Chapter 4

INNOVATORS IN HIGHER EDUCATION: CSAL, CUE-NET, AND THE LAPTOP INITIATIVE
Key themes emerged in the first two chapters: change and transformation. As we saw, one aspect of this transformation was visual, and focused on buildings – by walking around the campus in 1993 and then again in 2018, it was evident that numerous construction and remodeling projects have dramatically changed the landscape on campus. Another part of the transformations was internal, centered on processes, governance and becoming a university.

But this process of transformation is evident when we examine programs and technology, too. And here we’ll see another key theme present: innovation, especially as evidenced in academic programs and a willingness to embrace new technologies.

In 2018, Concordia creates and delivers a broad range of online courses and programs to students around the globe. Some programs, like the MBA, are fully online. In the early 1990s, though, this world of online learning was only a dream. But the expansive online presence CSP enjoys today is rooted in important foundations that were set around that time.

FROM CSAL TO CUE-NET

To better understand where the university is today, we need to step back to the mid-1980s, and the Concordia School of Adult Learning (CSAL). When it began, however, it was the Concordia School of Accelerated Learning—as we will see below, the name change, and focus change, will come later. While the different names can cause some confusion, there’s no confusing that both iterations of CSAL were innovative game changers.

The degree-completion CSAL program, set up in a cohort model and offering an organizational management and communication degree major, was by the early 1990s being offered at off-campus sites as well. CSAL significantly expanded Concordia’s reach, student population and revenue.1

The Concordia School of Adult Learning and its progeny transformed how CSP developed and delivered education. The foundation of the university’s 21st century online programs was this innovative curriculum. So let’s learn something about it.

Carl Schoenbeck, who enjoyed a decades-long career as teacher and administrator, explains how CSAL represented a new direction—and that meant some challenging questions.

There’s credit for life experience. Very controversial thing. ... It is not connected to church work. We’re off-campus. We purchased the curriculum. This is the first time we would take a curriculum that somebody else had, and we would start it. We delivered it. Just a whole lot of things that we were way ahead on. And successful.

[CSAL] gave Concordia a little experience of getting into cutting edge stuff and working through problems [like], how do you create something that’s separate, and integrate it? It took a long time.

But there was a lot of caution. I still remember President Harre saying, there’s a limited time CSAL will be with us. We knew the demographics of that, the high school populations and all that, traditional age students are down. Here’s a market, and we’re going to reach that market.

I remember coming to the plenary faculty, and that’s a difficult thing because there are people that don’t have the research on that and they’re looking at it and saying boy, I can’t see what that’s going to do. So I’m not necessarily in favor of it. 2

WIFI

These days on campus, one can get out a phone or laptop, and quickly connect to the wireless network. But when computers and the internet first arrived on campus, the way to access the internet was with a cable that connected the device to an outlet in the wall, or perhaps a portable hub. The ETI, with hundreds of devices on campus, exposed the limits of this system. But there was a solution at hand: “Wireless was one of those pieces that came at the same time as the Library Technology Center,” says Jonathan Breitbarth. “Our very first wireless access points were rolled out in the Library [when it opened in 2003].” This network quickly expanded across campus. And while users may not notice, says Breitbarth, the system is continually upgraded, as computers become more powerful. As of 2018, “we’re on the fifth iteration of wireless.”25 With more likely to follow.
Carol Klempka started working at Concordia in 1998. Initially she worked as dean’s assistant for the College of Graduate Continuing Studies, where CSAL was a department. Bob DeWerff was the dean.

Bob was really at the forefront of new programming and providing education for the growing adult student populations. CSAL was tapping into that new demographic of adult working students who had families and employment responsibilities and could not attend day classes, but needed BA degrees to advance in their careers. A huge contributing factor was that employee educational reimbursement was part of company benefit packages, and this wave of students really used that to their best advantage.

It was a perfect storm of right pricing, convenient hours, and the acceptance of adult learning principles in academia, which meant that students could accelerate their learning based on prior knowledge and experience and could learn better in collaboration with other students (hence the cohort model) and it could all be paid for by the company. This type of programming was a transformative experience for the students and a revenue producer for the college.

Marilyn Reineck, who then taught in the Communications Department, was involved with CSAL from the beginning.

I remember the early days. I was involved in teaching too, where we would send our faculty to Duluth, to Rochester, to other locations to conduct classes so that we could increase access. It really called for kind of a reconceptualization of access to education. There were a lot more weekends; I did some Saturday classes, evening hours and so forth.

