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WELDING

PAYS

OFF

The importance
of “upskilling” in
today’s welding
education
programs



The demand for skilled welders is growing. The American Welding Society predicts a need of almost 400,000 welders in the United States by 2025 while the Manufacturing Institute has stated that in the next decade alone, there will be a need for nearly 3.5 million manufacturing jobs.

To ensure the welding industry is prepared to meet this demand, today's welding educators and instructors must make certain that their programs and training methods are equipping today's young people with the skills employers are looking for. And, in a workforce that will increasingly require those who are agile, adaptable and highly qualified, "upskilling" students above and beyond the fundamentals of welding will only make them more employable in a competitive, high-demand industry.

SKILLS PAY OFF

With an oversupply of entry-level welders and a growing number of skilled welders ready to retire, welding and manufacturing

companies are paying more and more attention to welding codes and qualification standards. This means welders who are certified, or who are able to examine and test their own welds, are more attractive than ever before – and their pay reflects that attraction. According to the Fabricators & Manufacturers Association International's "2013 Salary/Wage & Benefit Survey," a welder who is certified to AWS, ASME and other codes has the broadest salary range of any shop floor position, up to \$83,000 for a base salary, not including overtime and bonuses.

While having basic welding skills can certainly pay off, other skill sets can also pay large dividends. Figure 1 depicts the many paths one can take when considering a welding-related career. For instance, the chart shows the average pay for a welding supervisor and a manufacturing production supervisor. With reported average pay ranges around \$12,000 higher than an average welder, these highly skilled positions are rewarded with higher pay. ▶

