

WHO is Emeriti Prof. Dr. Linda HARASIM?

Dr. Linda Harasim was Professor of Communications at Simon Fraser University, Burnaby BC, Canada

She is one of the pioneer academics who is studied o “Women and Computers in Education” and focused on dealing with gender issues and educational computing

Lets’ try to learn she from her words’

I am Dr. Linda HARASIM, and among the things that I am most proud of in my professional and personal life is that I am one of the pioneers of online education.

How did that happen?

My earliest encounters with email and computer networking in the late 1970s ignited in me (for whatever reason) a very strong vision of the educational potential of computer networking, and a world enriched by the meeting of minds and global building and sharing of knowledge. It is undoubtedly strange that I had this vision of global education and collaboration using online networks at a time when email was still such a weird, unknown and limited activity. No one that I knew at the time had any such vision. Most faculty and people associated with computer networks rolled their eyes at my suggestion of a future for learning networks. Electronic mail in the late 1970s was known only to computer scientists who specialized in networks and a few university academics; electronic mail was a very esoteric technology with no apparent educational or social application. (Networking was, in fact, invented to enable file sharing, *not human communication!!!*)



In fact, my 1990 book *Online Education: Perspectives on a New Environment*, made a bit of publishing history because I insisted on the use of the term:

“Online” rather than “On-line” in the title and in the text (no use of the dash -) and moreover insisted on the use of “email” as one word, not ‘electronic mail’ or ‘e-mail’. Online and email were viewed as so new that even in 1990 book publishers required the use of a hyphen, to denote that these were not yet real words. And of course, my 1990 book, argued that online was not just a new word, but the beginning of a new world.



How did you get started with Online Education?

It was the late 1970s and early 1980s, and I was in Guinea Bissau, Africa and I was conducting an empirical study of the Paulo Freire literacy campaign for my doctoral dissertation, and was also working on a project in Guinea Bissau that employed the Freire pedagogy. I was a doctoral student at OISE, the graduate school of education for the University of Toronto. My doctoral dissertation is one of the few empirical studies of the Freirean pedagogy.



Returning to Toronto several times during that period I began to using email, and by the early 1980s I was networking online with a few colleagues, and using word processing for my dissertation.

Once I returned to Canada in 1981 to complete my dissertation, I was increasingly drawn to a vision of using online communication for education, anywhere and everywhere that it was possible (quite limited at the time). Nonetheless, the rise of computer networking clearly enabled unprecedented communication globally, to share ideas, questions, information and knowledge. That vision of local and global collaboration took root and has never left me: I remain as excited and optimistic today as 35 years ago when the vision first came to me. I have subsequently come to learn that human collaboration is humanity's greatest and most profound achievement and our distinguishing feature, according to leading cognitive anthropologists such as Tomasello.



I recall searching bookstores in the early 1980s for books on computer networking, but all that I found were technical manuals on how to connect computers to printers. Having concluded my dissertation, I found university research work on an educational computing project. I also began to seek grants to facilitate my research into educational opportunities for teacher networking. My first 'book' or monograph was on the educational potential computer networking for teachers (Harasim & Johnson, 1986). Since the book was funded by the Ontario Ministry of Education, it was not allowed to be published by a commercial publisher. It is a shame, in retrospect, since it would have been the first book on the topic. Nonetheless, things were

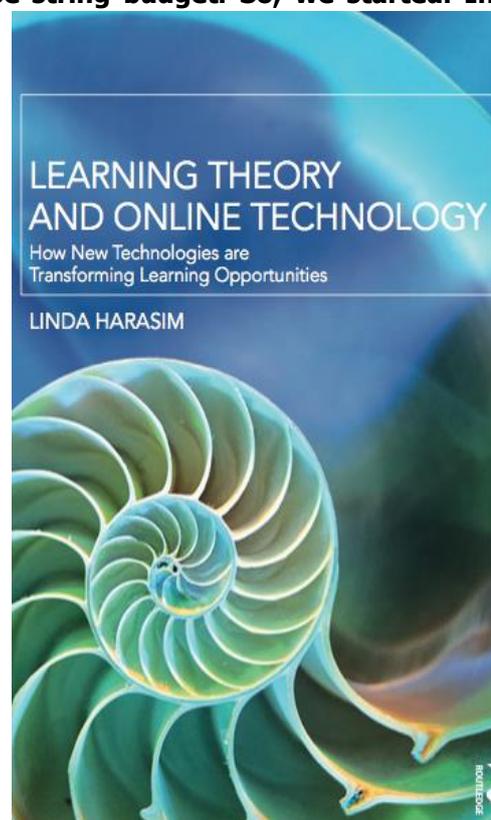
moving quickly. The Director of Computer Services at OISE, Richard Wolfe, also recognized the educational potential of computer communications such as computer conferencing systems; I worked with him to select a system and with a few other faculty, began to consider educational computer conferencing.