We were fairly early I think to move in that direction, and I see it now as having really paid off for us. We had great instructors in the program, people that really developed it. ... But it was really a university effort, with faculty from many disciplines participating in it.

Paul Hillmer graduated from CSP in 1982, then returned to work at the college in 1988. By that time, he recalls, CSAL was already a part of the curriculum.

CSAL and some of those early iterations of what we now think of as this panoply of adult graduate degree completion—and even PSEO and other sorts of programs that occur outside the sort of normal rhythms and auspices of our on-campus life—began in a very conventional way. ... It really wasn’t all that different from a class environment that we might see for undergraduates on campus, but it was of course working adults. It was happening after working hours.

Some CSAL classes were held on campus, but others were held off-site, at a variety of locations. Hillmer remembers how it worked for faculty.

There was a specified room where the boxes for instructors were stored, so they could pick those up and take them off site to wherever their class was being taught. Fred Bartling Senior was still teaching in CSAL at that time, and on occasion he would ask me to go with him to run a projector, which tells you something about the teaching methods of that era. He was still using a 16mm projector in the class!

I think the times that I went with Fred, it was actually in Hudson, Wisconsin, or at least somewhere right across the border. It was still very much the kind of traditional lecture, note taking, brief discussion, reading assignments, and paper submitted sort of environment. This was still well before the digital revolution. There was no internet yet.
Craig Lien joined the Concordia Business faculty in 1991, first as adjunct instructor and later, in 1999, as a full-time member of the university. At the outset, CSAL was the only game in town. But by the mid to late 1990s, Lien explains, the market was shifting. And fast.

The marketplace, two things happened. One is that all the colleges and universities saw that this was a new vista of opportunity for them, on the revenue side. And the other thing that really happened was, the whole supply change just blew up when you had for-profits enter. And that started happening in the late 1990s: Capella, Phoenix. And what they did was, taking more business principles and academic principles, they created this extraordinary abundance of supply, which led to more choice on behalf of the students. So that made it more difficult for smaller universities, less resourced universities like us.

By the late 1990s, Carl Schoenbeck was Dean of the Faculty and Vice President for Academic Affairs. He recalls that CSAL was also part of the financial equation by that time. And there were other challenges.

It was a major source of revenue. CSAL can’t exist without the traditional program, the traditional program can’t exist without CSAL. But we still haven’t ironed out all of the details like, if you teach a class in CSAL you’re going to have fewer contact hours than you are if you’re [on campus], and how do you pay for that? How do you recognize that within the whole academic governance structure?

CSAL would undergo changes in name and content, and remain a viable, if gradually less significant, part of the university into the 21st century. But the increasingly crowded market that Craig Lien described forced ongoing reassessments of the original CSAL program.

A DIFFERENT ERA
Joel Schuessler conducts training on administrative software POLISE (People Oriented Information Systems for Education) with Jan Sachs (Business Office), Kay Rindal (Financial Aid), and Greg Esala (Development Office.) Joel recalls that they were using ‘dumb terminals’ with no CPU that were wired into a central VAX system. Unlike modern software that completes functions with the click of a button, users had to type commands such as RUN DMS:SORT to work with the software.
On the other hand, advances in technology soon created new opportunities at Concordia. Rapid changes in computers, including personal computers, as well as the growth and development of the internet, allowed for new ways of thinking.

CSAL—with innovative thinking and methods—had allowed CSP to reach new audiences. Computers, though, could in theory expand the reach of traditional program and course offerings even further. But now, this could be accomplished right from campus. That meant far fewer trips to Mankato or Rochester to deliver a class, and perhaps none at all. The internet held the promise of greater reach and collaboration, as well as growing student numbers.

This next step had a name: the Concordia University Educational Network, or CUE-Net. The CUE-Net idea was developed in the mid-1990s, envisioned as a method for collaboration. It held much promise.

Jonathan Breitbarth, at CSP since his student days in the 1990s and currently Director of Computer Services, recalls the birth of CUE-Net. As he explains, the beginning of CUE-Net was an LCMS idea.

The Lutheran Church Missouri Synod said, how can we utilize technology and kind of bring different entities of the Lutheran Church together, the different campuses?

This was essentially distance learning; it had a document camera, a couple of video cameras. ... Ours was in Science Building room 104. It was like a television production studio almost. You could toggle between every camera, and change the audio.

So each campus, each Concordia, had one of these rooms and the idea was that if we didn’t offer a specific class, but for example Concordia Portland did, that the professor could be teaching both to the students in front of him at Concordia Portland and then a room full of students at Concordia St. Paul.
Paul Hillmer taught in the CUE-Net classroom, and recalls how the system worked in theory.

