



Raising the bar for adaptive learning using Learnosity

Industry:

Education

Headquarters:

New York, USA

Level:

K12, Higher Ed

Requirements:

- ◆ Complex question types
- ◆ Intuitive authoring
- ◆ Scalability
- ◆ Advanced analytics

Offering a combination of power, simplicity, and scale, Learnosity's assessment technology helped Knewton to guide more students on the path toward topic mastery.

Since launching in 2008, Knewton's adaptive learning courseware has provided individually customized training to more than 14 million students worldwide.

By analyzing an individual's skills and study patterns, Knewton's technology tailors the difficulty and content of lessons and coursework in real-time to optimize each student's learning experience.

"We are constantly assessing a student's strengths and weaknesses in order to help them master the material," says Jason Jordan, Chief Product Officer at Knewton.

The company's [proven results](#) saw it placed on Fast Company's list of most innovative companies in education – something it achieved through an unwavering commitment to the highest possible standards.

The challenge: Creating a more adaptive learning experience

Maintaining these high standards right across the board brings its own challenges, however.

"The instructional content we offer is of a very high quality," says Jordan. "But we had a hard time finding a vendor that could offer us the breadth and quality of assessment items we needed to augment our adaptive learning courses."

This was a problem for Knewton since a poor selection of [question types](#) makes it harder to

measure a learner's depth of understanding – an essential part in delivering a truly adaptive learning experience.

"It's really important for us to be able to ask different kinds of questions so we get clearer insights into a student's capability and preferred learning methods. The goal is to make sure that students are truly understanding the material so when they encounter the material at a later stage, they'll have a much stronger base of knowledge to build on."

The solution: A variety of question types for greater learner insights

Having scoured the market for the right assessment platform, Jordan realized that the huge variety of 60-plus question types made Learnosity the perfect fit for Knewton's adaptive learning algorithms.

"The Knewton platform is based on item response theory. Learnosity gives us the freedom to create



Learnosity allows us to package high-quality assessment with the instructional content we provide to customers. It gives us the capability to ask both skill-and-drill and high-order thinking questions at massive scale.

Jason Jordan
Chief Product Officer, Knewton

a wide range of questions to learn as much about a student when they enter a correct answer as we do when they enter an incorrect one. All the data from the student's response flows into the adaptive learning pathway and helps us keep the student on a path towards mastery."

Additionally, Learnosity's intuitive authoring interface enabled authors with minimal prior experience to quickly get up to speed while also making it easier for experienced authors to create content more efficiently.

"We move very quickly with our course creation," Jordan explains. "We've got a small in-house team of subject matter experts but we also hire vendors such as college professors to help out. That made it super important for us to have authoring capabilities that were not only easy to use for our in-house team but also intuitive enough to let vendors hit the ground running."

The results: A better learning experience at greater scale

Enabled by Learnosity's ease of use, Knewton managed to triple the number of courses it published year on year. And with a broader reservoir of student response data to mine, Knewton's algorithm could deliver actionable, student-specific content recommendations to millions of learners.

"In order to meet the needs of our many customers, we needed a solution that was built for scale," says Jordan.

Because Learnosity's infrastructure is battle-tested at massive scale, Knewton can reliably deliver an average of around two million Learnosity items per month to its rapidly growing user base.

"We looked at alternatives, including building our own solution. But once we saw how easy Learnosity was

for authors to use, the breadth of question types it supported, and the huge scale it was capable of, it was an easy choice."



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3x the number of courses published year on year



2 million Learnosity items delivered per month

Learn more about what Learnosity can do to improve your learning product.

[Contact the team](#)