THE BENEFITS OF Virtual Maintenance Training

What if we told you that you could reduce your training costs by 66% while achieving a 13% initial pass rate improvement over the traditional classroom model? What if you could train your technicians so that they made fewer errors in the field before they even left the classroom? What if you could improve your training efficacy so that students demonstrated a 9% better information recall and made 41% fewer errors than those trained in your current methods?

What if we told you this was possible now and that the world's leading commercial companies and military organizations are already reaping the benefits?

Training Across the Mixed-Reality Spectrum

When it comes to training, it is challenging to find a platform that enables trainers to teach students with varying learning styles. The DiSTI Corporation has taken on this challenge and come up with Virtual Maintenance Training applications that let students perform tasks in three ways:







On a Desktop, for the visual and logical learner.







Using Virtual Reality and Augmented Reality, for the physical and tech-savvy learner.







Using Hands-on Stations, for the physical learner.

Outside of the training environment, virtual and augmented reality is most commonly used in video games. Video games, while entertaining, help the user develop cognitive and problem-solving skills. Studies have shown that when using Virtual Maintenance Training and Extended Reality Training, student retention rates exceeded 75%.

Training in a virtual environment also keeps the focus on safety. Every dangerous or costly scenario can be depicted in a virtual environment. This is also true for hazardous situations in various weather conditions. Virtual training provides students the opportunity to make mistakes and experience the results without harm to the equipment or themselves, giving teachable moments that aren't possible in a real-world training situation.

Virtual Maintenance Trainers are the future of learning and help your students retain critical information to succeed in the field. Different types of learning simulation training stations can benefit all students with various learning styles. Virtual Maintenance Trainers are cost-effective, time-efficient, and help students retain life-saving information.

- Bailey, S. K. T., Johnson, C. I., Schroeder, B. L., & Marrafino, M. D. (2017).
 Using Virtual Reality for Training Maintenance Procedures.
 Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC) 2017.
- 3. Krokos, E., Plaisant, C., & Varshney, A. (2018). Virtual memory palaces: immersion aids recall. Springer Nature 2018. doi: 10.1007/s10055-018-0346-3
- 4. Morris, C. (2018, October 30). Why Walmart and other F500 companies are using virtual reality to train the next generation of American workers.

Reduced training costs

Better information recall

Fewer errors than current training methods

^{1.} Cunningham, J. C. (2020). Siemens Virtualizes Maintenance Training for its Global Workforce. The DiSTI Corporation.







VE Studio™

VE Studio is a virtual maintenance training development platform. With DiSTi's VE Studio™ software, you can take advantage of the latest developments in Augmented Reality, Virtual Reality, Desktop, Mobile, and Cloud-based technological solutions.

From Prototyping to Full-Scale

The architecture of VE Studio allows rapid prototyping and iteration. It is robust enough to handle the simplest Part-Task Trainers as well as the most sophisticated equipment, such as aircraft and weapons systems. VE Studio $^{\mathsf{M}}$ leverages Unity $^{\mathsf{M}}$, the world's most popular real-time 3D development platform, to produce realistic and immersive training environments.

Clients around the world use VE Studio™ in the development of:

- Virtual Maintenance Training
- · Virtual Operations Training
- Field Service Mobile Refresher
- · Equipment Familiarization Training
- · Guided Field Services Augmentation
- · Safety Training





School House™

DiSTI's School House™ is a managed virtual training solution that provides organizations the power to train and certify staff regardless of location. Also, it helps to lower training costs, improve overall efficacy, and provide access to online training materials.

With deployments in the Aerospace, Defense, Automotive, Industrial, and Medical industries, School House $^{\text{\tiny M}}$ enables virtual training with real-time 3D rendering through a standard internet browser.

While the possibilities for implementation are boundless, the benefits continue to emerge. Training through School House™ reduced one client's traditional 3-day instructor-led technical certification course to 9 hours, while also improving student engagement and retention rates.

DiSTI's School House™ allows organizations to host nearly any training content, utilize the LMS of their choice, and deploy it quickly and to scale.

- Users can access the application from any computer with a broadband internet connection and a modern (HTML 5 compliant) web browser running the latest versions of Google Chrome, Mozilla Firefox, Microsoft Internet Explorer, and Microsoft Edge, on desktop devices, including Windows, Mac, Chromebooks, and Linux PCs.
- Alleviates the need for customers/users to have high-end gaming computers to use their 3D training applications.
- Enables a rapid and instantly scalable global rollout of the training content.
- Cloud-based delivery ensures that any time the user accesses the 3D training application they are running the most current version of the application.
- No local software installation required. After exiting the service, no proprietary information resides on the user's system.







