



Global Summit 2006 Speaker

An interview with George Siemens - a leading theorist on the changing nature and needs of learning.

Can you tell us about your theory on connectivism? (I understand that is a theory of how learners learn today - but can you give a little bit of detail)

Connectivism started as my frustrations with existing learning theories rose. I started to see, in classrooms and online, that the theories of learning I had been taught were no longer adequate for (or representative of) how people were learning. Instead of cognitivism (and the views of cognitive schema) or pure construction of knowledge, I notice learners were actually connecting - with each other and technology.

Simultaneously, our learners were experiencing a tremendous increase in information. Some (like ASTD) have stated information doubles every 18 months. We simply are not able to handle and process information the way we used to. We need to offload the act of learning to a network. Karen Stephenson has stated that she stores her knowledge in her friends. This is very much in line with how we learn. We learn by forming connections and creating rich networks of distributed cognition and meaning-making. The skills we need are different today - we need to learn how to learn for life. We need to learn how to recognize patterns in the rapid knowledge landscape. We need to stop thinking of knowledge as a river, and begin to see it as a reservoir.

With connectivism, I wanted to create a conversation about what it means to learn and know today. All of the theories used by educators come from an era where computers didn't exist (or if they did, they were housed in university research centres). We are trying to use theories of learning from a predominantly physical era, and force them to work in a digital era. We need a new pedagogy, a new view of learning, a new view of knowledge, or interacting.

What do you see is the potential of technology to transform learning and society?

Technology, as with any tool or invention, has certain affordances. As McLuhan has stated, we try and get new tools to do the work of the old. With technology, we are still attempting the same duplication (i.e. we are trying to create virtual classrooms). So many online courses I've encountered have been an attempt to transfer content online...rather than transform it for the online space. Technology's potential to facilitate this transformation will be unearthed once we can shed our existing views of learning. We are seeing a continual rise of change pressures - social networking tools (myspace), personal publications (blogs, podcasts), and collaborative work tools (wikis) are prominent enough to demand educators to rethink what it means to learn and know. Unfortunately, our institutions are not structured for change. We have built them for stability. The true capacity for technology to transform learning rests in:

- Access to content and dialogue
- Personalization
- Power shift to the learner
- Bringing learning to the point of need
- Integrated learning with life - so it's as natural as breathing and as constant as a beating heart.

How do existing educational perspectives need to be revised to meet the needs of "today's students"?

In a word - democracy. I've stated in other forums that educational institutions are government funded dictatorships. While that statement is a bit harsh, and intended to force thought and reflection, few spaces in society suffer the power differential of education.

In terms of learners today, it's important to understand what we mean by "learner's needs" and "learner's wants". After almost a decade of being involved in a laptop education program, I feel that some component of structure and direction needs to exist for learners. There are times where the best learning happens in an engaged conversation in small groups...or in the reflection of writing a journal entry. While these can be mediated with technology, we need to ensure that we are not adjusting our institutions to meet the daily fads of today's learners. Different learning needs require different levels of structure. A student without much of a foundation in a discipline requires more structure than a third or fourth year student.

Unfortunately, we do our students a disservice by not understanding how learning needs change as competence and knowledge base increases. So we have schools trying self-directed learning with learners without a clear foundation...or we pursue lecture/test learning models with advanced learners. People might still learn in these situations, but the real question is one of how effective the experience is (and if it could be better if we made changes).

I think we are at the beginning stages of significant research work on what really happens in learning with technology. Most of us function by theories, assumptions, and our classroom experiences. We encounter the odd article on technology's effectiveness (or lack of it), but the research itself is not prominent (and where the research is clear, corporations and schools are not always acting on it).

To get back to your question - we need to begin creating learning ecologies and networks for learners - spaces where we can attend to the diverse needs of learners at different levels.

Can you tell me your thoughts on the role of blogs and social technology?

Blogs and social technology as a whole can be very effective for enabling learners to form connections...and to promote deep or reflective thinking.

Too much of education is passive. When we blog, or connect and interact with others, we are actively involved. If we adhere to Vygotsky's notion of social/cultural learning, or Wittgenstein's emphasis on language as giving life to thought, we quickly see the value of getting learners into social spaces...and getting them talking to each other, to experts from around the world, to students in other countries. I recently wrote that our co-workers no longer sit at the next desk...they sit in the next country. The same is true for learners. And blogs in particular can enable this global conversation.

What do you see as the role of ICT in education?

ICT role in education is primarily one of support, though ICT and education do influence (and drive) each other. Our real challenge is one of creating a compelling vision for education, learning, and knowledge in our society today. And then to leverage the tools at our disposal in making that vision a reality.

Is there anything specifically you will cover at the Global Summit, in terms of:

- **Elearning in education and training**
- **Careers in a connected environment**
- **Designing educational web services**
- **Understanding transformation in education**
- **Emerging trends in a connected world**

I will discuss how we need to rethink and redesign the structures and spaces of our society (businesses, schools) based on my book "Knowing knowledge" (which will be available by mid-Sept).

I will discuss the changes that are impacting and altering knowledge - namely, what does it mean to know today? What is causing changes?