



Tracking pandemics the new-school way

The school plans to use software as a service to automatically phone 1,000 students asking them questions to figure out whether they are sick. A student talks about the drawbacks of the current systems

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The Ottawa-based Algonquin College decided recently to step up their emergency preparedness, and turned to the Ottawa-based interactive voice response system vendor Vocantas for a solution that will better track pandemics in its student population.

It's not that Algonquin is a cesspool of disease or anything. Brian Burns, the school's director of institutional research and development. "We're seeing more and more outbreaks across the country, like the Norwalk-type virus at Mt. Allison," he said. "There was lessons learned there, and we knew we needed a better way of tracking outbreak and disease progression, otherwise it's difficult to know if it's getting worse or better."

Third-year Mt. Allison University student Kim Cox was one of the people hit by the Norwalk-like bug, and she found that the school's pandemic awareness and action plan wasn't up to snuff. Said Cox: "I feel as though they could have improved communication by getting information from people at the onset of the outbreak and then informing students of what was going on, and the appropriate measures to take in terms of leaving campus or staying. I know a lot of students were confused as to whether to stay or leave, and some of the students that did leave ended up bringing Norwalk with them and infecting other parts of Atlantic Canada."

Marc Ladin, vice-president of global marketing with the emergency notification service 3n (National Notification Network), said, "There's definitely an emerging trend, as there's been a series of major shocks such as the Finland and Virginia Tech shootings, and Hurricane Ike."

He has seen a growing number of post-secondary schools in Canada adopt these types of emergency software precautions to keep students safer; 3n clients include McMaster University, the University of Alberta and Simon Fraser University. "Canada is more pandemic-aware," said Ladin, "due to the SARS issue."

Info-Tech Research analyst Ross Armstrong said that he has recently spoke with 50 education CIOs about these issues, and says that the interest more often tips toward the emergency notification side.

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There also could be a delay in pick-up from more institutions, however, said IDC Canada director of public sector research Alison Brooks. She said, "I haven't seen a huge trend toward these sorts of predictive tools, as it's often a reactive space, and education is usually pretty cash-strapped, making it a nice-to-have. Algonquin College is being pretty proactive."

Algonquin College thought that Vocantas would be a good fit. If there was an influx of sick people at the clinic (or a similar pandemic warning sign), the college administrators would use the advanced interactive voice response system to automatically dial out to the 1,000 or so students living on campus and ask students a short set of questions to determine if they were infected.

Taking such a tech-enabled approach was also healthier, according to Vocantas' CEO, Gary Hannah. He said, "You don't really want to have someone knocking on the dorm-room doors of people with infectious diseases



and asking them questions. I mean, who wants that job?" (Vocantas also counts hospitals among its clients, using its software to conduct follow-up calls on discharged patients.)

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The amount of paper generated by these campaigns was also potentially unwieldy.

The influenza virus was the one chosen as the first response module. Algonquin College consulted the World Health Organization guidelines and spoke with an on-campus doctor to determine the best questions to suss out whether a respondee was sick or not.

Once the student responded, the information was noted in the program and collated in Vocantas' databases. The information would take around four hours to gather, and then would be accessible to Algonquin via either an online access point, or sent as an XML or Excel file.

The vendor's software-as-a-service delivery was a good fit with the school. Said Burns: "It meant we didn't have to invest in any infrastructure up-front, or gain any expertise there." The IT department also doesn't have to invest a great deal of time in collating the information, as the reports place the data in an easy-to-view format that makes it easy to determine any pandemic levels. Said Cox: "I do think that (an advanced interactive voice response system) would have made a large difference in terms of both efficiency and putting students worries at ease because a lot of students were unsure of what the outbreak was and therefore confused as to whether to go to the hospital or treat themselves and if it was contagious or not."

And IT managers will be called upon more and more to be a part of the planning going on around better emergency preparedness in the university space—and beyond. Said Ladin: "There's a lot more plans and policies going into place now."

IT managers should take an active role in emergency preparedness, said Hannah. "Systems like this are just one portion of a good plan and a more holistic approach to safety," he said.

Armstrong suggests that IT departments take a proactive approach in helping with scenario planning. "You should work with HR and a crisis committee members to have plans drafted up, especially in a pandemic, as IT staff might not be able to come in. That could mean remote work capability, and extending those VPNs out there. There's no software that can handle a pandemic from beginning to end, so consider this just one part."

For its part, Algonquin College has been pandemic-free since it ran the test last December, said Burns: "It's kind of like having an insurance policy: you might not need it, but if you do, it's there."

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