

SOLVING A SPECIALIZED WORKFORCE SKILLS GAP — **THE WAY THE PROFESSIONALS DO**

For more than 25 years, companies large and small have trusted their training needs to Industrial Training International (ITI), placing a high value on the company's high-touch, hands-on teaching methods provided at training centers in the United States, Canada, and Brazil.

Anticipating a need to train a new segment of highly-skilled specialist engineers, in 2014 ITI sought to find out whether its team of trainers could leverage video-based eLearning to deliver the company's trademark learning experience to an even larger audience.

Drawing inspiration from the video-enabled learning best practices in place in the nation's leading universities and colleges, ITI adopted Panopto as a video platform that could enable the team to create and share video training content with professional audiences around the world.

“Video has really helped us deliver the information our students need, in a way that works for them.”

— Christina Lanham, Manager of E-Learning and Digital Services,
Industrial Training International

Today ITI's team of instructors rely on Panopto as an essential tool that helps them solve critical knowledge gaps in their clients' workforces.



Industrial Training Technology is the world's foremost provider of educational and technical services for those who use cranes, rigging, and load handling equipment. The company assists organizations worldwide in preparing competent workforces who conduct efficient, proper, and innovative load handling activities.

Over the past quarter-century, ITI has become recognized by customers and competitors alike as having an innovative and pioneering attitude toward training, and for having raised the current levels of instruction for cranes, rigging, and lifting activities. The company is based in Woodland, Washington, with offices in Tennessee, Edmonton, and São Paulo.

THE PROBLEM: HOW TO TRAIN A NEW GENERATION OF SPECIALIST ENGINEERS

In 2013, Industrial Training International recognized its clients would soon be facing a significant change in their workforce. With the impending retirement of the Baby Boomer generation already underway, the veteran rigging engineers employed by ITI's customers were beginning to retire in large numbers. Schools, however, were simply not producing new graduates with the skills required to replace those positions.

With a team of experienced subject matter experts ready to teach and certified training centers ready to provide students with first-hand experience in the field, ITI had the know how to produce the specialized skills their customers needed.

Classroom-based training, however, could only scale so far. With more and more clients requesting training — and with even more potential clients interested in training but unable to commit due to issues with scheduling or the cost of travelling to the training centers — ITI realized they needed an innovative solution that could allow their team to produce a course that could be delivered online but still retain the quality of their in-person sessions.

Wanting to deliver a best-in-class learning experience, ITI researched the learning technology used by leading colleges and universities to record lectures, flip classrooms and provide training to their administrative staff. In short order, ITI discovered Panopto — and discovered a flexible, software-based video platform with which they could record and curate video content from instructors scattered around the globe, manage and edit those recordings in the cloud, and easily share the them with students anytime and anywhere, on-demand on their laptops, tablets, or smartphones.

“Panopto helps us make our training more user-friendly.”

— Christina Lanham, Manager of E-Learning and Digital Services, Industrial Training International

THE FIRST TEST: TAPPING THE POWER OF VIDEO FOR EMPLOYEE ONBOARDING

After selecting Panopto, ITI was excited to begin building their new eLearning program. Of course, the process of adapting course content, designing a framework for learning activities, and developing new materials suited for online delivery represented no small task. And while the team at ITI was working diligently to bring new eLearning program to life, another application for video-enabled learning popped up.

At the same time ITI's trainers were finalizing a new eLearning course that would help clients manage growth and turnover among their specialized engineering staff, executives at Industrial Training International headquarters were searching for a better way to manage staffing growth and turnover issues of their own. While ITI already had a detailed document for onboarding new employees, the process still required a senior staff member to spend several hours with each new hire. As the company sought to continue its expansion, that requirement became a burden on the internal learning and development team.

ITI instantly recognized the problem as an opportunity to put Panopto to the test in-house. Using Panopto, the ITI training team recorded a series of standard employee onboarding presentations that the learning and development team would typically have delivered one-to-one with each new hire. The team paired up each video with slides based on the company's existing onboarding handbook. In short order, they created a small library of recordings for new hires to review as part of a comprehensive onboarding program — with one video for each week of the new person's first month in their role.

The new onboarding program was an immediate success. Providing the information as on-demand video meant new hires could review the materials as best fit into their schedules and other training activities, which in turn allowed them to better focus on the materials presented. And because the presentations were recorded, individuals were free to rewind and replay the videos whenever questions arose.

The video format was also a real benefit to the company's human resources department. Video made the scaling of learning and development presentations possible, allowing the team to ensure every new hire received consistent training — no matter when they were hired or what office they worked in. Video also helped boost audience engagement — hearing and seeing an actual member of the ITI team provided a human touch that wasn't possible with the text-based handbook alone.

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It was during this pilot project that the ITI team was able to see just how much potential video lessons might really provide. As Christina Lanham, Manager of E-Learning and Digital Services at Industrial Training International noted, “For us, the onboarding project was the perfect opportunity to really see how well we'd be able to teach with video. And so far, the feedback has been very positive.”

PUTTING IT TOGETHER: PRODUCING THE NEXT GENERATION OF ENGINEERING COURSES WITH PANOPTO

With its onboarding pilot in place and the plan for its specialized crane and rigging engineering eLearning course complete, it was time to produce the videos. Lanham's team again led the effort, and took full advantage of the efficiencies created by their new video platform.

