

## **Log on, Learn, Earn Credits**

*By weaving technology into the fabric of academic culture, Jon H. Larson forwards the idea that a small college can compete with larger institutions in the area of using technology for learning purposes.*

Jon H. Larson is President of Ocean County College in Toms River, New Jersey, an institution actively advancing the cause of information technology in an academic environment.

**UBIQUITY:** Let's start by having you tell us a little about Ocean County College.

**LARSON:** We think it's one of the finest colleges in the country, and we really are very proud of this institution. It's located in a beautiful spot on the Jersey shore in one of the prettiest parts of the world. Many people are surprised to learn that there are parts of New Jersey outside the turnpike and Newark. It's a very unusual community in that it is relatively free from some of the difficult aspects of urban life, and so it's reasonably affluent and has been pro-education and pro-community college.

**UBIQUITY:** Competition in the area?

**LARSON:** There isn't a lot of competition. We have a couple of private colleges that are nearby. Only one public institution any near close to us -- that's Richard Stockton College. The two privates that are nearby are both small, expensive private institutions, so they don't pose much in the way of competition. We have a lot of support from the local government for the college.

**UBIQUITY:** Tell us about the student body.

**LARSON:** We have 8,500 credit students and an additional approximate 6,000 noncredit students who take a variety of short courses. The demographic distribution of our students is fairly typical, but they tend to be a little bit older than the traditional student age of going to college. Ours average in the upper 20s. And they're atypical in the sense that most of our students transfer. We have relatively few terminal degrees, as they used to call them, or occupational/technical kinds of courses. Most of our students intend to transfer when they

come here, and most of them do. We transfer almost 80 percent of our students to four-year colleges, and we have an outstanding record there.

**UBIQUITY:** Does information technology play a strategic role in the academic life of the college?

**LARSON:** Very definitely. Our sense of this is that, while we cannot compete with our neighbor, Princeton, or our other neighbors, Monmouth and Georgian Court, in terms of the quality of the resources that they can bring to bear in the educational world and some of the research in upper division instruction areas, we can certainly compete in this new area of how you do the best job of teaching.

Our goal is to try to utilize technology to the greatest extent possible, with the specific aim of delivering it for learning purposes at the highest level we can, and we don't think that anybody in the world is better off than we are with regard to that opportunity because we're all starting basically from ground zero -- we're all learning at the same time. So the question becomes, how effectively can you introduce that into the academic culture?

**UBIQUITY:** And the answer to that question?

**LARSON:** First, we think we have a culture very receptive to the academic uses of technology, and second, being a relatively small community college, we have a bit more control over how quickly we can accomplish it than they might at an established senior institution, like Princeton.

**UBIQUITY:** What do you suppose makes the college's culture receptive in that way?

**LARSON:** Well, it's certainly the tradition of the institution to want to be the best, and there has been a self-perception here that we are an outstanding teaching institution and that our goal is to be on a par with the nation's best liberal arts undergraduate colleges in terms of the delivery of the quality of learning in the classroom. And that's an unusual prevailing ethic, because most community colleges assume that since they're dealing with many students who are not collegiate-ready when they get here, they must begin by compromising their standard. Here, no such compromise was ever envisioned, and the idea has always been that we will bring our students up to collegiate standards before they

proceed. So things like mandatory testing and placement have been around here for a long time.

Beyond that, I think the issue of why they are receptive is because I've made it a major aspect of my leadership. I've been here four years. I've been able, as a relatively new and well-supported president, to make a few changes. We've emphasized this as one of those areas that we wanted to change.

**UBIQUITY:** Let's go back and talk about your student body. How long does the typical student stay at Ocean County College?

**LARSON:** The typical student probably stays longer than two years, but there are a great many of them who do finish within the standard two-year full timeframe. We have quite a few students, more than the average community college, I would say, who come here, stay the full two years, graduate and transfer and do so within the normal timeframe of two years. Even in four-year colleges today, the likely time of graduation is more like five years than four, and for us, on balance, it is more than two years to complete the two-year program here. But we still have a fairly large number who do it within the normal cycle. We have some who leave early, but we don't have an enormously high dropout rate. Most of the students who get here and get enrolled in a credit degree program indeed succeed and transfer.

**UBIQUITY:** Have you any technical degrees?

**LARSON:** Yes, we've got a few, and we're introducing a couple of new ones. We think there is a possibility that we can offer a biotechnology program that would help to send people into the pharmaceutical industry here in New Jersey, which is enormous, and we're taking a quick look at aviation. We're working up a third-party arrangement with a local fixed-based operator at the local airport to provide pilot training. And so, yes, we do offer some technical degrees, but we are geared primarily toward one type or another of transfer into the programs that students tend to go to four-year colleges to pursue -- engineering, liberal arts, teacher education, business, the like.

**UBIQUITY:** What kind of understanding of computers and networking do students have as they come in and then as they leave?