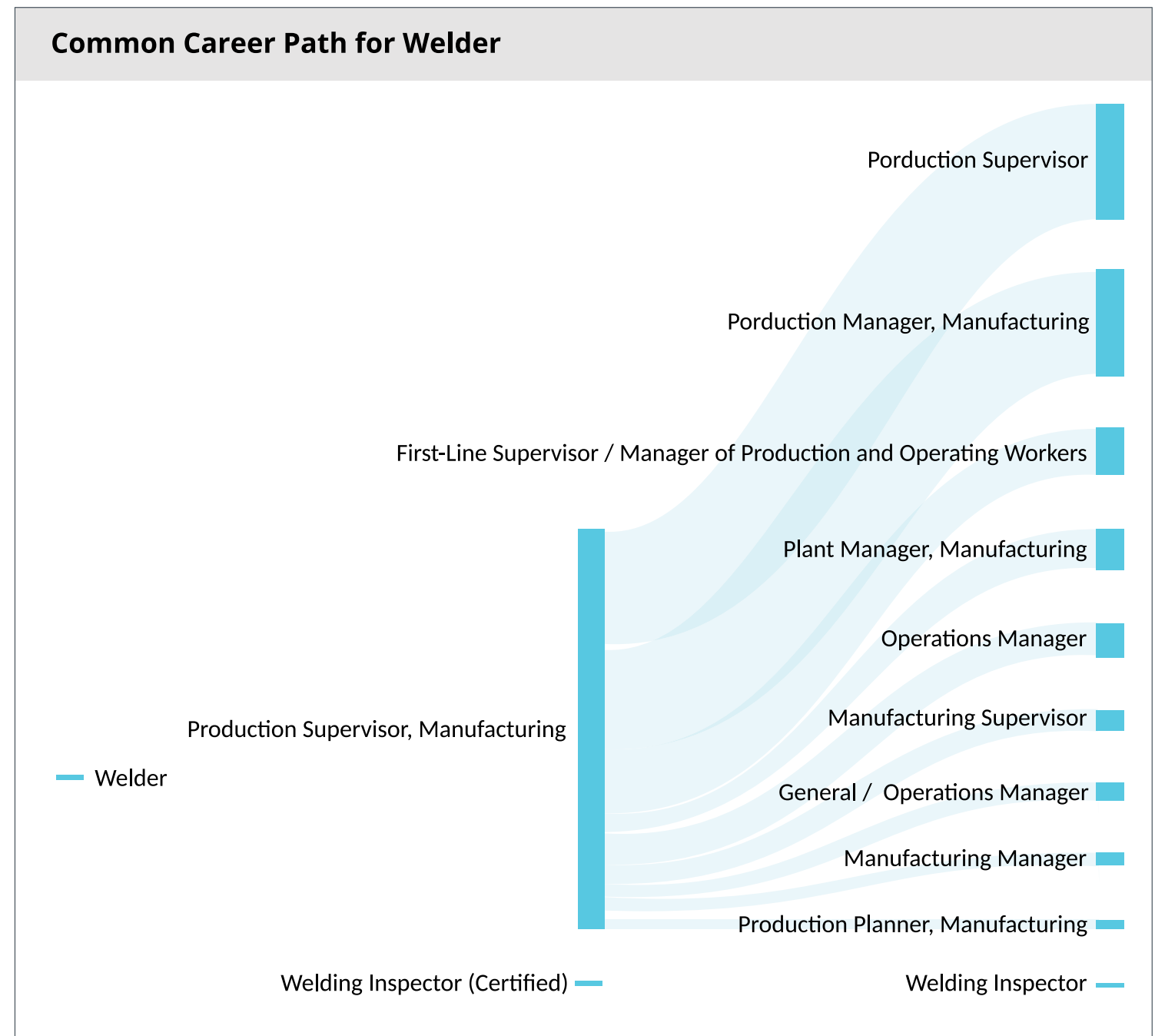


Figure 1. As seen from the chart from PayScale.com, a welder's career can take shape in various ways. Often, the per-hour wage for employees who can visually inspect welds and supervise others in the creation of quality welds is much higher than an employee who creates quality welds.

When speaking with various workforce development boards and companies within the welding industry, it's not uncommon to hear welding and manufacturing industry representatives say that they routinely pay more per hour for employees who can visually inspect welds and supervise others in the creation of quality welds over those who could simply create the quality welds.

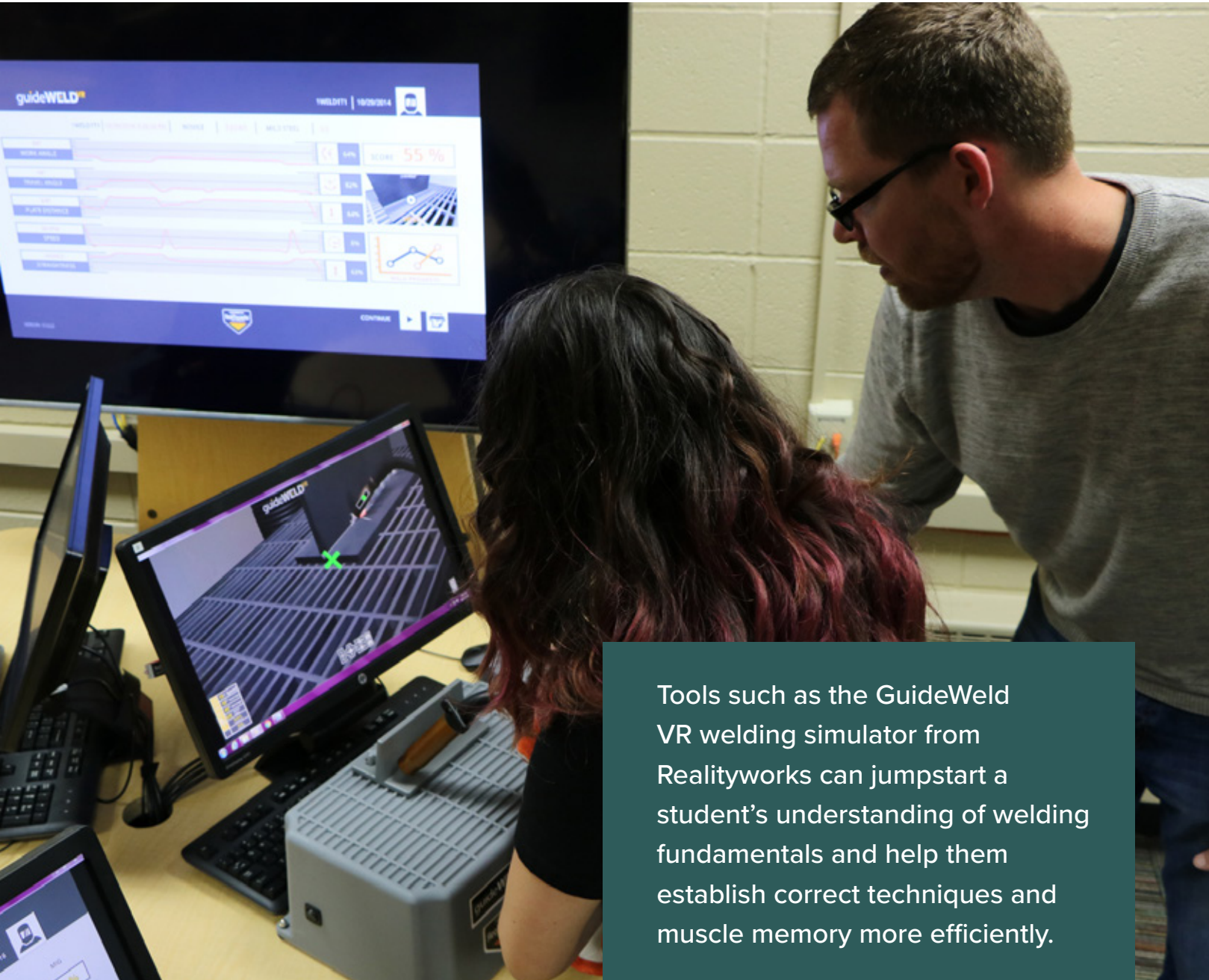
Barring geography, experience, skill level and employer, the message is clear: By focusing on basic skill development and the development of additional career-specific skills such as weld testing and qualification, educators and trainers are opening the doors to higher pay, more benefits and in the long run, more successful careers. If the industry can work on creating more welders who understand how to visually inspect their welds and conduct quality testing, it will help employers and employees.

