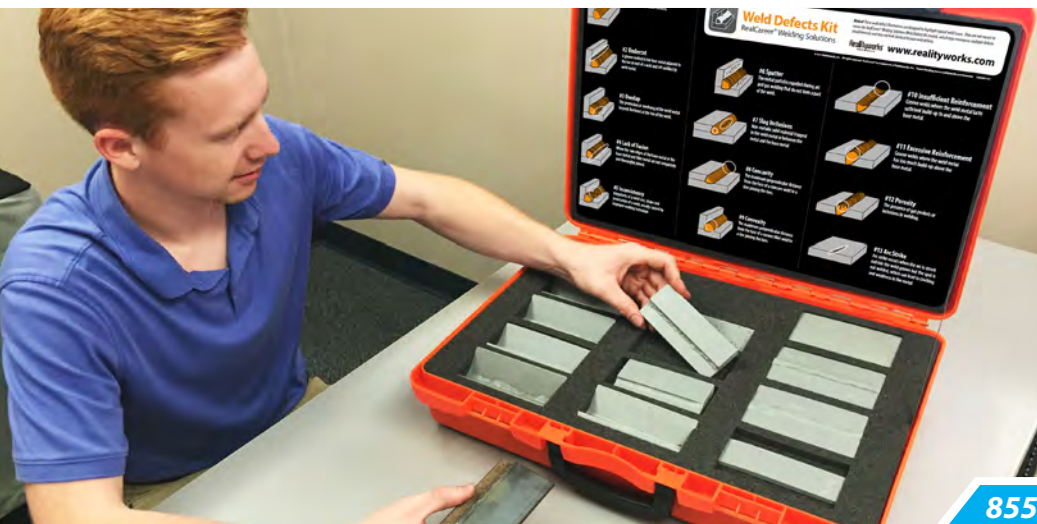




Welding Solutions Implementation Guide



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Live it. Learn it.™

Welding Solutions Implementation Guide

Realityworks' RealCareer® Welding Solutions feature several powerful and cost-effective welding education tools to help train welders more efficiently and engage students in welding career exploration. Use this implementation guide to understand the value of 21st Century learning tools and to see how these solutions can easily be integrated into any classroom.

Semester Implementation Guide *Timing will vary depending on your classroom. Adjust accordingly.

Minimum # of weeks	Maximum # of weeks*	Focus	Includes
1	2	In-class curriculum study (VR Unit 1, Lessons 1-6)	Safety exam
1	2	In-class curriculum study (VR Unit 2, Lessons 1-5)	Weld basics exam
1	1	Introduce VR for Stick welding	Tee & lap joints
1	3	VR for Stick welding	Tee & lap joints
1	2	VR for Stick welding	Lap & butt joints
1	1	Introduce guideWELD LIVE in welding shop for Stick welding	Start with LIVE in-helmet guidance
1	3	Welding shop Stick welding and visual inspection	Weld Defects Kit
1	3	Welding shop Stick welding and destructive bend testing	Bend Tester
1	2	In-class curriculum study (LIVE Unit 3, Lessons 1-5)	Defects exam
1	1	Introduce VR for MIG welding	Tee & lap joints
1	3	VR for MIG welding	Tee & lap joints
1	2	VR for MIG welding	Lap & butt joints
1	1	Introduce guideWELD LIVE in welding shop for MIG welding	Start with LIVE in-helmet guidance
1	2	Welding shop MIG welding and visual inspection	Weld Defects Kit
1	2	Welding shop MIG welding and destructive bend testing	Bend Tester
1	2	Welding review	All products
1	1	Welding testing & qualifications of semester/year	All products - curriculum exams

Fun Activity

Class Competition

- Review how to read reports as a class; create several class assignments
- Assign a group of students to each simulator
- Give each group enough time for each member to perform a weld; record each member's score
- Compare cumulative score to other groups
- Recognize winning group or individual with a prize, i.e., a "Weld Champion" sticker

Individual Competition

- Print and save initial reports of each student's best weld
- After several hours/weeks with simulators, have students test again using same metal, thickness, etc.
- Compare to previous reports and see progress!

