

# Q&A

## How edtech is transforming learning

Rapid acceleration of digital transformation in the last year has put edtech at the very heart of university learning, says **Itay Koppel**, chief executive at education technology firm Proprep, whose technology has helped more than 500,000 STEM students to maximise their academic potential



### Q How has learning been transformed by digital innovation?

**A** For 2,500 years, since the days of Socrates, Plato and Aristotle, education was really only done in one unchanging format: a teacher standing in front of a class and addressing them. Technology helped improve content, but it didn't change the way it is actually consumed. Recent digital innovation, however, is now changing the way people learn. Learning no longer starts and ends with a teacher and textbooks. Students can be given the tools to absorb information in multiple forms, which is where Proprep's learning resources come in.

As students enter the workforce, they'll probably change their career multiple times and this is really only possible if they have the capacity for self-learning. Those who are ready and able to review additional resources outside the classroom, and practise in their own time, will have the tools to adapt to new job positions with ease later in life. As we move into this generation of self-serve and more customised learning, digital innovation is helping to make this as efficient as possible.

### Q What impact has the coronavirus pandemic had on education?

**A** It has accelerated processes that were already happening, but which we thought would be very slow. For example, the move to self-learning and utilising new technologies was already underway, but sped up rapidly when traditional learning environments like lecture theatres vanished basically overnight. Adapting to these challenges has definitely been tough for universities, but the shift to blended learning is positive because it has been proven to be much more efficient than learning fully in-person or fully online. A recent study found that the average grades of students who

watched videos in addition to their existing classes rose from a B to an A, and suggested that this is because they were able to pause and rewind the videos to "manage their own cognitive load". With more blended learning and customisation of learning resources, we can better empower students to succeed in their studies, especially in STEM (science, technology, engineering and maths) subjects.

### Q How did you respond to the pandemic to support students and universities alike?

**A** We recognised early in 2020 that students were facing serious challenges as a result of university closures. Our response was to open up access to all our bite-sized video tutorials and study guides, which are created by expert professors, free of charge for the whole academic year. We also introduced a scholarship fund of £50,000 so STEM students could focus on their studies without having to worry about finances.

Unfortunately, university satisfaction rates were often low even before the pandemic forced campuses to close. We are determined to change that, working with universities to improve their services using our technology. Our video tutorials and study guides can be customised to the requirements of any university syllabus within minutes. By enabling these institutions to offer additional, reliable resources, Proprep saves them valuable tutoring time and office hours. We also work with lecturers to improve the experience of their students, particularly their engagement with course materials.

### Q What are the key challenges students have faced in adapting to blended learning?

**A** Leaving the specific issues of the pandemic aside, I think change is always scary and students

probably feel a lot of uncertainty when trying something new. In particular, blended learning changes the traditional relationship between students and their university and might leave both sides confused about their role in this new environment.

What students have learnt the hard way over the past year, unfortunately, is that using online video communications services or pre-recorded lectures to teach isn't really blended learning at all. Although educators may be embracing new forms of technology, they are still standing in front of their class talking, albeit on the internet. This is far less efficient for a student than self-learning or learning one on one alongside a tutor, both of which work much better and can be employed with the help of technology.

### Q Which specific technologies does Proprep utilise to create its learning resources?

**A** While we make use of algorithms and artificial intelligence, it's our team of seasoned university professors who create our video tutorials. We then use our award-winning technology, which can create up to 95 hours of customised learning content and 1,200 practice questions within minutes.



**Our mission is to support STEM students because these subjects are the future of the workforce, and STEM skills are a crucial launchpad for social mobility**

# 37%



of students reported being "dissatisfied" or "very dissatisfied" with their academic experience

Office for National Statistics

# 90%



of students believe that technology used as part of their learning is basic and 3% say no technology is used at all

Student Academic Experience Survey (Higher Education Policy Institute)

This process is completely unique, and the closest you can get to having a tutor, without the high prices. Our technology enables us to scale fast and create personalised STEM courses for any English-speaking university student.

### Q Why do Proprep's learning resources and thousands of practice exercises focus on STEM subjects?

**A** Our mission is to support STEM students because these subjects are the future of the workforce, and STEM skills are a crucial launchpad for social mobility. The

low uptake of these subjects at university level is leading to a national and global skills shortage, which is impacting our economy and progress in science, research, medicine, engineering and other areas. By giving students learning tools that can help them to maximise their potential in STEM, we want to break down the barriers that might have put them off studying these subjects. Making them accessible to everyone paves the road to future success.

### Q What are the ultimate benefits to students who use the Proprep platform?

**A** Sadly, STEM degrees have some of the highest dropout rates. By breaking down complex subject matter into bite-sized learning resources, students who are struggling can use Proprep to get that extra knowledge boost and help them push their academic performance over the line. This works on two levels, as it caters for students who find following lectures challenging or are stuck on a particular subject, as well as for those who want to get ahead in their studies. Our mission is to improve students' success by supporting them to realise and maximise their academic potential. We want to ensure every STEM student around the world has access to trusted online learning tools, which can help them to excel and thereby ultimately close the gap in STEM education.

For more information please visit [www.proprep.uk](http://www.proprep.uk)