TRAINING TOOLS

Of course, quality welding training won't happen without quality welding training tools. Tools such as the RealCareer Weld Defects Kit from Realityworks Inc. enable students to see, touch and feel different weld defects and discontinuities, ▶



Experiential learning tools like the RealCareer Weld Defects Kit from Realityworks can help students build on basic welding skills by understanding how weld defects and discontinuities occur, and how to prevent them.



Tools such as the GuideWeld VR welding simulator from Realityworks can jumpstart a student's understanding of welding fundamentals and help them establish correct techniques and muscle memory more efficiently.

establishing an understanding of the impact improper welding can have. What's more, students can learn how to prevent improper welds – and this is where skill development really takes a step forward. By learning how to improve poor welding techniques and prevent weld defects, students begin to develop skills that will help them stand out to employers.

Weld qualification through guided bend testing is another skill that will help students stand out in the eyes of an employer. Not only are most employers today using this type of test, but more and more are looking for welders that have this skill. Bend testing and experiential learning tools like the RealCareer Bend Tester are appearing in more and more schools across the country.

These types of tools put the student in the driver's seat and allow them to learn first-hand how to qualify a weld and how a certified welding inspector addresses a weld. Just like having an understanding of how weld defects occur and how to prevent them can help students stand out to future employers, upskilling students with an understanding of how bend test qualifications work will help set them apart in a growing field.

TAKING IT TO MARKET

Additionally, welding instructors and educators should consider whether they are also equipping their students with the ability to market themselves and the skills they have learned. Soft skills such as the ability to communicate, think critically, show up on time and solve problems are just as important as the ability to create, test and qualify a quality weld.

In fact, research conducted by Harvard University, the Carnegie Foundation and Stanford Research Center has concluded that 85 percent of job success comes from having well-developed soft and people skills, and only 15 percent of job

success comes from technical skills and knowledge. Today's welding and manufacturing workforce needs workers who have both technical, job-related skills and soft skills.

To stay competitive and relevant in an increasingly global market, today's manufacturing and welding employers are calling for innovative employees who can take the industry to the next level. To ensure that today's young people are prepared for future careers, welding educators and trainers are focusing not only on creating quality, skilled welders but enticing students into these profitable, in-demand career paths – and upskilling can help.

By enhancing skill development within welding training and education, educators and trainers can engage more young people in welding and manufacturing careers. In the end, this will allow them to develop skills to help them stand out in the workforce. ■

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