Moving to Anywhere, Anytime Learning:
Institutional Strategies for Meeting the Online Education Needs
Of Lifelong Learners

Andy DiPaolo
Executive Director
Stanford Center for Professional Development

Good morning. Let me start by asking you a question. Where is this photograph taken? It is Bangalore. I have been spending a lot of time in India and China, trying to figure out ways that Stanford can lend educational assistance to professionals and managers in companies and government organizations Now, if you visit Bangalore, let me show you the traffic and what it is like to get to Electronics City, the home of many high tech companies.

When I met with the Vice President of Human Resources for Wipro, a large IT company I said, "It took two hours to get to your location! Isn't that a problem for your employees who travel every day?" He said, "That's a learning opportunity." I said, "What do you mean?" He said, "We know we have our employees for four hours a day, sitting in cars and buses so we provide them with online education programs while they are in transit. For example, if you work in a call center, you can get accent training. If you are a manager, you can access training on how to do performance reviews. If you are an engineer, you receive technical lectures. What a fabulous way of taking a problem and converting it into an opportunity for online learning!

We here, over the last few days at MIT, have seen many examples of what is happening with online learning or e-learning. Clearly, it is a success story. It is working and here to stay. You have heard your colleagues offer presentations on how online learning has become an important part of an institution's portfolio. Now, it also includes many kinds of providers— traditional universities, consortia, as well as start-ups and entrepreneurs. When you ask learners what it is they look for in an online provider, they say a few things. They look for quality and cost, but at the end of the day, when you drill down, especially for the people that we work with who are working professionals, they indicate they select an online education provider who can help them in their employment and in their career growth. That makes sense.

I would like to do three things today. First, I want to talk to you about the impressions and the advice from the demand side, from the students' side. As educators we indicate that we know what is best for students. I want to flip that and ask the students what advice they can give us. The second thing I want to present is a profile of Stanford University and how we provide ongoing, lifelong education online to professionals and managers. Third, I want to offer ten recommendations if you are planning to start an online education program or examine a program that already is in operation.

The photographs you see in the slides I am using are real students in Stanford's online programs delivered to industry. These are people like you and me, working people who are very busy, mobile and have family responsibilities. So, if you ask questions about education needs and interests – and we do -- here are the kinds of things that we are hearing First, they have limited time to take courses due with work commitments, but are willing to assume responsibility to learn. They know they need to continuously learn in order to keep their job and advance in their career. Second, they want to access their learning wherever they are, and whenever they need it. Learners want a mobile, on-the-go, 24/7 connection to education and are using the open parts of their day to learn. What I like to say is that the industrial age, we went to school and in the communication age, the school comes to us. So we are now using the model of delivering the university to the student wherever they are and whenever they need it.

One of the industry students we interviewed said, "I want to treat my university like I do my bank and my supermarket." I asked, "What do you mean by that?" "Well, when I need to use my bank, there's an ATM available at anytime and in many places. I know it will work, it's reliable, and I can gain access to banking services whenever I need to. Why can't a university act that way? Why does it have to be restricted to certain hours? I want it open all the time! Especially if I'm living in other parts of the world, it needs to be open all hours." Lifelong learners are asking for convenience and flexibility with a range of course and delivery options and multiple avenues for learning.

Other things we are hearing from students are, "I want you to offer a variety of ways for me to learn. Don't simply think about a 30- or 45-hour class, but think about breaking down content into smaller increments and let me choose an independent path to meet my learning needs." Stop thinking about courses; let's start thinking about chunks of learning, of learning experiences. The push is for short, focused modules and "learning experiences" versus courses. At Stanford, the curriculum for the master's degree consists of 15 courses. Each course has 30 hours. Well, might that curriculum be broken down into smaller chunks or pieces, where a student can then take what is need in a customized way? Students are also asking for a wide range of online degree, certification and career-building programs with flexibility around when programs start and end. The term we are hearing most often is "choice." Let me, as an adult, make a choice about where and when I want to learn, and the kinds of things I want to learn. Why do I have to start a course in September when I need the course in May? The University of Phoenix, the largest online provider in the United States, starts courses every week.

Another thing we are hearing from students is that they want the course activities and assignments to be directly related to their work. They want project-based learning and assignments which support work responsibilities. They also want to learn in a way that allows them to participate in a group, especially in project activities. They are asking for courses that are well-designed, engaging, relevant and continuously updated which facilitate the transfer of learning to direct application. Rapid mastery of knowledge and skills – practice oriented education – is the desire.