**LARSON:** Like everyplace else, we're discovering that more and more of our students come with a staggering amount of understanding and knowledge, and most of them come with computers. We still have a few who are technologically disadvantaged. The digital divide hasn't served everybody equally well here, and some come without much preparation; these tend to be the older students rather than the newer students. Those who come to us directly out of high school have a very large degree of familiarity -- many with a scary amount of ability -- and one of our major concerns here is not so much whether we can accommodate that interest, but whether we stay enough ahead of it to continue to be relevant, to continue to be seen as a technology leader.

We have made major investments in that technology, and everything we do -- from the bookstore to the recruitment of students -- is designed to be fed through that process. For example, we like to look at the potential of providing tutoring online rather than to hire a bevy of individuals to sit here in a lab and wait for someone to come in and ask for tutoring help. That's the approach that we're striving to follow in everything we do around here, and students love it.

**UBIQUITY:** What might another example be?

**LARSON:** Another example would be academic advising. One of the great problems that community colleges face is that we roll the student population over 100 percent virtually every two years, and every year we bring in half of our student population as new admissions. So there's a tremendous amount of new orientation as a part of our process of bringing students into the college, and we provide them with an intensive program that includes their first registration being done here in a lab with laptops, where they enter their schedules. Then, in subsequent semesters, we encourage them to go through a preliminary check by having our degree completion audit tapped online to see what courses they need to have, allowing them to register for a course or a program they think is going to be satisfactory and then submit that online to their advisor, who can take a glance at it and say, "Hey, we should talk," or "It looks fine to me. Go ahead, and let's talk when you're in here."

All of that is designed to try to smooth the pathway of the student coming in and also to free the faculty member to do some personal advising of a kind that the student really

benefits from -- rather than having all the advisement time consumed completely by course selection.

**UBIQUITY:** Do you do any online instruction?

**LARSON:** We do a good bit of online instruction. We're running a large number of students through regular online courses, and we have a new effort at providing redesigned courses that we've been working on with the help of consultants from Collegis -- or what is now SungardCollegis. The two choices have come down to math and history, to be followed with a course in psychology as soon as possible thereafter, and possibly in English composition. The course in math is a developmental algebra course. We're finding that math phobia, math readiness for collegiate work, is one of the principal shortcomings of students who come out of the high school systems today.

For whatever reason, every single college is finding that to be true, and it's a major impediment to getting students into any kind of a program that has rigorous math and science requirements. So we want to try to get people through the developmental math activity as soon as possible and get them up to speed. We think we can advance the state of what we're doing there by doing a quick online pretest to see whether they can benefit from a waiver and go right in and get to the work directly or whether they need to go through some developmental math instruction first.

And if they do, perhaps we can deliver that best by utilizing the advantages of an Internet-based online instruction program that is more responsive to their individual needs and can detail it to the learning style and the speed with which they want to learn better than they would by doing it in a traditional classroom setting. So we're engaged right now in designing how all of those things will work to produce two outcomes -- learn better and learn at a lower institutional cost. We'll soon have the whole array of assessments in place to determine whether, all other things being equal, students learn more quickly with online instruction, retain the material longer, and have a higher degree of engagement when they take these courses in this new form. The second desired outcome is that we actually save money in the process. I think either one of those outcomes alone would be a win, but together we'll have a real homerun.

**UBIQUITY:** How far are you prepared to say that you are going to win?

**LARSON:** Well, the precursor national study that was funded by the Pew Charitable Trust produced about 30 different efforts and a variety of courses -- some math, some social sciences, some humanities courses, writing courses and the like -- where they attempted to tackle this issue. The Pew researchers found varying degrees of success, but in many, many cases the improvements were significant. What we're trying to do is to show that you can put that same kind of effort in at the community college level in these courses, and to do so, with one additional wrinkle and that is to add high-quality digital learning objects as the principal delivery mechanism to get it done. Those models that were used in the Pew study ranged from a large emporium-style open lab (in which you can mosey in and visit with anybody) to the more individualized styles that we're looking at here.

Our focus is on a hybrid form, where the students will have some face-to-face meetings in a classroom setting on campus, but where most of the content delivery and most of the drill-and-exercise activity will occur via the Internet, using the superior teaching tools and content delivered online. Our hope is that online instruction will allow the student to proceed at a pace that he or she finds more comfortable, a greater opportunity to become engaged and focus on the material, and then an opportunity to sit down with other students in the class and with the faculty member, and synthesize and put into perspective what's been learned and still have all of it be relatively entertaining and engaging, because it's like going to a great movie.

**UBIQUITY:** What's the timeframe on all this?

**LARSON:** We've got actually three efforts, one of which is our nursing program, for which we received a major grant from the Robert Wood Johnson Foundation and the Johnson & Johnson Company foundation, to produce an online nursing program that essentially will run one day per week. The students come in for a class meeting one day per week, and everything else is delivered over the Internet. The schedule's start time for that instruction is a year from this coming September. So all of the design work is under way already, and they've gotten a decent way down the line. We're going to be testing it in the springtime and then admitting students and delivering it starting next fall.

**UBIQUITY:** A hypothetical question: suppose we walked around the campus for a day and just talked to randomly selected students.