Instead of booking travel arrangements for all of their trainers to meet in a central location, Lanham deployed Panopto's desktop recorder to each of her trainer's laptop computers, giving each the ability to record virtually anything from virtually anywhere.

Instead of asking instructors to take additional time to record a lecture specially for the eLearning class, instructors were simply asked to capture the lectures they were already conducting.

Panopto's desktop recording software makes it easy for anyone — from novice to expert — to capture video, audio, screen recordings, and presentations slides, instantly creating complete, professional video presentations. With Panopto, trainers can record with just about any device that can be plugged into a laptop — from professional-grade camcorders to simple webcams, as well as specialized recorders like document cameras, mobile tablets and smartphones, and even specialized wearable devices designed for onsite recording.

For the trainer, using Panopto is simple — just open Panopto, click record, and teach. Panopto takes care of all of the heavy lifting, automatically uploading every recording to a secure, centralized video library, transcoding the file for optimal playback on any device, and indexing the recording to make it searchable. Just a few short minutes after a recording was complete in São Paulo, Brazil, Lanham had access to their presentations in her office just outside of Portland, Oregon.

With recordings in hand, Lanham and her team used Panopto's simple video editing tools to divide the videos up according to the new course curriculum, quickly adding tables of contents, captions, and slide resources to each lesson.

"We officially started recording lectures in October of 2014," reported Lanham. "In just a few months we captured nearly 100 hours of lectures from all over the world — down in Brazil, up in Canada, and all over the U.S. And since everything happens inside Panopto, managing the whole process from start to finish is simple."

BRINGING ELEARNING TO LIFE: DELIVERING TRAINING VIDEOS TO **ANYONE, ANYWHERE, ANYTIME**

With the content completed and integrated into the organization's existing learning management system (LMS), customers began enrolling in ITI's first web-based sessions in early 2015.

The first course in the program itself is quite an achievement, unmatched by anyone else in the field. A complete introduction to rigging engineering, the lessons include 27 hours of lecture broken up over four primary modules, each containing three to six sub-modules. Through a series of meticulously developed recordings, students learn the fundamentals of forces, moments, and other structural concepts essential to rigging engineering. Along with the video lessons, exams and quizzes push students to demonstrate their knowledge and apply what they've learned.

Students progress through the course materials at their own pace, accessing the content through ITI's LMS and viewing everything with Panopto. Here too, Panopto makes a difference for ITI with a video player that is browser-based and supports both HTML5 and Adobe Flash, meaning students can watch any Panopto video from any computer. Panopto videos can even be played on smartphones and tablets, either in the mobile browser or directly in the native Panopto iOS and Android apps.

"Panopto helps us make our training more user-friendly," said Lanham. "Students can watch on a tablet. They can watch on a laptop. They can even watch on their phone. Panopto really helped us enhance the versatility of our learning materials."

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And while ITI crafted each lesson in the new course into easy-to-digest segments lasting no more than 15 minutes, they still found that Panopto's in-video search offered a powerful way to help students find specific content within highly technical presentations. Utilizing both automatic speech recognition (ASR) that indexes every word spoken by an instructor and optical character recognition (OCR) technology that indexes every word that appears on-screen in video graphics, screen recordings, and slide content, Panopto's Smart Search helps to make any and all information in ITI's course library instantly available to viewers with a few keystrokes.

LOOKING TO THE FUTURE: DRIVING TRAINING INNOVATION WITH PANOPTO

By the end of 2015, ITI expects to offer a comprehensive series of eight eLearning courses for crane and rigging engineering. Thrilled with the power and ease-of-use Panopto offers for recording and content management, ITI is also moving to convert its old eLearning modules to Panopto videos.

ITI has even leveraged Panopto's scalable cloud infrastructure to improve the in-class experience as well. In the past, the handful of videos that instructors used in the classroom to complement the lecture material would routinely bog down ITI's regular file servers — presenting obstacles for instructors attempting to play those videos live while on-site. Uploading those videos to Panopto instantly solved the problem, ensuring the recordings could be played anytime, anywhere without overloading servers or networks. And of course, once these legacy videos were uploaded into ITI's Panopto video library, they gained all the same benefits as any other video recorded with Panopto — including complete indexing for search by any word spoken or shown, and automatic transcoding for optimal playback on any device.

With the success of eLearning in delivering the specialized engineering skills training on which the company has built its reputation — as well as its own positive experience in leveraging video for internal employee training and onboarding — ITI has begun looking at new ways to expand their service offerings and bring video training options to their partners in industry, tapping into new opportunities in fields like sales. By using Panopto for product training demonstrations, ITI can enable its industry partners to train their sales forces in a much more scalable way, reducing travel costs and simplifying the logistics and resources required to reach every member of clients' often geographically-dispersed field sales teams.

After more than 25 years of leadership in the crane and rigging training field, Industrial Training International has created a much-needed innovation to fill a widening hole in the workforce. By empowering their experts around the world with a simple and flexible video content management system, ITI has made delivering complex, specialized technical training anytime, anywhere, on-demand, a practical reality for its clients around the world.

"Video has really helped us deliver the information our students need in a way that works for them," said Lanham. "And with the versatility of Panopto, the sky's the limit for all the ways we'll be able to offer video-based training in the future, both for our clients and for ourselves."

Armed with Panopto, the all-in-one solution for recording, uploading, editing and managing video, ITI is preserving the knowledge of an entire generation of engineers, ensuring that the world's infrastructure and construction projects keep moving forward.