At that time, 1985, few women educators were attracted to educational computing: they were not taking graduate courses on computer-related topics, and in the public schools, neither female teachers nor girl students were engaging in the existing computer applications available. Dr. Dorothy Smith, a well-known feminist professor at OISE, and I obtained funding from the Federation of Women Teachers Associations of Ontario (FWTAO), to design and conduct an online graduate course to explore this topic. The FWTAO, however, did a crazy but ultimately excellent thing: they insisted that their teacher members also participate, and not only participate but represent even the most remote areas of the province of Ontario. The project was to demonstrate geographic and gender equality in educational computing, on a shoe-string budget. So, we started. In January, 1986, we launched the first online credit course with 20 registered OISE graduate students, and 22 working teachers who represented various regions of the very large province of Ontario. This was quite a design challenge:

The challenge to design a collaborative learning course that reflected feminist pedagogy, in an asynchronous, place-independent environment. We used OISE's new Participate computer conferencing system, which was technically new to all of us to engage in a totally online course, again new to all of us, collaborating asynchronously using Bell telephone's very primitive online services.

1. We had 20 for-credit graduate students, along with 22 practicing teachers who would gain only a professional development (PD) certificate. The credit versus the certificate differential might create a strong motivational difference, we feared;
2. No one had ever conducted an online university credit course yet, and beyond my drive and vision, there was no empirical evidence that this could succeed;

3. In late 1985 and early 1986, the public Internet had not yet been invented. The Bell Telephone system had a primitive computer network but it was not viewed as a public service and access to most of Ontario beyond the main cities was very sketchy. In fact, Bell did not even publicize the secret access code whereby the public, even teachers, could access the network. And here we had a course with 42 participants from around the province who had signed on and were ready to go.





This was an amazing experience; despite all of the difficulties and obstacles, the computer screen dissolved into a window on the world. The grad students and plasticizing teachers immediately crossed the technological barriers to talk and converse, as if the technological issues were mere annoyances (and they certainly were at least that). The participants encountered and solved problems individually and together, coming up with solutions that as a researcher and teacher I had no knowledge about. But the participants resolved the problems as they encountered them, and shared their knowledge with one another. Our

“emergency telephone line” was not used once.

The so-called rejection of technology by women vanished as soon as they had a application that was meaningful, valid and of value to them.

Moreover, rather than worry about how to incentivate participation, I



faced the opposite challenge: how to control the flow among the participants. The project had to pay for all the telecommunication user fees, but we viewed that as a minor issue. The network was humming 24 hours a day, 7 days a week. Participants were engaging at all hours of the day and night, depending on when they had time available.

Another unexpected outcome was that rather than an estrangement or schism between the graduate students and the teacher participants, the two groups began enthusiastically to brainstorm and share questions, experiences, practice, and theory. Through the course discussions and research assignments, Dorothy Smith and I discovered that most of the educational software of the time was experienced as very

sexist: typical educational computing activities involved ‘shooting’ down the right answer to a mathematical question ($2 \times 2 = ?$); various numbers would float by and the student had to shoot down the correct answer. Or shooting down ‘words’ for an English class: what is the plural of the word “I”? Moreover, the rewards were little toy engines, trains, airplanes, cars, etc. that would accumulate in the reward box. There were few or no activities or rewards that encouraged collaboration, communication, or rewards of interest to girls. That reflected educational computing of the 1980s (is any of the same still around today, in 2016). Educational computing in the 1980s was thus rejected by female teachers and students; yet this same group was very interested in online communication applications.