I have a son who is a gamer. Last week he had on a headset and was playing a military-type game with a group over the net. I asked, "Let me listen to what's being said." I could tell the participants were of different age levels ranging from teenagers to adults. After a few minutes I asked my son, "How do you succeed at this game?" He said, "Well, first I have to test to get in, to determine if I am the right level to play. Then we have an assignment. We have an objective as a group." And these are people scattered all around the world. You don't know who they are. "Then we give each other advice as we work our way through the assignment." "Then, when we make a mistake, we learn from that and get better and can advance to the next level." What a great learning experience that is! Think about that: groups of people working on a challenging objective, helping each other, advancing as fast as they can, succeeding because they failed, because they learned from failure.   That is what people are telling us they would like to be able to do in an online education course.

Other things students tell us: I want to go as fast as I can and eliminate university inefficiencies. Students want demand-driven learning with control of the sequence and pace of learning. We as adults don't tolerate inefficiencies when dealing with a service provider. We are impatient. So why does this happen at universities? Why do they make it difficult at times for students to register, to work through the payment process or get assignments submitted, reviewed and returned? Adults, you and I, are asking universities to break down these types of barriers.

In the United States we have a system called TiVo.   It is a digital video recorder that will, if you want it to, track the preferences   of what you like to watch on television. So not only can you record something for later viewing, but this device knows over time that you , for example, enjoy World War Two history, because you're watching a lot of shows on that topic." That device, over time, will learn your preferences and your likes, and then begin to download and prioritize programs for you. Originally television was "just-in-case" where you turned it on and maybe discovered something you wanted to watch. Then it became "just-in-time", because you could set up a videotape recorder and watch it when you wanted to. You could time-shift it. And now with TiVo and similar devices it is "just-for-me." And students are asking "Can you create similar systems that will know me as an individual and begin to craft a customized education experience matched to my job needs and career goals?" Personal learning paths based on assessment of knowledge gaps, learning styles and preferences will be the next wave in online learning.

Online students want electronic advising, counseling, mentoring and to be part of a learning community. They want to work in   peer-to-peer learning relationships and participate in groups. Certainly now, with the new kinds of social media, that is easy to do.   In particular, what we are hearing from companies, from the student's employer, is, "Let students engage in international online learning. Let them work with students from other countries in groups, because that is what we want them to do at work."

We are also hearing that students don't care where the curriculum or the content comes from, as long as it is relevant and makes sense. But what they do want is an aggregator.

They want somebody to bundle the content and to receive a certificate from an institution with a recognized brand and reputation. They also want to preview a course, read course evaluations and have experts comment on the relevancy of the course to career development in order to make an informed purchasing decision.

Other things we hear from students: I want to be able to create a learning portfolio that will be accessible throughout my lifetime – and I want to be able to share it with employers when I apply for a job. Adults - lifelong learners – are also asking for competitive and variable pricing. For example, they ask why I should pay full price for a 30-hour course, when I only want two hours. Can you break this course down into smaller modules and just charge me for that?

There is strong movement towards using mobile devices -- such as those that you have in your hands today – for online learning People who are traveling around the world want to be able to use those smarter, faster and cheaper devices to be educated when and where they need it — whether it is in cars and buses in Bangalore, here in Boston, sitting in Palo Alto, on a Lufthansa flight to Germany or an oil platform in the North Sea.

Adult learners want educational renewal throughout their careers. Certainly in the United States, when you graduate from a university, you receive some type of follow-up communication. What do you think that first communication is? It is for money. "Somebody contributed prior to your coming to this school and you need to do the same to help the next generation student." I believe that is a mistake. The first message should be, "We want to follow you throughout your career. We're going to provide you a learning opportunity so you can be successful." Maybe we will give them their first course for free. Wouldn't that be great? Then when the development people call, they might be more likely to contribute!

These are the kinds of things that we are hearing from the students that we work with in industry, people like you and me. The challenge to universities is that these are the kinds of people who want lifelong learning – and if we don't offer it we do so at our own risk. Here's an example of what I mean. Last year I received a prospectus from a firm wanting to create a new online   university. Let me tell you what the private side thinks about lifelong learning in higher education:

- Higher education is one of the most fertile new markets for investors in many years
- Lots of opportunity for scale.
- Many disgruntled current users.
- Large amount of potential revenue on a global basis
- Poorly run, low on productivity, high in cost, and relatively low technology utilization.

I especially like this one:

- Existing management is sleepy after years of monopoly; the field is ripe for takeover, remaking and profits.

