



AFGHANISTAN TECHNICAL
VOCATIONAL INSTITUTE



Market: Federal

Customer: US AID and Afghan Technical Vocational Institute

Problem: The Afghan Technical Vocational Institute (ATVI) is an institution of higher learning based in Kabul, Afghanistan. Funded by the United States Agency for International Development (US AID) and commercial partners, ATVI is developing courses and curriculum to prepare its graduates for leadership in key sectors of horticulture, construction, information and communications technology (ICT) and vehicle maintenance. In the vehicle maintenance classes, professors only had one engine available for as many as 30 students. Huddled around the engine, many students could not get close or have any “hands on” training. As a result, learning the basics of engine operation/repair as well as learning complex processes (i.e. trouble shooting an engine) and critical concepts (i.e. internal combustion) proved to be both difficult and time consuming for instructors/students alike.

Solution: Bridgeborn developed a Training Delivery Platform© (TDP) for use at ATVI. Powered by Bridgeworks©, the training and education solution displays a 4 cylinder diesel engine, its four stroke internal combustion cycle, brake assembly and drive train through an interactive, 3D web-based environment. Using intuitive mouse controls, the trainee can assemble, disassemble, rotate, view and inspect the entire engine, brake system and drive train as well as drill down into more detailed views. Animations of complex processes and repair procedures can be started, paused or stopped at any time and viewed from any vantage point. Advanced features such as “explodes” and 3D labeling further enhance the learning environment. The entire training solution is web deliverable for use both in the classroom and on Personal Computers at the ATVI Lab for self-paced study as well as refresher courses.

Value to Client: Bridgeborn’s TDP serves many purposes and provides tremendous value to instructors/trainees at ATVI. The training solution has dramatically improved students’ ability to efficiently learn complex concepts and subject matter while increasing retention rates through interactive, “hands on” instruction. Additionally, the ability to use the TDP in the lab means that students can learn through self-paced instruction and require less time with instructors. Utilizing fewer instructors saves ATVI money while still producing high quality, well educated students. And running TDP in the ATVI Lab provides graduates with access to the training content at any point in the future, further reducing drain on instructors while giving students valuable refresher courses at their convenience.

Services Provided	
	Analysis
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✓	Support Services
✓	Training and Education
	Research and Development

