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# Preparing for 2025

We asked people to look ahead 10 years  
They predict revolutionary changes



Ken Steele, Eduvation Inc.

Many years ago, when I was a young man at the beginning of a teaching career, the Scarborough Board of Education had a challenge with technology: Should ballpoint pens be allowed in the classroom?

The debate – it seems ludicrous now – occupied the board for several weeks, and created vigorous public debate.

At the same time, one teacher I knew was involved in pioneering what surely would revolutionize the classroom: Educational TV.

The issue over pens struck at the heart of education: already reeling from the transition from straight nib pens to fountain pens, traditionalists saw the writing on the blotter: penmanship would be a dying art and standards in all areas would wither and writhe. Besides, the cheap

ballpoints leaked, and who would want that in the hands of a 10-year-old?

TV, on the other hand, was the new kid on the block: TV broadcasting at that point less than 10 years old in Canada. Pundits predicted the TV set might replace the classroom teacher. It was cutting edge.

The ballpoint pen issue was resolved rather handily. One trustee, a banker, pointed out that ballpoint pens had been accepted by banks for two years, so should be good enough for schools. We are Canadians, and don't argue with bankers.

I recalled both of these issues when I set out to research the feature in the current issue: What will colleges be like in 10 years – in 2025?

The question is, of course, unanswerable to any degree of accuracy unless

your crystal ball is working free of a power source. We first asked this question in 2006 in the magazine *Lumière* (the forerunner of *College Administrator*).

First, does the march to 2025 threaten colleges? Just the opposite, says Ken Steele, chief futurist at Eduvation Inc.: “There are plenty of indications that the colleges will be in the ascendancy over this next decade,” he told *College Administrator* in an interview via Skype in December.

We're seeing that now, as society catches up on to what colleges do best: prepare people for the workplace. College advantage over universities will continue to flower, Steele says. “Employers are hiring for skills anyway; they don't really look at your transcript to say did you get an A or B in Chaucer; they don't really care about that minutiae.”

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But job skills notwithstanding, the Internet has changed the way we all learn and is changing delivery. Video demonstrations help us all in all domains, from fixing a leaky toilet tank to special stitching for quilts, from explanations of long division to quantum gravity.

The Khan Academy, which began as family tutorials, is still less than a decade old. It provides more than 3,000 mini lessons on topics from arithmetic to calculus for grade school and high school level. Now the Khan Academy is looking at what it can offer at the postsecondary level. Although the Academy did not invent the “flipped” classroom, it did popularize the approach: watch the lecture and lesson at home, and work on the application at school where the teacher can offer help.

Add to that the prevalence of MOOC (Massive Open Online Courses) – anybody can take courses in anything any time. From home. In pyjamas. For free.

“What (are) the colleges going to look like?” asks Matt Stewart, President of the College Student Alliance which represents 110,000 Ontario college students. “How are colleges going to facilitate their courses? With the development of online learning the need for a robust transfer credit system will grow.”

Credit transfer has been a thorny problem in the past, often amounting to one-off solutions from course to course or program to program. Complicating it even more “is the convergence between college and university offerings,” said Ken Steele. “The movement toward fused college-university education has pretty clear momentum.” He cites examples Guelph-Humber and York Seneca as hybrid institutions that show strong growth as university applications fall off.

And in 10 years? Dan Holland, CEO of OntarioLearn has a prediction: “Students will be able to transfer credit easily to

universities and from universities to colleges to really build to the type of education that they need one of the workforce is in 10 years,” he said in an interview with CA. “That would be my vision of seamless, flexible, easy access” across both colleges and universities.

Dr. Marilyn Herie, Chair, Dean, Learning, Teaching and Scholarship Centennial College, agrees. “I would love to see a more integrated and seamless experience from elementary to secondary education, and then through to postsecondary learning, as well as pathways across the college and university systems. Those transition points are still a challenge for students to navigate.”

Easing such transitions are important to students, says Matt Stewart, and fully supported by the Student Alliance. “Not just between colleges but between colleges and university and vice versa. The concept of lifelong learning (is) going to grow in importance as technology changes; it’s going to play an increasingly important part in education.”

So let’s put that down as a vision for colleges 2025: seamless transfer.

The development of such protocols fits well in the growing globalization of colleges.

International students undoubtedly want their achievements to be recognized around the world.

“The feds and the provinces have all emphasized the need to increase international enrolment,” said Steele but he sees limits. “I do think it caps out in the 20 to 25% range. When institutions hit 25% international in any given program or certainly overall the sustainability starts to waver.

“Until we get there there’s opportunity for growth (since there are) college campuses in Ontario nowhere near 20% international.” But that, he added, can be affected by the unpredictability global currency fluctuations.



Dr. Marilyn Herie, Chair, Dean, Learning, Teaching and Scholarship Centennial College

Nevertheless, “There will be continuing interest in North American education in India and China or other developing countries.”