This was very rudimentary stuff. It was basically a device that allowed you to put a transparency on a screen, and then the screen would be projected in a classroom remotely somewhere. ... This sense that, okay, there's someone who's probably facilitating this somewhere, but I don't have to be there in the classroom. I'm going to be in the Science Building doing my thing and my head is going to be on the screen and I can put other things up there. ... These were the building blocks of what we think of as online education today. This is how it started.

In the mid-1990s, Joel Schuessler worked in IT Services and was closely involved with installing the CUE-Net system on campus. Accordingly, he says, there were certain difficulties.

CUE-Net was a hardware-focused version (cameras and TV screens) of today's web-conferencing software. ... Some of the challenges were that it was a fairly new technology and there were a lot of moving parts. I remember sitting for hours, honest to goodness, sitting in the Science Building—I think it was Science Building Room 104—and putting different wires, crimping different wires to see if I could get the sucker to work. It was trial and error until I got the right combination of wires plugged in and voila! Good. And I said don't move it, right.

We also tried to install electronic whiteboards into the classroom to capture the instructor's writing and transmit it through the internet to the other side. It didn't work very well. So that was a challenge. Coordinating with other people on other campuses was a little bit of challenge. Different systems. Different campus hardware systems and differing levels of expertise.

Richard Brynteson was a faculty member, and recalls his own experience with how CUE-Net worked in practice.

It was unwieldy technology. I would do it here and at [an off-campus site in] Rochester, and I'd have to spend most of my time making sure the technology was working rather than being a teacher. And it got very frustrating. You'd get kicked out, then you'd have to reboot. So it was a really disruptive classroom. ... We have it down to a science now and we're doing really well with it, but there were stops and starts and frustrations and upset moments. ... It wasn't all roses from day one.

By the middle of the 2000's, concludes Schuessler, the CUE-Net idea just kind of faded away. While a number of classes originated at CSP, and others were received from other Concordia institutions, collaboration never reached the levels imagined in the late 1990s by proponents of the system. Still, working with CUE-Net did give both staff and faculty valuable experience with installing and using computer technology, and re-thinking ways course content might be packaged and delivered.

Challenges with CUE-Net are part of the explanation why it was discontinued but, more importantly, Concordia by the 2000's was well along with another major technological innovation, one that brought the possibilities of internet-based teaching and learning to each and all students and faculty: the laptop initiative.

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E-MAIL

E-mail communication on campus dates to the early 1990s, and first was available to staff and faculty. Jonathan Breitbarth recalls that “when I came here [as a student] in Fall 1995, that was the first year that students were eligible for e-mail. We needed a disk to be able to keep our e-mails, because there was one computer lab outside the library, and because it was a public area the contents of that e-mail needed to be stored there. We utilized a software called Eudora, and we had two different e-mail servers. We had a faculty e-mail server, which was Genesis, and a student e-mail server, which was Proverbs. ... We were worried about data security even back in those days!” Since then, email at the university has undergone numerous changes. Those who have been here long enough may recall Eudora, Microsoft Exchange, or Outlook Web Access, all of which predate Gmail, which arrived in 2007.

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ARRIVAL OF THE LAPTOPS
Students use the first IBM Thinkpads, 1998.

“The laptop initiative ensured that all students would have access to the same exact laptop ... it ensured for faculty that all students had the same level of technology.”

THE LAPTOP INITIATIVE

By the mid-1990s, computers for student use already were on campus. Paul Hillmer recalls that, “we had a computer lab in which we had, of course, IBM computers with DOS and Lotus 123 and 5¼ inch floppy disks. And we got our first Macintosh and oh, my goodness! This was a revolution: that you could type words into a text without needing code, without needing to switch disks back and forth to do various things.” But demand for the devices outpaced supply, Hillmer adds. “You would be limited to two hours of time on the computer, because people didn’t have their own computers.”

It wasn’t simply a matter of administration freeing up resources, either, and purchasing more computers. What kind of computers? Around that time, Carl Schoenbeck says, “In the Teacher Education program, we were all running Apple programs. The Business program was on a mainframe program, and some offices had terminals and some didn’t. In Science they were running on Windows.”

Also, it cost money to acquire and service these multiple types of hardware and software—money, concludes Schoenbeck, the school just didn’t have. “With 1400 students, we were really strapped financially. You look at the money that we were putting in, in order to just keep up with this and getting access to technology. So one faculty member here could have access to technology and the person right next door would not have access. So it’s costing us. It’s not efficient.”