Thus, the first online course dealt with an educational problem and became an unexpected educational solution. Over time, we discovered that female students especially appreciated the temporal and geographic flexibility of online courses, since many students had family and work responsibilities that might have otherwise precluded access.





Thus teachers who were working in different cities and towns, and who wanted to pursue graduate degrees were not able to continue to work, maintain their family life, and yet also continue their education.

Access issues are also very important for male students. Most undergraduate students in Canada work full or part time, and many have families---and online education is a powerful opportunity for them. However, online education, specifically online collaborative learning (OCL), can and should be MORE than as good as f2f classes. OCL holds the potential to enable a far higher level of understanding and knowledge construction than has hitherto been available, even in f2f classrooms and lecture halls.

And this should be taken seriously: doing better is not only a possibility, it is urgent. Otherwise, teachers will soon be replaced by AI systems such as those appearing in MOOCs, personalized learning systems, adaptive learning systems, and all forms of courseware.

Building the Field of Online Education: From Vision to Practice to Research to Theory

My 1980s move to online education (which was not yet even a field or even a flicker) was not because of the job prospects: there were none. Research and development in online education were *essential* in order to

make it a field, in order to describe it, *define it*. And to prove that it was worth doing.

Where to begin? Well, I had to begin in all directions at once. The vision of online collaborative learning was very quickly put to practice with the 1986 courses and those that followed.

Practice and Design of Online Collaborative Learning:

From my first online course in 1986, and afterward, I encountered an unexpected level of activity and participation, 24/7. I recall being questioned by other faculty, from OISE and other institutions, at the 1989 conference at the Open University, Milton Keynes: why were my participation rates so high? A very important key to the success of online courses, I found, was the use of collaborative learning design.

There were many challenges but collaborative learning design for the online environment proved to be key. So, how does one enable collaborative learning and teamwork in an asynchronous, place-independent, text-based environment? How can we coordinate activities and even conversations when people were logging on at different times, from different geographies?

To address these kinds of issues, I generated the concept of the 'online week', as a way to organize activities within the asynchronous, place independent group. I also used a geographical metaphor to help students navigate the online space and to discover where was the action that week. Each seminar or activity had a name, and these names represented "places", that began and ended at specified days and times.



Also, I used different sized group activities during the semester long online course: starting with a full group plenary activity, then moving to smaller sized groups for various assignments, and finally returning to the plenary for conclusion.

There were also social spaces and intellectual spaces. The social spaces stayed opened the entire course.

We began with plenary (whole group discussions) in order to let participants meet one another; we then moved into small group activities such as dyads and learning partnerships for the early assignments. The learning partnerships were especially valuable, as it provided each participant with a buddy, with who to talk, ask questions, and overcome anxiety as they became more comfortable with learning online and discussing with people they had never before met or seen.

We also deliberately did not post photos of one another, in order to enable participants to focus on the message, rather than the messenger.

There are many, many other lessons and outcomes which have been discussed in my publications of the 1980s and 1990s. Some of the major takeaways from this experience are:



was "Women and Computers in Education." Ironically, a course on why women were not welcome in educational computing became the trigger for the tsunami of online education that followed.

- Online courses, even on topics such as educational computing, became especially popular with female students. There were always waiting lines to register, unlike other courses on educational computing at the time. Male professors also began to teach online and male students as well as female, reported appreciating the opportunities for discussion and debate.

- I continued to teach totally online at OISE, until I left in Dec. 1989, to take a faculty position at Simon Fraser University, Vancouver, where I taught primarily in blended mode, since the university did not pay professors to teach distance or online courses. This is still true today.

- The first ever online formal university course was taught in 1986, at the University of Toronto, by two women academics: Drs. Linda Harasim and Dorothy Smith;