(Even there, assumptions are not easy to make. In an interview with *College Administrator* two years ago, demographic expert David Foote warned: “You just can’t go to India to recruit. You have to target rich people in India.” And the one-child policy in China will soon create a dramatic drop-off, he said. Foote’s recommendations: Recruit from Turkey, Vietnam, Brazil, Mexico.)

Aside from ballpoint pens, we haven’t even talked about technology yet.

Some perspective. In the original story in 2006, smartphones had been around for a decade, but their real impact did not hit colleges until the launch of the iPhone in 2007. Consider that the iPad (and associated tablets) danced onto the scene in 2010 – five years ago. Physically, tablets resemble the slate that Anne Shirley broke over Gilbert Blythe’s head in Avonlea Public School, circa 1890, but otherwise they are worlds apart.

Ken Weaver, Dean, Technology and Visual Arts at Georgian College, looks at the students entering college today, bringing more with them than a pen and pencil – smartphone, laptop, tablet with perhaps a desktop at home. “The system has to catch up a little bit and recognize that that is going to be the expectation. I’m hearing of some great uses of technology in grades two and three, even



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Kindergarten. (These) students are going to land on our doorstep in 10 years; imagine the expectations they are going to have on how we interact with them.”

Predicting new technology is all but impossible. We have no idea what Black Swan device is now under development, and those developing it are keeping it to themselves. But technology will dominate, and “will be smaller and everywhere,” says Dr. Pehrsson of CMU. “Students can plug in and take classes from any place, home, any room on campus and also face to face.”

Karen Creditor, CEO of Ontario College Application Service, predicts we are just scratching the surface of even the technology now available. “One thing we will see impacting education is the interconnectivity – where I can decide that I’m leaving my classroom and I’m going to go to the library,” she said in an interview. “And I’m wearing a bracelet, or turn on my iPhone to access the research I need when I get to the building across campus. That type of interconnectivity in disparate ways is really important. The technology is already there – it hasn’t become commonplace yet. And we are going to see that more and more – connectivity across all platforms.”

There’s more. “Virtual reality in 3D space” can be applied to hands-on training in the trades and other areas, she says.

The need, she adds, may be in creating education that is seen as cool to a new generation: Simulations; learning through games; combining 3D virtual with Google Glass in a hybrid world for enhance learning.

The learning opportunities could be enormous. “We don’t hear teenage boys saying they don’t get Halo (a video game site) and they quit playing,” Steele says. “They get killed, they respawn, and they keep trying to level up.” Apply that model to learning, he suggests, and “it has the potential to open up math and

science again to boys who are increasingly dropping it in high school.”

All of this while doing more of what colleges excel at: “personal connectedness with students, and supporting students’ success,” said Dr. Marilyn Herie. “Technology offers us tools and solutions – it’s not an end in itself.”

Everyone interviewed for this feature agreed: the classroom of 2025 will driven by technology, involving some version of online and hybrid classes and by student demand geared to the individual learner.

Still, technology is only a tool. “Good teachers embrace technology and use it within their approaches but it does not dictate their pedagogy; it enhances it,” says Dr. Dale-Elizabeth Pehrsson, Dean of Central Michigan University College of Education and Human Services.

What may be more difficult than mastering technology may be in adapting and shaping the expectations of students. That third grade student who walks through college doors in 10 years will be “much more individualistic,” says Karen Creditor. “They (will) expect from a very young age to be treated as unique individuals.”

Dr. Herie sees this challenge as a strength. “Colleges are uniquely positioned to foster and build applied skills for meaningful work (and meaningful lives), and include critical reflection, academic scholarship, and transformative learning,” she says. “The college system is nimble, innovative and entrepreneurial, and this puts us at a big advantage in leveraging new and ‘disruptive’ teaching/learning technologies with our students.”

Matt Stewart of the College Student Alliance stresses that anything that “affects student livelihood, you would have to work and talk with students. That is the strongest point we can stress. Students are the ones going through the system. Who better to provide such information than those who are going through this system firsthand?”



Karen Creditor, CEO of Ontario College Application Service

Dr. Herie has a warning: “It’s easy to get distracted by the bells and whistles of the many and varied ‘edtech’ applications,” she said. “Given that the history of online and technology enhanced learning/pedagogy is so much briefer than that of classroom-based learning (i.e., approximately the last three decades versus approx. the last thousand years), there is a need for evidence-informed pedagogy (or ‘paragogy’) faculty development.

“We want students to experience the same outstanding learning online that they get in their classrooms. As institutions and as a system, we also need to work toward pushing for Learning Management Systems that are as intuitive as the best viral social media applications out there. There are still barriers to both faculty and students in engaging/developing dynamic online learning environments.”

Emerging studies on how people learn will also change the face of education. Colleges long ago discovered – or were built on the idea – that people learn best by doing rather than listening: demonstrations, exercises, practical labs. Although not extinct in colleges, the lecture as such is likely to much play a much-reduced role.

Ken Steele: “Studies are all telling us that lectures are probably the least effective way to convey information. But a

majority of faculty still use the lecture.” Although this is more common in some disciplines, and may be more of an issue at universities than colleges, there is pressure for change.