And not just the devices. Jonathan Breitharth adds that another “of the pieces was the computer lab. With the buildings we had and the location we were at, trying to find space for additional computer labs specifically in and around residence halls … was one of those challenges.” Many other schools at that time, Breitharth notes, tried with mixed results to juggle rooms and devices. Concordia chose a different path: “Our answer was, we’ll get the laptops to the students.”

Several people were responsible for the monumental shift from the computers and labs model to laptops for every student and faculty member, but for Schoenbeck,
“...[the laptops were] a way to place students on an equal level in terms of access in and outside the classroom...”

then vice president of academic affairs, “the champion for the laptop is Eric LaMott.”

Soon after starting at Concordia in 1994 as assistant professor of kinesiology, LaMott demonstrated an interest in technology and its possibilities. President Bob Holst encouraged him in his attempts to find new, cost effective ways to move past the computer labs model.

Holst strongly believed that to be a multicultural campus, which was one of his goals, Concordia had to embrace the laptop initiative. “Basic segregation in the United States,” said the president, “is economic segregation, and that has created racial segregation. … Here’s the Hmong and the African-American and the Asian-Americans that come from learning the English language in high school. They may have been valedictorian,” he continued, “but they’re still not culturally adjusted … If we’re really concerned about being a school that serves across economic divides, then we have to go with it.” So he embraced Eric LaMott’s plan.14

And LaMott’s plan, Schoenbeck recalls, soon bore fruit. “He comes in with a proposal and says, here’s what we’re spending right now on technology. If we give everybody a laptop, including the students, and we track what the income is going to be on this, here’s what we’ll be spending—and it’s less.” This attracted people’s attention. “We’re going to spend less money than we’re doing right now? It’s a no-brainer. I mean there was not a debate on that.”

When the program was announced in 1997, though, reactions among students proved mixed. On the one hand, Lucas Woodford, President of Student Senate, said “I fully support [Concordia becoming a laptop campus]. It is imperative for students to use them to be prepared for the work force. You will use laptops in any vocation, from church work to business.”15 Others echoed this positive view.

But an open forum in November 1997 in the Student Union showed student support for the laptop initiative (officially the Educational Technology Initiative, or ETI) was far from unanimous. Before the meeting started at 8:00 p.m., the space was filled with more than 100 students, parents and faculty members. President Holst and Eric LaMott provided information, then answered questions. A lot of them. Many in attendance were nervous about how the ETI would affect them, as every full-time student would be required to have one of the new laptops.

Concerns raised included what to do for commuters, mid-year transfer students, or students studying abroad? And how about student teachers, those on internships, and students taking part in exchange programs? Several wondered aloud how they would pay the new technology fee, announced as $400 per semester; others asked what would happen to the existing labs. Holst and LaMott addressed these concerns, but they admitted that not all individual situations had been fully thought through. Still, LaMott later concluded, “We, the community of Concordia, need to continue on into the future on a new and different road.”16

And so it was. Concordia embarked on this new, digital journey as scheduled, in Fall 1998. The ETI provided every full-time student with an IBM ThinkPad

E-MAIL BACK IN THE DAY

Notice in the Sword, 6 September 1996: “E-mail accounts may be purchased from information services at x 8866. They cost $5 and are good for the duration of your stay at Concordia.” That’s right—when it first arrived on campus, e-mail for students wasn’t free.
Carl Schoenbeck explains how and why the ETI worked. “The idea was lease and standardize. … the money we were putting into purchasing exceeded what would happen if we would lease.” A large tech company showed interest in working with the school. “[We had a] partnership at that time with IBM. They said, this is innovative. We were far enough ahead on that, and small enough, so we were at the advantage. IBM couldn’t have implemented this at the University of Minnesota, but they could do it in a little place like this.” Leasing machines, and not buying, meant they would be the newest standard, too.

The challenge noted above, though, with multiple computer systems being used across campus, had to be addressed once the ETI began. “The big downside to it,” Schoenbeck confesses, “is you have to standardize across [the campus]. So you want your Apple computer. That’s fine if you want to keep it, but we’re going to give you a Windows laptop and the person next to you is going to have a Windows laptop.” Some offices and faculty adjusted easier than others, but there was no going back—laptops were here to stay.

