CUTTING EDGE TECHNOLOGY IN THE TRADITIONAL EDUCATION MARKET

From cloud-based innovations to artificial intelligence – education departments and curricula have been slow to adapt.

Though many industries have rapidly embraced emerging technology – from cloud-based innovations to artificial intelligence – education departments and curricula have been slow to adapt. Recently, however, many schools have made great strides toward integrating technological advancements into educational processes. Experts predict that the industry is undergoing a revolutionary transformation. Here are some of the most promising trends in education today.

PERSONALIZED CLASSROOM EXPERIENCES

In a traditional school environment, all students are expected to learn at the same time and in the same way. Many students find themselves ahead or behind due to different strengths and learning styles. This causes learning outcomes to suffer, particularly for students that need extra time to master the material. Technology now enables educators to modify learning programs to fit the individual needs of each student, adjusting the curriculum to the modality preference of the learner (whether visual, auditory, tactile or kinesthetic – typically some combination thereof). It can also adjust the

number of repetitions needed depending on the results demonstrated by the student.

Flipped classrooms (an instructional strategy that reverses traditional learning by delivering content using online education outside of a classroom), competency-based education, and online and hybrid classes are changing the way educators think about learning. Flexibility and new delivery modalities create opportunities for learning that adapt to the needs of each student. Combining digital courseware, integrated planning, and advising with learner analytics can create an educational structure that supports and enhances the experience for everyone involved. For example, an e-textbook shares data with a learning management system about the number of pages read, how much time is spent on page notes, or how many times a video is viewed. The data collected is then analyzed and evaluated for patterns associated with engagement, achievement and, of course, educational success.

AUGMENTED AND VIRTUAL REALITY

Augmented reality (AR) and virtual reality (VR) are game-changing technologies that offer infinite possibilities in terms of education. These spatial-based technologies give students the opportunity to learn in customized settings, experience first-hand geographical locations or historical events and enable students to interact with each other and their teachers in new ways. Although this technology is still in its development stage, AR and VR have the potential to dramatically improve and personalize the educational experience.

GAMIFICATION

For many years, educators resisted incorporating games and play in the educational process. However, gamification has proven to offer new possibilities when it comes to education. Games provide immediate feedback, motivation and a compelling reason to engage. Gone are the days of memorizing long passages or formulas. Today's educational

environment is more focused on problem-solving in scenarios that imitate real life.

ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI), including chatbot technology, is still in its infancy. Nevertheless, AI is beginning to find a place in education. For example, chatbots are being used to:

- Answer homework questions

- Provide information about college regulations, locations, menus, etc.

- Help with paperwork requirements

- Assist with college student employment

AI tools for tutoring, called virtual learning assistants, are in development and have already shown success providing one-on-one tutoring. Natural language processing (NLP) has opened the door for open-response type questions and instant feedback and scoring.

INTERNET OF THINGS

The Internet of Things (IoT) is changing things in significant ways. In the education industry, the IoT is being used to create smart campuses. Understanding that facilities can dramatically affect student and faculty recruitment, forward-thinking schools ware using sensors to connect the campus. Here are some examples of how this technology is being used:

- Collecting temperature and humidity data to maintain the temperature of campus buildings to save money on utility bills

- Identifying water running from a faucet no longer in use to help cut water usage

- Collecting noise data in the stadium and put the results on a big screen

- Providing parking space information via a smartphone app

- Providing wait time estimations for concession lines and restrooms

- Deploying improved crime prevention strategies that use networked dome cameras, integrated building access control kiosks, digital signage, intelligent lighting, intrusion detection sensors, door locking hardware, wireless access points, fire detection, and sound and paging devices.

Innovations in technology, and changing student behavior, present schools with new opportunities to improve learning outcomes, enhance safety, and support the increasing demands on the school's network. Today's students use laptops, tablets, drones, and 3D printers to complete assignments.

The potential for new technology in the classroom is limitless. The pace of change in education is increasing; technology is now redefining the roles of students, teachers and administrators. •

For more information on your evolving educational insurance needs, **contact Marsh & McLennan Agency**. *With over 5,000 colleagues in more than 75 office locations, MMA will help you determine the right coverage for your needs.*