**LARSON:** That's a great way to learn things.

**UBIQUITY:** Suppose we specifically asked about technology? What would they say right now?

**LARSON:** Well, I think right now many of the students who had been here for a semester or more would say, "Wow, there's a lot of stuff around here, and anybody who has an interest can certainly do pretty much what they want." But a brand new student coming in probably doesn't know enough about what's available to give you a good answer. So this program we're developing to cultivate and deliver represents the difference between just "building it and letting them come" and actually delivering to the students something that we know is going to work for them. Our goal here will be to say to them effectively, "We want you to know that when you enroll in this course you're part of a special group that is going to be treated somewhat differently than the rest of the college students. You'll need to have access to broadband signal delivery conveniently, whether it's at a relative's or at home, and we'll help you do that."

**UBIQUITY:** In what way?

**LARSON:** We're going to organize a once-a-semester reduced rate or perhaps free broadband service that's associated with registration. The student must have a computer, but we'll help the student buy one and if that's not good enough we'll selectively provide some money that will allow the student to buy it as a gift of the institution. Of course, we need to make sure we're dealing with people who can benefit from it and who have the desire to do so. Our hope is that out of that you will see some people whose performance in the classroom exceeds what it ordinarily would. We also hope to be able to prove that we can do so without spending the same dollars that we would've spent if we did things the old-fashioned way.

**UBIQUITY:** What do you expect that students would say to you after that sort of experience?

**LARSON:** Well, it would be totally different from what you would hear from them now. Students who have taken online courses at a lot of places and who are well-suited to that

environment would probably express some degree of satisfaction because it meets their life's scheduling needs. And that's very good, but it isn't quite as fancy as what we're proposing to do. What we're proposing to do is really going to be exceptionally appealing to the extent where, ultimately, we believe most academic departments will say, "If there's a choice between doing it the way we've always done it and this, we think this is better."

**UBIQUITY:** What problems have you had to overcome as you went about redesigning the courses for online delivery?

**LARSON:** Well, first let me say that the help from Bill Graves's people at SungardCollegis has been very substantial; they've worked through the whole process and understood enough about academia to know that, if you don't engage the faculty in designing this modification to how they deliver instruction, that it will never work. And, you've got to get them to buy into this approach and participate in making sure that there are some collective decisions made about what you are going to learn and what you are going to forego learning. You need to have a common pedagogy that you're dealing with in order to deliver this in a way that is cost-effective.

**UBIQUITY:** What are your goals, in general terms?

**LARSON:** One of our goals here is to try to ensure that in all of the 19 off-campus centers where we teach Western Civilization, that roughly the same standard of learning is available to the student. Quite honestly, that is not currently true -- and I should add that it's not true at any institution in the country. We just don't have any effective means of controlling the quality at all of those off-campus sites (and little enough, frankly, here on the main campus). So one of our goals is to have the department agree upon a standard of what a student should know and then make sure that that's in the course content.

**UBIQUITY:** How is this done?

**LARSON:** Some example has to be chosen that is predetermined by the department, and that we know will make the point that each student who enrolls, no matter where, will be getting the same level of learning that they would if they came to the campus. So there are multiple objectives that we have coming out of this, and as we proceed down this line, all of the obstacles that we presently encounter in teaching our students will, hopefully, be

overcome -- quality differences, our ability to respond individually when students' learning styles are not well-suited to the delivery mechanism, and an opportunity to engage the students more.

A difficulty faced by every teacher is to find a student who is ready to respond, to pay attention, to keep their eyes open, come in alert, awake, interested, and ready to be engaged. One of the things that the Pew Study activities found was that the mere act of tuning in over the Internet and dialing up these digital learning objects has a capacity to grab your attention and hold it in ways that sitting in a lecture hearing one person talk just does not do. So when you combine that with an opportunity to talk it over on the campus once-a-week or once every-other-week, you have an ideal combination of overcoming that obstacle of lack of engagement.

**UBIQUITY:** And it works pretty well for all students?

**LARSON:** It can be fined-tuned a little bit in terms of how you might modify the approach to accommodate a student who is not doing well, whereas in the more standard approach you don't really discover how students are doing until it's far too late to do anything to help them.

**UBIQUITY:** You seem to be a true enthusiast for technology but you don't have a technological background.

**LARSON:** No, I was an undergraduate major in college in English and government, and my Ph.D. work was in political science and higher education leadership.

**UBIQUITY:** Where did you win your degrees?

**LARSON:** My undergraduate college is Norwich University in Vermont, and then my graduate programs were both at the University of Maryland. Like so many people, I first got interested when the first PCs came out. I see such great potential for the computer in its application in the learning environment that I really think this is the golden age of higher education. Our ability to facilitate learning is so different than the tried-and-true methods that we've used but have not varied much from what they were back in the medieval university. The blackboard and chalk was the major advancement in learning technology for

centuries. But today, doing research on any topic is just so different than what it was just a few years ago. I think it's much more practical and more readily available, and is becoming a necessity in a world where those skills must be ubiquitous for the economy to continue to move ahead and for individual students to find success in that economy. Our hope is we're preparing our students for a transfer opportunity at a very fine college and university that will get them off on the right footing, and we want to do it better than anybody anywhere.

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