ETI meant a campus filled with computers. Now, how to keep them all running, and also solve technology problems as they arose? The answer was the Help Desk, along with leasing and standardization the third piece of the puzzle. Concordia student workers played an important part in this office. Brock Behling, currently in Instructional Technology, worked there in the mid-2000s. “At that point I think we had almost 1500 machines that we were working with in the back room that we would have to re-image, prepare, get all the software on and make sure that they were running efficiently for the students.”
Hiring the right kind of students was key, he says. “We’d get individuals who had experience with the software working the front desk, and then they’d come back usually to the tech shop and work on some of the details of taking machines apart.” And they had plenty to do. “Yes, definitely a lot of traffic with the machines. They get a lot of wear and tear. People moving from classrooms, throwing them in the backpack, having ten other books in there. A lot of screens got broken. A lot of spills on the machines happened, too.”

There were adjustments for everyone, but the benefits were clear. Three stand out. Importantly, argues Eric LaMott, “it became a differentiator from our competitors, and for many, many years that was a huge differentiator. People chose us because we had that over and against other schools. Let us provide you with all these tools and resources … so that it’s not just in our classes that you’re getting education. Students have access to each other, to resources and everything else.”

Enroll at Concordia, and get a computer; in the late 1990s, that provided a real marketing advantage.

And these laptops brought benefits for students, too, as Cheryl Chatman, Executive Vice President for Diversity, explains. The new devices were “a way to sort of place students on an equal level in terms of access in and outside the classroom, through a single instrument.” This closed a widening gap between students who could afford this new technology, and those who might struggle to do so.

Finally, Paul Hillmer remembers how the ETI impacted teaching and learning. “The laptop initiative ensured that all students would have access to the same exact laptop … it ensured for faculty that all students had the same level of technology.” Planning a technology-based assignment, for example, whether in class or out, suddenly became a whole lot easier. “For one thing,” Hillmer continues, “it got rid of the need for overhead transparencies, another one of those old technologies that professors relied on quite a bit. I think it cut by half or more the amount of time that I spent preparing materials that I needed for the classroom. Instead of having to run to an audio visual center or hand make something or see if some publishing house had a particular set of visual aids that I needed to support a class, I could simply go onto the internet and find what I needed.”

During the years of the ETI, there were multiple generations of laptops, as leases expired generally every three years. And they got better, Brock Behling remembers. “The machines definitely improved. … They basically designed them based on the repairs that were sent in.” Damages due to beverage accidents were one example. “A lot of spills happened as people were working at all different times, and a lot of devices had pretty bad spills. So they put drain channels throughout the machines that would allow the liquids to kind of run past the circuits instead of actually frying the circuits. So fewer repairs.”

CSP.Edu
Want information about Concordia? Easy—log on to csp.edu. But when this quarter century began, in 1993, the university didn’t have a website. That soon changed. “I got the chance to purchase the first internet addresses for the campus,” recalls Joel Schuessler. “Pretty much everybody had internet addresses and they were starting to get email through those addresses. So we needed to stay with the times. There was this scramble to get the right address. I remember having some pointed discussions about what are we going to call ourselves, what’s simple enough?”

Jonathan Breitbarth adds that “There was kind of an informal agreement amongst all the Concordias that no one would take Concordia.edu.” But when the sister school in Texas did just that, the decision was taken to use csp.edu. And so it has remained.
Lonn Maly served during the 2000s and 2010s as Dean of the College of Education and also Vice President for Academic Affairs. He describes how changes in technology gradually made the ETI less relevant.

"We had a lot of students by 2010, 2011, 2012 who were saying, I don’t need the laptop. I have my own device. I don’t need your support to give me a technological equalizer or advantage that I needed before, because I’ve got my own device that’s even more powerful than what you can give me—and I have the freedom to choose whatever device I want.

So many of our students were declining the offer for a laptop by that time. Folks were saying, I don’t want to be stuck in the PC world. I want to have other options. So I’m choosing this, that or something else.

And phones were starting to come into play. We were starting to envision that there were going to be these tablets down the road. So there were just a lot of choices that students had, and it just became a costly extra that we no longer needed to offer. I became convinced—and I think others too—that it was time to transition out of a one size fits all model to one that says, we’ll support you in any way we can, for example by taking the money that we would have put into new laptop computers, and plowing that into a better wireless network for instance, or better databases in the library."

Thousands of Concordia students benefitted from the ETI during its existence. But over time, as Lonn Maly makes clear, the advantages it brought in 1998 slowly became less valuable. Accordingly, in 2014 university leadership took the decision to end the laptop initiative. And yet the many advantages of this innovative program over its sixteen years—for students, faculty and the university as a whole—demonstrate that the ETI truly was a game-changing idea.

We can draw the same conclusion for CSAL and CUE-Net as well. Both programs no longer exist, but in their own way each opened a door to future developments. And taken together, all three of the ideas featured in this chapter show how leadership has used innovative programs to continually transform the university.
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