Training skill

Job skill

- Training skill
Ravenswood Training Center
4432 N Ravenswood Ave, Chicago

- CNC:
  Monday – Friday 9:30AM - 3PM

- Welding:
  Monday – Friday 9:30AM – 3PM

- Bridge:
  Monday – Thursday 9AM – 1PM

Note “Ravenswood” on your application if interested
Austin MultiPlex HS
231 N. Pine, Chicago

- CNC:
  Monday - Thursday evenings 4:30 PM-8:30 PM
  Friday, 4:30PM - 6:30 PM

- Bridge:
  Monday - Friday, evenings

Note “Austin” on your application if interested
 Careers in Manufacturing Program

Q and A with JARC Trainees

• Trainee name, status
• Trainee name, status
Support services for trainees

Financial Coaching

Your goals

- Manage your money
- Protect from ID theft
- Rebuild credit
- Savings Plan

One-on-one appointments focused on what you need to improve your financial life.

JARC
JANE ADDAMS RESOURCE CORPORATION
Support services for trainees

Public Benefits

One-on-one appointments focused on accessing all of the benefits available to you.

Your goals

- Health insurance
- SNAP benefits
- Utilities assistance
- Referrals to other agencies

JANE ADDAMS RESOURCE CORPORATION
Women In Manufacturing

- Part-time
- Childcare assistance
- Connect with women in your field

Create a future for your family with Jane Addams Resource Corporation (JARC)
Partnership with
Chicago Women in Trades

Programs

Welding Program:
• M – F, 9:30 a.m. – 3 p.m.
• 9th grade reading and math
• Open enrollment

Technical Opportunities Program
• Prepares women for apprenticeships in the construction field (laborers union, etc.)

Talk with the presenter afterwards for complete info!
JARC also holds classes at the Technical Training Center that are open to the public.

**JARC recommends these programs only if you are already working.** These classes are open to anyone but you must pay for these classes.

Forklift-- $250

Contact Mallory Zilligen for more info! 773-751-7114
Other JARC Programs

Adult Learners Program

Your goals
- Reading
- Writing
- English
- Small groups
- or one-on-one

Meets Tuesdays and Thursdays
6:30 - 8 p.m.
See staff after session if interested!

Available to anyone!

Other JARC Programs

Adult Learners Program

Your goals
- Reading
- Writing
- English
- Math
- GED

Available to anyone!
Careers in Manufacturing Program

Application Process

1. Attend session and submit application
   - 1 to 2 weeks on average

2. One-on-one interview
   - # of weeks on average

3. Acceptance Offer
   - # of weeks on average

4. Submit Funding Paperwork
   - # of weeks on average

5. Set start date
   - 1 week, maximum

6. Start Training
Careers in Manufacturing Program

Eligibility

- 18+ years old
- Eligible to work in the US
- No sexual offenses
- Unemployed or underemployed
Qualified candidates exemplify the... Three A’s

- **Attitude**
- **Ability**
- **Attendance**

Keep in mind, Manufacturing is a career path, **not** just a job.
For your interview:

- Know why you’re interested in manufacturing.
- Complete CNC or Welding research questionnaire and bring to interview.
- Complete Self-assessment and bring to interview.
- Prepare professional references – not your mom!
- NOTE: you may be asked to bring a rap sheet.

It’s not what you wear, it’s what you say.
Careers in Manufacturing Program

Testing

Locator
• Reading (12 minutes)
• Math sections (13 minutes)

Survey
• Reading (25 minutes)
• Math sections (40 minutes)

DONE
• Make sure your entire application is filled out
• Check in before you leave!

Make sure you put your NAME and DATE at the top of your score sheets!