Study Hour Use

- Make the virtual welders available for students during study halls
- Put Weld Defect Kits nearby for self-assessment and additional learning experience



Live Welding Booths guideWELD® LIVE real welding guidance system

- Corrective guides, immediate feedback, classroom management
- A one-of-a-kind solution for guidance inside the welding helmet during live welding



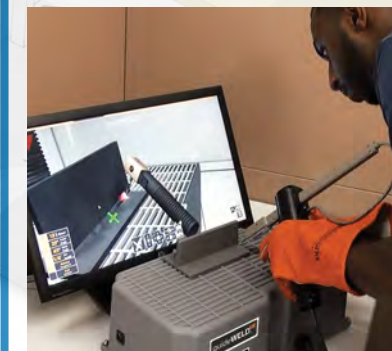
Destructive Weld Testing RealCareer™ Bend Tester

- Prepare for careers, self-assessment
- Challenge students to test their own welds and determine what went wrong



Visual Weld Inspection RealCareer™ Weld Defects Kit

- Assessment and correction techniques, quality inspection
- An instructional aid to teach weld defects and discontinuities



Welding Simulation Lab guideWELD® VR welding simulator

- Explore careers, foundational learning, provide more arc time
- A safe, cost-effective way to teach welding fundamentals

Classroom Example

This illustration was created as a visual example. The scale, models and layout are generic representations. Implement these welding educational tools into your program using the following information as a guide.



guideWELD® VR welding simulator

Classroom Curriculum

- Focus: Introduction to welding safety, equipment, proper welding techniques and careers
- Lessons: 13
- Teaching hours: 20-30
- Presentation slides: 292

How to Set Up the Classroom

- Weld shops are not an ideal environment for computers; the perfect environment is a classroom with tables and computers
- Computer choices: laptop with or without an additional monitor, computer with monitor or all in one with touchscreen

Best Practices

- Give students a change to try welding in a safe, virtual environment. Great for career exploration events and parent's nights!
- Demonstrate a weld for the entire class by performing a virtual weld for the entire classroom on a projection screen rather than in a welding booth.
- Create a competition within the classroom to increase excitement and give users a chance to enhance form, technique and build muscle memory with repetitive play.
- Make virtual welding a key component in the classroom; integrate virtual welding throughout an entire semester for increased hands-on welding time. Save on classroom consumables while allowing students to master welding techniques!



guideWELD® LIVE real welding guidance system

Classroom Curriculum

- Focus: Introduction to weld correction techniques, welding procedure specifications and weld testing
- Lessons: 16
- Teaching hours: 20-30
- Presentation slides: 318

How to Set Up the Classroom

- guideWELD LIVE is intended for use in a welding booth with MIG or Stick welding machines
- Helmet and speed bar are battery-powered; no electricity is needed for system

Best Practices

- Prep students for system guides: talk them through what to expect while showing a visual of the guides within the helmets
- Conduct live arc welds and arc-off welds; guides can be used with a live weld or without to provide immediate guidance
- Use the custom WPS editor to create WPS's for your local industry needs



RealCareer™ Weld Defects Kit

Classroom Curriculum

- Focus: Identifying and correcting common weld defects and discontinuities
- Lessons: 5
- Teaching hours: 10
- Presentation slides: 151

How to Set Up the Classroom

- Kit case can be used to display defects or defects can be passed around
- Hang posters on walls of classroom or welding lab

Best Practices

- Introduce defects early and engage students on welding inspection and correction by showing common defects and the correction technique for each
- Compare actual welds to kit welds. After completing a real weld, have students compare to defects kit for self-assessment



RealCareer™ Bend Tester

Classroom Curriculum

- Focus: Destructive testing; preparing, bending and qualifying welds
- Lessons: 8
- Teaching hours: 15
- Presentation slides: 167

How to Set Up the Classroom

- Hang posters near Bend Tester in welding lab to help students understand how to conduct bend test and self-evaluate

Best Practices

- Have students test their own welds to help them understand qualification
- Conduct a weld visual test then perform a bend test. Have students visually inspect a weld and determine if it would pass, then perform a bend test and see if they were correct by inspecting the weld themselves

Employability Skills Program

Provide your students with additional skills to help them acquire and maintain a well-paying job!

- Curriculum and activities to develop soft skills
- Apply 20 key soft skills to real-world scenarios
- Includes 20 workbooks, curriculum/teacher guide, scenario cards, presentation slides
- Pre- and post-tests



Additional Training and Help

Online Product Support

We're here to help! Our online Product Support features video tutorials, downloadable documents, frequently asked questions and product notices, all of which make it easy for you to get support for products, software and more, day or night.

Find our online product support area here: www.realityworks.com/support/

Online Store

Supplies, accessories, select simulators, curriculum and more are available for purchase from our online store 24 hours a day! Find our online store here: <http://store.realityworks.com>