XTREMELABS

The Challenge

Technology is changing at a rapid pace. As such instructors that teach technology and run technology education programs are constantly looking for best tools and solutions that can help students not only acquire the latest knowledge but also be able to convert them into usable skills.

The Solution

XtremeLabs has developed its *Lab Bytes* offering based on educational psychologist Richard E. Mayer's *Segmentation Principle of Learning*. Lab Bytes have been designed so that complex technology topics are broken down into smaller hands-on digital labs that can be completed in 15–30-minute bursts. Learners can complete single hands-on labs at a time and fine tune their technology skills.

XtremeLabs has partnered with *Mesa Community College* who are using *Lab Bytes by XtremeLabs* in their technology programs. Lab Bytes have been developed to support certification track courses including Windows 10 Certification, Azure Fundamentals. AWS Cloud Practitioner certification as well as various programming training programs such as Windows PowerShell, Python Basics etc.

Lab Bytes have been integrated into AI-based adaptive learning platform, that dynamically adjust learning paths for each learner based on their progressive mastery of technical skills.

Lab Bytes by XtremeLabs are delivered on XtremeLabs Digital Hands-on Learning platform. LTI is utilized to integrate with Learning Management Systems. The integration also supports high stakes performance-based assessment and results are seamlessly passed back to the LMS.

Learning Impact Outcomes

The modular nature of the labs permits the ability of students to progressively learn the objectives for each lesson. At *Mesa Community College*, the labs are the homework which students are asked to complete each week after the lecture. This allows students to continue practicing the subject material in a digital, hands-on environment in between class sessions. The short burst *Lab Bytes* can be repeated over as many times as the learner wishes.

Whether the technology training being delivered is on Microsoft Windows or Data Science, the learner only requires a web browser and Internet access to gain access to XtremeLabs cloud-based Digital Online Learning Lab platform and its Lab Bytes offering. This promotes equity, as students with the most basic laptop or desktop can access all the technology training.

Return on Investment

Integrating XtremeLabs digital hands-on Learning Labs platform has been a seamless and low-cost initiative for Mesa Community College. With zero cost LTI connectivity, XtremeLabs platform and Lab Bytes are integrated with the institutions existing LMS, resulting in easy adoption by instructors and students. The pricing model is purely on consumption, with no recurring, upfront or one-time costs. Costs are incurred only for students that are enrolled in the class. Automated and rapid provisioning allows students to join the class at any time and if a student drops the class prior to start, refunds are promptly granted. The simple interface, instruction guides, and training videos allow for minimal time spent by teaching staff to master the XtremeLabs platform.