Improving Lives Through Construction Education

Presented by:

Jennifer Wilkerson, NCCER VP – Innovation & Advancement





The National Center for Construction Education and Research, a not-for-profit construction education foundation

Est. 1996



Provide rigorous and relevant workforce development solutions that create opportunities for individual career advancement and support industry growth.

Vision

A qualified and successful workforce of diverse individuals whose lives were improved through construction education.



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Curricula & Assessments

Over **45 crafts** and **25** construction-related areas of study

Workforce Development

Nearly 7,000 points of delivery

Industry-Recognized Credentials

- Over 2.4 Million credentials
- Issued to 1.2 Million craft professionals
- 22.8 Million modules of craft training delivered

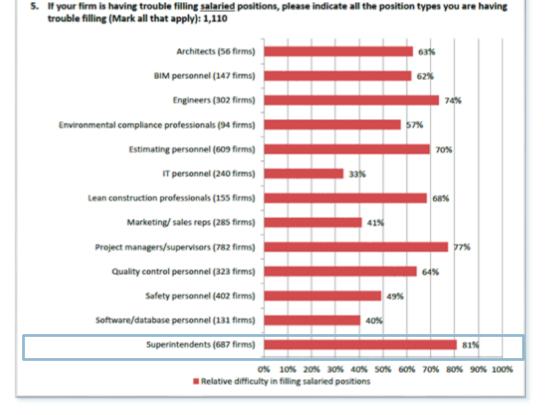


Fst. 1996

Construction Superintendent Certification Program







Superintendents are the hardest salaried positions for organizations to fill.

AGC | Autodesk 2023 Workforce Survey Analysis

The Field Leader Shortage





Previous generations of field leaders learned through on-site experience and may not have had formal training. That means that the knowledge passed on to up-and-coming leaders is limited. Now, with a shortage of experienced field leaders, people are being asked to lead or make decisions without the experience or supervision they may have had in the past. As we know, training helps with talent retention as well as the bottom line of a project. So, what can be done?

-Excerpt from FMI 2022 | Trading on Excellence: The Value of Talented Field Leaders



The **Construction Superintendent Certification Program** accelerates competency development that leads to:

Reduced Project Risk 🕂 Increased Project Profitability

Superintendents are the stewards of every person and every factor on a project - from safety and profitability to the quality of the final project the owner receives. NCCER's Construction Superintendent Certification Program serves to develop and certify current and aspiring superintendents to effectively fulfill these critical responsibilities."



Developed with support from 75 well-known industry leaders, including:

- American Contractors Insurance Group
- Archer Western Construction
- Baker Construction Enterprises, Inc.
- Bechtel Global
- Brasfield & Gorrie
- Cianbro
- Clemson University
- Construction Industry Institute (CII)
- Construction Safety Research Alliance
 (CSRA) at the University of Colorado
- Gilbane Building Company
- Gray Construction
- Haskell
- Hensel Phelps
- Irving Materials (IMI)
- ISC Constructors, LLC
- Jacobs

- Kiewit/TIC
- Linbeck Group
- M.C. Dean
- Marek
- McCarthy Building Company
- Procore
- S&B Family of Companies
- Shelby Erectors
- Skanska USA Building, Inc.
- Steel Erectors Association of America
- Sundt Construction
- Trimble, Inc.
- Turner Industries
- University of Florida
- Yates Construction
- Zachry Group
- And more...



Robust program that builds a <u>qualified and certified</u> team of field leaders.



Online, self-paced training lets you keep your field leaders on the job

Practical and usable realworld examples and lessons taught by some of the nation's most seasoned construction superintendents and executives

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02

Rigorous assessment

of knowledge and verification of experience



Operational Excellence	Risk Mitigation	Client Satisfaction
Site Logistics Coordinating Project Resource Flow	Legal Concepts and Regulations Understanding Construction Law	Scheduling Developing and Managing the Project Timeline
Work Planning Ensuring Safe and Productive Workflow	Cost Control Monitoring and Influencing Project Spend	Quality Delivering Excellence
Resource Management Optimizing People, Materials, and Equipment	Risk Management and Claims Prevention Protecting Your Business	Project Closeout Finishing Strong
Constructability Integrating Construction Knowledge into Design	Change Management Minimizing the Impact of Change	
Information Management Delivering Accurate and Timely Information	Contracts and Procurement Understanding and Implementing Project Agreements	NCC
	Site Logistics Coordinating Project Resource Flow Work Planning Ensuring Safe and Productive Workflow Resource Management Optimizing People, Materials, and Equipment Constructability Integrating Construction Knowledge into Design Information Management Delivering Accurate and	Site Logistics Coordinating Project Resource FlowLegal Concepts and Regulations Understanding Construction LawWork Planning Ensuring Safe and Productive WorkflowCost Control Monitoring and Influencing Project SpendResource Management Optimizing People, Materials, and EquipmentRisk Management and Claims Prevention Protecting Your BusinessConstructability Integrating Construction Knowledge into DesignChange Management Minimizing the Impact of ChangeInformation Management Delivering Accurate and Timely InformationContracts and Procurement Understanding and Implementing Project

