

Education and the internet. Where does the future lie? LSE is a founding partner in two ventures, UNext.com and Fathom, both aiming to revolutionise the way education develops while offering all-important quality content.

In July, **Andy Rosenfield** testified before the US Web-based Education Commission on the role of web-based education. In this summary, he talks of his vision for the internet and UNext. Then **Ann Kirschner** explains the knowledge trails and concept of Fathom.

The internet learning dream

Internet learning has the power fundamentally to transform educational opportunity and to democratise access to education worldwide. At the same time, however, we must be mindful of the enormous and immutable advantages of facilities-based learning and we must make assurance double sure that we do not diminish support for, and nurture of, the great colleges and universities that today provide the core of our basic research and also excellently educate the young. Technology-based education neither sounds the death knell for traditional facilities-based universities nor reduces the importance of passionate and skilled teachers. This is a period of greatness – perhaps hegemony – for traditional universities.

Internet-based education has profound advantages for two groups.

Firstly, those who, because of the happenstance of financial and geographical circumstance, never could hope to attend a physical college or university on a full-time basis, and secondly, those who already have completed their university education and seek

continued lifelong learning to maintain their edge or simply to enjoy the pleasure of learning at a time, place and pace convenient to themselves.

Internet education is less costly to provide per student than is facilities-based education when it is delivered in 'scale'. It is also significantly less costly for learners relative to full-time matriculation at a physical university, because students typically remain employed while consuming internet-delivered education. Even with these advantages, however, one must be mindful of the shortcomings of internet-based education. The greatest economy of distance learning – the ability to learn while at work – is the central reason that distance learning is not as effective as full-time immersion in a learning community. Learning is most effective when it is a student's full-time job. Learning only happens when students do – when they think, read, reflect, challenge, argue, debate and question – not when they listen passively to a lecture. And that, of course, is why the great colleges and universities correctly pride themselves on seminars, breakout sessions, small classes and the recruitment of inquisitive and intelligent students who challenge faculty and one another, read texts critically and think and speak for themselves.

That is why distance learning via the internet presents massive opportunity. It is active and engaging – learning that mandates doing instead of watching. Internet education can and will bring very high quality learning opportunities to people who could not possibly afford a full-time education at a facilities-based school. These students can learn on their own schedule, while employed, and thus can avoid the largest component of educational expense: foregone earnings. Another fundamental role



75 per cent of the wealth of a modern economy. In other words, the stock of physical capital accounts for about one-quarter of aggregate wealth.

John Dewey, the distinguished educational theorist and philosopher, created the Laboratory School at the University of Chicago and was a great proponent of learning by doing. Dewey hated passivity in learning. He tells the story of looking for appropriate desks and chairs for his school and finally speaking to a furniture dealer who explained why Dewey could not find what he wanted: 'You want something at which the children may work; these are all for listening.'

Dewey predicted that technology would be part of the process of change: 'Now the change which is coming into our education is the shifting of the centre of gravity. It is a change, a revolution, not unlike that introduced by Copernicus when the astronomical centre shifted from the earth to the sun. In this case, the child becomes the sun about which the appliances of education revolve; he is the centre about which they are organised.'

The time is at hand. Many today attack distance learning as a lesser or diminished or denuded experience when contrasted with full-time facilities-based education. It is much less a handmade experience than full-time facilities-based education. This is because we use scalable methods and our students lack the benefit of physical congregation and the luxury of full-time devotion only to the process of learning. But, in many ways, it is a greater experience and a noble activity. It provides access to quality education to many, for whom no access would otherwise be available.

With UNext.com we are not creating a TV university. We are developing just-in-time interactive learning because we believe that employed adults throughout the world have a hunger for education.

What policies need we adopt to foster this revolution? Here are some that I advocate:

- Recognise that the amount of financial and human capital needed to create online learning solutions is immense but that free markets – those free of undue governmental bureaucracy and regulation – are ideally suited to address this task.
- Treat virtual universities without prejudice or discrimination. Demand excellence; but provide all the usual advantages government pro-

vides students at physical universities without distinction or difference.

- At the same time we must remain vigilant in our support of traditional colleges and universities and in particular of research universities. These institutions, as I have explained, are key to the creation of new knowledge and are the best source of education of youth.

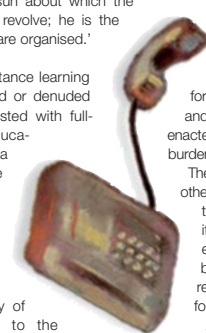
- We need to hasten the development of broadband internet technologies. Again my belief is that unfettered competition is the best way to accomplish this task.

- We need to provide universal access to the internet. It is futile to think that access to education will be transformed by technology if many in our country lack access and the ability to participate in the new programmes that are made possible only on this new medium. To do this we need a wise tax and transfer policy that allows the poor to make an investment in themselves.

- Recognise that tertiary education is probably the United States' best non-exported product because the US enjoys profound competitive advantage and leadership in the marketplace of ideas. For these reasons, impound distance learning into our export policies and be forceful in making sure that tariffs, taxes and other impediments to success are not enacted strategically by our trading partners to burden our ability to serve the world.

The existence of firms like UNext.com and others – firms that can flourish because of their access to financial and human capital – will, with modest support from government and with a steady commitment by government not to regulate where no regulation is needed, succeed in transforming educational opportunity.

And with that comes the opportunity for people here in the US and all over the world to realise their hopes and dreams because they can finally make an investment that pays the best return. ■



ANDY ROSENFELD

IS FOUNDER, CHAIRMAN AND CHIEF EXECUTIVE OFFICER OF UNEXT.COM, A GLOBAL LEADER IN ONLINE EDUCATION. THROUGH CARLETON UNIVERSITY, THE COMPANY COLLABORATES WITH ITS ACADEMIC CONSORTIUM OF LSE, COLUMBIA UNIVERSITY, STANFORD UNIVERSITY, THE UNIVERSITY OF CHICAGO AND CARNEGIE MELLON UNIVERSITY TO CREATE BUSINESS EDUCATION FOR GLOBAL COMPANIES. FIND OUT MORE AT WWW.UNEXT.COM