Dr. Pehrsson sees a new campus: “The lecture format will have all but disappeared. Faculty members will hold office hours virtually. Instructors may live on another continent as might students.”

What replaces the lecture?

Online demos, interactive simulations, and “the ability to record a lecture that we can turn into a textbook,” says Steele. Add interactivity; put the textbook online with the ability to test and record student progress and present material adjusted to the student’s current grasp of material; and use class time for active engagement rather than passive listening. The learning dynamic is energized.

“Textbooks are getting more and more sophisticated,” he adds. “Textbook publishers are operating in a global \$9 billion industry. They are investing a huge amount in R&D to create personalized adaptive learning platforms.”

Steele says that within 10 years the students we’ll be getting on campus will have been raised with mobile computer devices on wi-fi “from the crib onward.”

“Television will be an interesting antique to those students and they will expect mobile in everything,” he says. “Those are the students who are going to be coming to campus. They will be a lot further along the curve than we are now.”

However, he says, “they are still going to be coming to campus.”

That campus, however, will be constructed differently, and according to Dan Holland can provide a classroom, hybrid and online mixture for learning enhancement. He points to the spectacular growth of on-line courses through OntarioLearn “in 10 years from 23,000 students to just under 73,000 – very close to triple” and still growing although the acceleration in the growth pattern is beginning to moderate.

OntarioLearn started out as an expansion of Continuing Education and what 20 years ago he saw as the need to coordinate the fledgling area of online offerings. Dan won the OCASA Doug Light Award for Administrative Excellence for his role in bringing colleges together

in online learning rather than have each college strain resources to provide a limited approach.

OntarioLearn is only part of the online learning. Holland points out that many colleges provide in-house course offerings that could be expanded and made available more widely. Through Ontario Online Consortium, the Ministry is encouraging college and university collaboration in the online universe,

basically using a model pioneered by OntarioLearn. This has the potential of being the meeting ground for online, hybrid, college, university and credit transfer issues.

Convergence, it is called. It keeps coming up.

“High school students may have taken some college courses,” said Dr. Pehrsson, a movement that already developed some history in Ontario.

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Kevin Weaver sees blurring at the other end as well. “What has been traditionally postsecondary education and what has been called continuing education and contract training. (In this) new environment I see these coming closer together, working more to collaborate. I don’t think that to the student this matters.”

Like most visions, practical events can hobble even the best of intentions. Funding always crops up as an issue that controls technology, applications, and staffing, and this can be unpredictable.

Politics and politicians make predictions difficult, Ken Steele claims. “Actually, politicians are very rational creatures. But to them it’s all about votes, so politicians go where the votes are. That’s not always the most rational thing for higher education.”

Steele sees governments starting to embrace performance-based funding. Once “funding is based not on enrolment but student progress and success, then the cheese has moved,” he says.

“The institutions will have to reward effective teaching rather than just enrollment and that’s going to mean we’re going to have to take this seriously. If the data tell us (that) teaching in a way that is cheap and convenient isn’t actually effective, (we) are going to have to look at more effective ways to teach.”

Sum it all up, and the predictions are for a deep and revolutionary change for colleges. “Postsecondary institutions have an opportunity to reshape and rethink some of the historical ways they have been conducting business,” Dr. Pehrsson of CMU said. “If they can speed up their

responsiveness to this new world of technology, the sky’s the limit.”

But, she warns: “Postsecondary institutions that do not adapt will die.”

And who is in charge of that change? In short, you are. Administrators must be the coaches who prepare staff for this future. The key, says Dr. Pehrsson, is trust. “Trust takes time to foster. Trust develops by being transparent, using good and steady communication and then even more communication. Individuals have to understand the core issues and they have to buy into why changes matter.”

Dr. Marilyn Herie: “I see the role of administration as fundamentally about influencing change. We do this every day among individual faculty and staff, as well as among our peers across the institution and system.

“The challenge for administration (and it’s a good one!) is to model the change that we are asking for from our faculty and staff. Our creativity, willingness to model positive risk-taking, and commitment to quality and the student experience help move us forward.”

In June, Dr. Herie will lead a workshop at the *Leaders & Innovators Conference* that focuses on motivating faculty and staff to embrace change. (See details in this issue.)

Karen Creditor will also offer a workshop at the conference on helping administrators to become champions of change – “consciousness raising so we can start leveraging our skills in what will drive the next ten years of education.” She sees the glass half full “and it doesn’t have to be frightening.”

And the technology?

Tools, merely tools to help do what colleges have become increasingly good at: encouraging learning, giving students of all ages a leg up on the future.

Remember that cutting edge of the ‘60s, educational television? It’s still with us, although packaged and delivered in ways we couldn’t imagine in 1961.

And the ballpoint pen that gave the Scarborough Board of Education such a challenge? It’s still with us, and still involved in almost every classroom today. I’ll bet a cup of coffee that you have one on your desk right now.

See me at the Leaders and Innovators Conference to collect. [c|A](#)