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People Leadership	Operational Excellence	Risk Mitigation	Client Satisfaction
Leadership, Ethics, and Communication Succeeding as Project Steward	Site Logistics Coordinating Project Resource Flow	Legal Concepts and Regulations Understanding Construction Law	Scheduling Developing and Managing the Project Timeline
Human Resources Building a Strong Team	Work Planning Ensuring Safe and Productive Workflow	Cost Control Monitoring and Influencing Project Spend	Quality Delivering Excellence
Safety and Health Protecting People	Resource Management Optimizing People, Materials, and Equipment	Risk Management and Claims Prevention Protecting Your Business	Project Closeout Finishing Strong
	Constructability Integrating Construction Knowledge into Design	Change Management Minimizing the Impact of Change	
	Information Management Delivering Accurate and	Contracts and Procurement	
	Timely Information	Understanding and Implementing Project Agreements	NCC

There are two pathways to certification.

Construction Superintendent Certification Pathway:

Construction Superintendent Development Pathway:

$$1 \text{ Train} \longrightarrow 2 \text{ Assess} \longrightarrow 3 \text{ Confirm}_{\text{Experience}}$$



Program delivery options

Organization

- Individual leaners
- Cohort model with 2+ learners
- Invoice purchase
- Facilitator enrolls learners into program
- Courses and assessment completed online, in-person, or blended

Individual

- Individual learner
- Direct purchase via credit card
- Learner directly
 enrolls into program
- Courses and assessment completed 100% online

Key program benefits include:



02

Shortening the learning curve and helping trainees grow into highly effective superintendents more quickly.



04

Ensuring relevancy and alignment with modern industry trends through input from industry leaders.

01

Equipping seasoned professionals with new strategies and knowledge for better results.



03

Building strong leaders through shared personal insight on leadership and communication from top construction executives.



Program delivery may be tailored to meet the specific needs of your team.



The Future of Craft Training

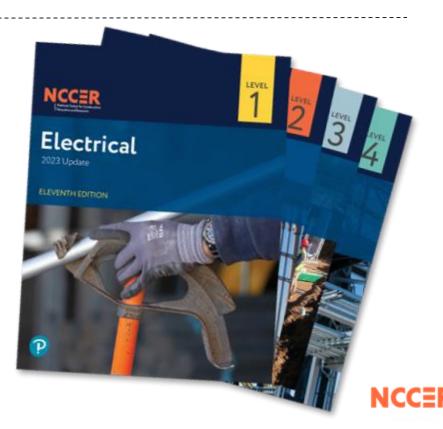




Current Model

- Accreditation
- Instructor led
- Multiyear (apprenticeship)
- Time-based
- One size fits all

Do you need other options?



New Training Solution:

CraftPRU

Systems & Platform

- Customers curate courses and create learner paths for individuals
- Administered by HR, talent or operations department
- Mobile-first learning experience with virtual instruction, videos, reading content, and hands-on verification
- Stackable credentials customized with contractor and NCCER logos

Course Development

- General Carpentry
- Frame and Finish Carpentry
- Concrete Construction
- Pipefitting
- Electrical
- Rigging
- HVACR
- Plumbing
- Welding
- Heavy Equipment
- And more...







Path Forward

• Provided by NCCER:

- Extensive portfolio of content (~2000 modules)
- Instructional designers
- Technical and script writers
- Video team
- Digital content developers
- Delivery platform

• What we need:

- Access to project sites for video shoots
- Subject matter experts (guidance and content review)
- On screen talent





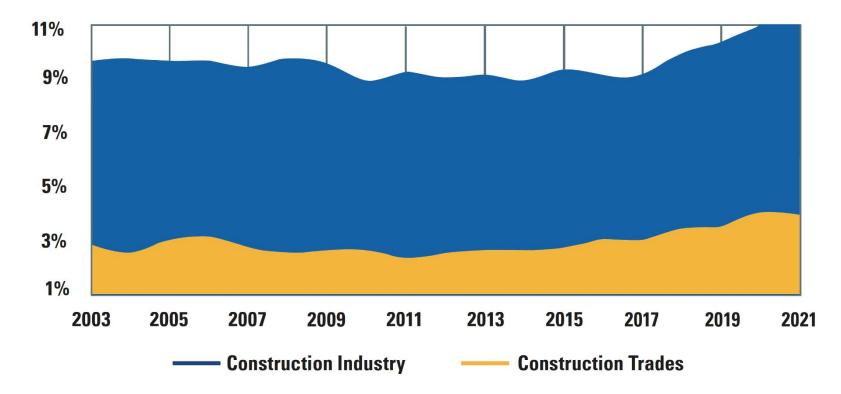
In Her Own Words:

Improving Project Outcomes

Jennifer Wilkerson



Percentage of Women In Construction





Research Questions

• What qualities do women bring to jobsites that lead to improved project outcomes?

