



**2002 Excellence in Practice Citation - Workplace Learning and Development
Category**

Partner: Northrop Grumman Newport News Shipyard (Newport News, Virginia)

Program: Modernized Welding School

The Welding School at Northrop Grumman Newport News has aggressively modernized its entire training process, procedures, programs, curriculum, and content. The key elements to this transformation were the introduction of e-learning technologies and changes in instructional strategy and procedures. With the support of Training Modernization Group, the Welding School converted 90 percent of the instructor-led practical training curriculum to computer-assisted instruction and 100 percent of the instructor-led classroom training to computer-based training. This conversion allowed instructors to focus on the core learning event - one-on-one practical instruction. Also, a learning management system was implemented within the shipyard intranet. To capture return-on-investment, the school implemented a validated assessment and test plan, data capture process, and analytical support program. The modernized Welding School Training Model features basic training to evaluate trainees early in their welding experience and then groups them by learning aptitude and pace to better match instructors to trainees, providing a more efficient training model. The Welding School has more than tripled its throughput while reducing cost per trainee by 16 percent. In addition, the school has reduced their safety incident rate by half, and also increased available direct labor hours to production projects by 15,700 hours due to faster matriculation.