CASE

VEJ-EU
VEJSEKTORENS EFTERUDDANNELSE

VEJ-EU

VEJ-EU, an independent association formed by the Danish road sector, trains workers on Denmark's roads to ensure their safety, and the safety of road users.

Challenge

- Everyone working on Danish roads must hold a certificate covering safety regulations and best practice for ways to guard road work areas.
- The certificate was acquired by passing a multiple-choice exam at the end of an in-person class. This approach was problematic for several reasons:
  - Classes contained students with very different needs. Some students were highly experienced, and some were new employees with no experience; some were skilled engineers and others were manual workers with little formal education.
  - The class required an overnight stay in a hotel and was two days long. This was expensive and took workers away from their jobs.
  - Most of the two days were slideshows covering a combination of safety regulations and ways to guard road-work-areas. The approach was far from engaging and was poor from a pedagogical point of view.

Solution

VEJ-EU partnered with Area9 Lyceum to redesign the curriculum as a blended offering using Area9 Rhapsode™ adaptive learning combined with in-class experiential learning.

- Step 1: convert all slide-based instruction to self-paced adaptive learning.
- Step 2: reduce the classroom component to one day, eliminating the need for an overnight hotel stay, and switch from instruction to group-based problem solving.
- Step 3: use analytics from the self-paced portion to help the instructors optimize step 2.
- Step 4: eliminate the summative exam, and instead use the formative output of a (median) one-hour adaptive learning module.

Outcomes

- This project was delivered on time with no disruption to the teaching schedule and proved to be popular with both students and instructors.
- The new blended approach gives a truly personalized experience yielding a 100% pass rate on the certification, yet reduces classroom time to one highly interactive and engaging day.
- Students suffering from dyslexia or colour-blindness, or with little or no formal education, or those who have post-graduate degrees all receive personalized on-demand instruction suited to their needs, combined with practical examples.
- The time to complete the knowledge component of the course reduced from 8 hours to a median of less than three, and guaranteed proficiency even for the slowest learners.

Testimonial

"All of the objectives we set out when we started this project have been achieved. This blended approach using adaptive learning has proven itself on this safety-critical subject, and we will expand its use across our curricula."

TRAINING ROAD WORKERS TO ENSURE SAFETY