What can they do that universities have difficulty doing? They have more money and investments. They are nimble, responsive and very fast in creating courses and programs based on a deep understanding of student needs. These online education start-ups know how to design interesting, challenging and relevant courses. They know how to market and to sell. They know how to effectively apply technology. And they do not have the constraints of a university bureaucracy. You know how long it takes something to get done at the university. These people don't worry about that. They crash through it. They look at education as a commodity. I am not saying they are right, but it is a terrific challenge for us as educators break out of our traditional ways of doing things, knowing that the people on the private side are challenging us and plan to move forward in their own way to meet the needs and interests of lifelong learners.

The University of Phoenix in the Unites States -- the largest online provider -- didn't exist 15 years ago. Schools you may never have heard of— Cardean, Capella, Jones University, all private start-up universities—but they are all doing what I mentioned. You can receive accredited degrees online. People are not quite sure yet of the value of the degree over a career, but they are very serious and very good at accomplishing the things that universities struggle with around services and support for online learners.

Let's talk a little bit about Stanford. How do *we* do it? I wish I could do everything I mentioned that students want. Obviously we can't. But we have done some things. First, let me tell you we take seriously our interactions with industry. Stanford fosters a climate where collaboration with industry thrives, generating both breakthrough discoveries and the science and technology that can support continuous innovation. We have a long history of very productive relationships with corporations of all sizes, from startups to mature, successful enterprises and provide firms with education, research partnerships, consulting, and connections to faculty and students. My center -- the Stanford Center for Professional Development -- supports academic departments in the offering of graduate degrees and courses and professional education programs online, on campus and at work to meet the lifelong education needs of technical professionals and managers. We have 52 masters degree concentrations, 40 graduate certificates, 65 professional education courses and thousands of hours of free programs online. About 10 percent of the master's degrees earned annually in the School of Engineering at Stanford are earned online.

We are also engaged in an OpenCourseWare-type project called Stanford Engineering Everywhere or SEE. We have fewer offerings than MIT, but they are complete courses which include video-based lectures, notes, handouts and exams.

I also want to mention a national group where I am a board member. If you want a place where you can find a great deal of information on online learning I recommend going to the web site of the United States Distance Learning Association.

The last thing I would like to offer is a series of recommendations – based on lessons learned at Stanford and elsewhere -- if you are planning to start an online program or examine what you are doing today:

- First: make sure what you do is consistent with your university's mission, values, strengths and areas of distinction. Build from tradition in new ways.

- Second: make sure you are close to the core faculty when developing an online education program. When you examine why some online university programs failed, they did not seriously involve key faculty in the early planning and development. And then the faculty said, "Why are we doing this?" and pulled out. The key is to identify faculty champions early in the process and work with them.

- Third: You want to position your online education initiative as a way to extend and enhance existing programs. You should also try to develop a unique niche to meet a local, national or global market need. For example, University of Kentucky: thoroughbred horses; Penn State University: turf management; Espoo in Finland; telecommunications. What is your university's distinctive niche?

- Fourth: What is your sweet spot?   Find the intersection of audience needs and wants, institutional strengths, faculty interests and what people will pay for. Develop your online program based on that.

- Fifth: Think course-to-certificate-to-degree progression. Online versions of existing courses are easier to create than new ones. Continuing and professional education is a good place to start because you have more flexibility than a standard credit-based curriculum.

- Sixth: Recruit and train faculty by offering incentives and rewards supportive of innovation. For example, the faculty in the Computer Science Department at Stanford are busy people. How do you get their attention to teach online? If you teach a Computer Science course online at Stanford you receive 1.5 course credits for your teaching load. That is an incentive! You also need to address faculty concerns regarding ownership of intellectual property, increased student demands and impact on workload.

- Seventh: Develop a financial model covering costs and investments with revenue distributed to participating departments and faculty. At Stanford much of the money received from online education is returned to the departments and faculty teaching the courses.

- Eighth: Start small: pilot with existing students, alumni and focus groups. Experiment, adapt, improve and incorporate best practices. Grow carefully in order to scale and sustain. Publicize only when ready and showcase success stories. Don't promise more than you can deliver, but deliver more than you promised.

- Ninth: Don't do it all locally. Work with faculty to develop online courses using their own materials blended with others that are free or purchased. For example, there are many places to obtain teaching and learning materials — OpenCourseWare, Connexions, MERLOT, Stanford Engineering Everywhere. Companies will also sell you material.

- Last: Identify every possible service interaction so that online students and faculty have a productive, positive and rewarding experience. Be fast, flexible and attentive.

Let me end with three points. First, what I discussed today is not about technology – it is about innovation to improve learning! Second, you need to question everything like an entrepreneur. Think daringly, execute steadily. And last, appoint faculty and staff with vision, passion and a willingness to take risks.   I hope you are willing to be innovative and entrepreneurial in moving forward to create   online programs that will make a difference for people throughout their careers.