• Why are women significantly underrepresented within the construction trades?

• What can contractors do to better recruit and retain tradeswomen?



Data Sources

- Focus Groups
 - 176 North American Tradeswomen

- Survey of Craft Professionals (Men and Women)
 - 2,780 Responses

- Survey of Women in Construction
 - 770 Responses (272 were tradeswomen)





Benefits Tradeswomen Bring to Jobsite





Strategies for recruiting and retaining tradeswomen

Address Discrimination and Sexual Harassment	Ensure Consistent Hiring Practices	Accommodate Mothers	Treat Women Equally
	Offer Training Opportunities	Other	More Women Improve Site Jobsite Leadership Experience

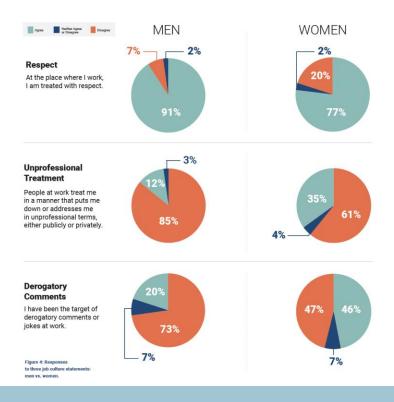


Discrimination and Sexual

Harassment

- Women report a significantly more negative jobsite experience than men
- Suggestions:
 - Third-party discrimination and harassment reporting service
 - Women resource groups

Responses to Three Job Culture Statements



Ensure Consistent Hiring Practices

- Using a gender-neutral name (e.g. Chris instead of Christine)
- "You have to know someone to get hired"
- Suggestions:
 - Ensure everyone has the opportunity to apply
 - Remove recommendation requirement from someone in the industry.

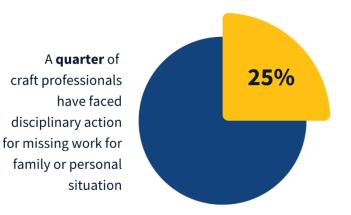




Accommodate Mothers

- Women are still the primary caregivers to children and aging parents
 - During Covid women took on 3xs more childcare responsibilities than men
 - Women spend 15% more time per month as caregivers to aging parents compared to men
- Inconsistent PTO policies
 - 57% of tradeswomen
 - 4% of women in managerial and administration
- Suggestion: Consistent policies for field and office positions.







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Accommodate Mothers

- Suggestions:
 - Industrial project sites designated parking near gate for parents
 - Scheduled work hours (e.g., 6:00 AM 3:00 PM)
 - · Company provided childcare benefits
- 40% of working women with children under 10 years old considered leaving/downsizing careers (*Insights Workplace Business Research 2022*)
 - Opportunity for construction industry to become industry of choice for working moms





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- Lack of effective craft training affects women disproportionally
- Construction CTE Enrollment
 - 10% 20% Women
- Training enables progression and creates loyalty



Women in Site

Leadership

- 57% have never had a female supervisor during their time in the industry.
- 69% of the same tradeswomen indicated they want to be in a leadership position at some point in their career
- Suggestion: Develop and implement a plan to identify women early in their careers who have leadership traits (women resource group)





Improve Jobsite Experience

- Bathroom Facilities
 - Request feminine hygiene considerations in service contracts
 - Have custodial service keep the women's temporary toilets stocked with products and ensure that a trash can is adjacent for proper disposal
- Proper fit of Personal Protective Equipment
 - Improperly fitted PPE is identified by OSHA as a health and safety concern
 - Provide female employees with a list of available clothing and protective wear options.







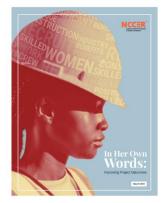
Download and share white paper across your network <u>https://www.nccer.org/research/in-her-own-words/</u>

Improving Project Outcomes

To go beyond the numbers and statistics that are typically presented in research about women in construction, NCCER met with 176 tradeswomen and analyzed survey responses from 770 women in construction. Our goal was to highlight the unique benefits women bring to the construction craft workforce, the obstacles they encounter getting in and staying in the industry, and their advice on what contractors can do to recruit and retain more women in the craft workforce.

🗐 Executive Summary 🗹

- → Download White Paper 🗹
- → Download Research Report 🗹
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Thank you!

For questions, please contact:

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