POINT OF VIEW

BY ANDREW BROWN

THE MODERN-DAY WELDER RETENTION PLAYBOOK

A practical look at why welding employers lose promising candidates and what they can do differently

Hands-on exposure helps students and career changers understand the realities of welding before choosing a pathway.

The U.S. welding workforce challenge is often described as a labor gap. A more accurate description is a pipeline failure driven as much by perception and timing as by demographics.

The effects are already visible across industry. Infrastructure projects face delays, manufacturing timelines grow tighter, and maintenance backlogs continue to build. What might seem like a workforce issue on paper has become an operational concern in practice.

AWS projects that 320,500 new welding professionals will be needed by 2029 (*weldingworkforcedata.com*), requiring roughly 80,000 new entrants each year to meet demand and replace retirees. Employers feel this daily: Job postings attract applicants, but only a fraction are qualified, fewer show up for interviews, and many new hires leave within the first six months.

Many companies say they can't find welders when the truth is they can't keep the ones willing to try. In many cases, companies ask for three to five years of experience for roles meant to be entry points, filtering out candidates who have the soft skills, work ethic, and safety mindset but not yet the technical experience.

What Younger Workers Want

Gen Z (roughly ages 13–28) evaluates careers differently than previous generations. They expect clarity early: what the work looks like, how progression happens, and whether support shows up from day one.

When the message is still "pay your dues" or "you'll be set in five years," hesitation shouldn't be surprising. Those phrases lack context and immediacy, and younger workers have too many alternatives to commit blindly.

Most employers and educators are doing the best they can within systems they inherited. The problem is that many of those systems were built for a labor market that no longer exists.

When expectations aren't clear early, interest fades — not because welding lacks value, but because the path into it feels uncertain.

Recruiting vs. Retention

Across two decades working alongside welders, shop owners, educators, and manufacturers, I've seen the same lesson play out repeatedly. Organizations that consistently attract and retain younger welders tend to focus on the fundamentals early, providing training, mentorship, and support when new hires need them most. By contrast, organizations that struggle often depend too heavily on recruiting efforts while delaying the support that helps people stay and succeed. More job ads alone won't fix an onboarding process that isn't working.

A Five-Step Playbook for Retention

The five steps below reflect a practical order of operations used by organizations that hold onto people rather than just hire them.

1 **AWAKEN: CREATE RELEVANCE QUICKLY.** Initial exposure matters. If students or career changers don't see how welding connects to the world they live in, attention is lost almost immediately. Effective outreach isn't a lecture or a labor-market statistic. It starts with relevance, showing how welding supports infrastructure, energy, transportation, and manufacturing. The goal here is to build interest.

2 **EXPLORE: MAKE IT TACTILE AND IMMEDIATE.** Exploration must be hands-on. Prolonged theory without physical interaction is one of the fastest ways to lose potential entrants. Whether through shop visits, trailers, personal protective equipment demonstrations, or supervised tool use, hands-on exposure lets people experience the work before committing to it. Some opt out — which is a success, not a failure.

3 **CHOOSE: CLARIFY PATHS, NOT JUST POSSIBILITIES.** Many people leave the pipeline because they can't see where welding leads. Choice requires clarity. That means explaining real paths — for example, fabrication, structural work, inspection, maintenance, automation support, and leadership — and how progression happens over time.

4 **PREPARE: MENTORSHIP STARTS IMMEDIATELY.** This is where many employers unintentionally lose the game. Mentorship is often delayed until a new hire proves themselves; in reality, most people decide whether they will stay within the first week, even if it takes months for that decision to show up as turnover. Early mentorship directly impacts weld quality, safety habits, and rework. New welders without guidance are more likely to develop poor habits, miss inspection criteria, or disengage before reaching proficiency, increasing costs, risks, and frustration on both sides.

Structured mentorship during onboarding bridges the gap between classroom learning and real-world application. It reinforces standards early and signals that the individual belongs.

That also means doing the legwork upfront. Not every experienced welder should be a mentor, and filtering out the wrong fits matters just as much as selecting the right ones. If a company consistently loses welders within six months, the issue is rarely a lack of recruiting volume.

5 **ELEVATE: TURN EXPERIENCE INTO LEADERSHIP.** Retention improves when people see a future beyond entry-level work. A simple approach is a buddy-to-mentor progression: A second-year welder helps onboard a new hire for the first few weeks, walking through shop flow, safety expectations, and basic process checks, with a lead welder available as backup. It creates an early leadership opportunity while reinforcing accountability and pride in workmanship. Teaching reinforces skill, builds confidence, and strengthens culture. Knowledge is transferred instead of lost.

Bridging Education and Industry

Education and industry perform best when they operate as connected systems. Public career and technical education programs rely on industry input to align curriculum, equipment, and outcomes with local workforce needs. When employers engage, even a few times per year, alignment improves and graduates arrive better prepared.

Conclusion

The welding workforce isn't disappearing because the work lacks value. It's being filtered out by pathways that no longer match how people actually enter and grow in the trade. If the industry wants different outcomes, it must change the order of operations: make welding visible earlier, provide hands-on exploration, clarify career paths, invest in early mentorship, and elevate experience into leadership. The next generation is watching — not to see what the industry says, but to see what it actually does. WJ

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