- The content of this first course

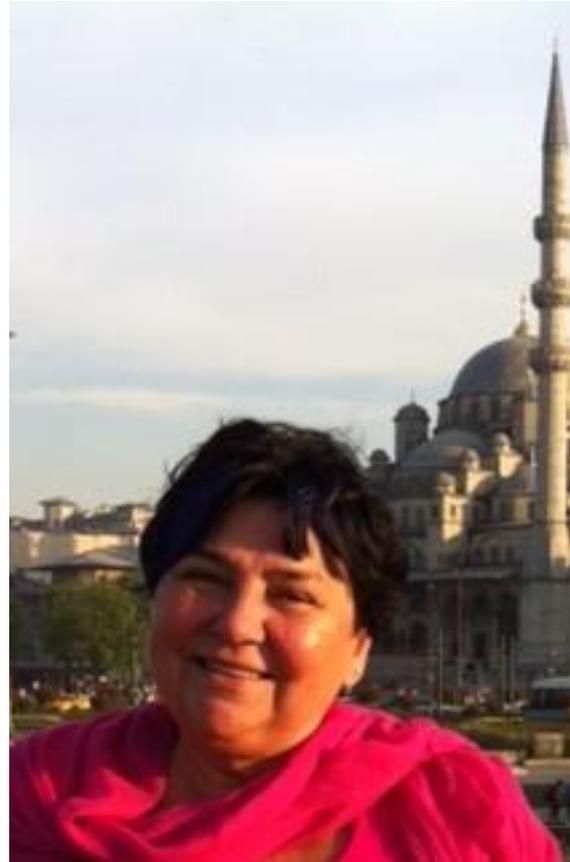
- **My final observation about this experience is that it was both groundbreaking and amazing---and yet, I am dismayed to report that in my opinion, online education has yet to fulfill its potential as a pedagogy that surpasses any traditional classroom or distance education model to date. That is our great challenge.**

Research in Online Collaborative Learning:



In my case, I was studying the phenomenon as I was helping to create and design the field. I was teaching online, administering pre- and post-use questionnaires, designing user satisfaction scales, and also developing a research methodology of transcript analysis that I believed would not merely describe learning, but would actually visualize learning. Recall, if you will, that in the 1980s (and still) there were no empirical indicators for "effective education", "effective learning" or---"learning". Research on learning--- for the most part--- was reduced to testing and exams: was the 'correct' answer being repeated? If not, why not? How to improve transmission of the correct content, rather than how to help students learn and understand?

Until we engaged in online education, "learning" had not been visible. As I was teaching, I was also gathering user data: usage activity; usage patterns; user satisfaction, etc. But that did not add up to evidence of learning. But now, with the advent of online and the archive of the verbal transcript of student discussion, we could begin to study their words, to 'see their thoughts' and to study learning as it progressed by individuals and within the group. During the 1980s I designed, taught, and studied online education and contributed to building the field of scholarship and practice. I began to present at academic conferences, participate in some online discussions, and thereby began to meet and collaborate with educators and researchers from other fields and universities who were also experimenting with online education courses and applications.



The 1980s were a time of energy and enthusiasm for the field as we began to experience the new opportunities and challenges. That was 30 years ago.

Much has happened in online education since: the field has quickly moved from outlier to mainstream acceptance. In the USA, more than 1/3 of all university students have taken at least 1 online course and today university administrators view online education as begin as good as or better than traditional f2f education. I agree that online education is good but it has not yet reached its potential because knowledge about the research and theoretical developments associated with online education are not well known not adopted by educators.

Research has grown and there are many, many opportunities to learn from one another, to share, to debate and to gain an understanding of the field of online education. I have also focused my energy on studying and building the field of Online Collaborative Learning.



Theory of Online Collaborative Learning:

Most recently, I have spent a great deal of time and effort studying Theories of Learning, and especially developing Online Collaborative Learning Theory (Harasim, 2012, 2016). Without a theory that explains how learning occurs within particular environment and set of activities, online education will flounder, flop around and not meet its potential. It is essential that educators begin to take learning theory and research seriously.

First, because they will be better teachers if they better understand the theory that they are employing in the classroom. Second, because they need to understand that there is serious---in fact, HUGE, competition that is headed directly at online education. Public education is, in real ways, under attack by for-profit digital media corporations and their foundations, such as Bill and Melinda Gates Foundation which heavily invests in MOOCs; the Zuckerburs, who in December, 2015, invested/donated \$45 billion to personalized learning environments). Neither MOOCs nor PLEs will use live teachers).

Emeriti Prof. Dr. Linda HARASIM
Faculty of Communications at Simon Fraser University,
Burnaby BC, CANADA

Phone:

Mobile:

Facebook:

URL(s):

Email(s): linda_harasim@sfu.ca harasim@sfu.ca

