QUEST 2016
Marlene Scardamalia The Complexity of Knowledge-building

MARLENE: This notion of increasing disparities in society and how, what kind of pedagogical model might address that challenge and I'm going to come back to that. OACD talks about innovation-driven society so that in, no matter in what work of life you are, the importance of taking an innovative stance is really critical and I hope to convey how that happens through knowledge building pedagogue. Increasing complexity, if you just think of terrorism, the economics, the issues that we're facing in society today, then, as Michael talks about dealing with things that are good for humanity, one needs to deal with really complex issues in order to make those kinds of changes and contributions. So we need societies that actually can thrive on complexity and that's not easy, that's where a lot of innovation gets hung up because of premature simplification, but then, of course, we need to find what's simple in the complex so it's a really difficult issue that needs to be addressed. This notion of the internet and super abundance of fragmentary information it's creating new literacies of a really dramatic sort that also, not only has society had enough challenge getting all students with literacy and numeracy as we've known it, but now we have new literacies that are actually harder and more demanding, and we need to address those as well. There's a pervasive collaboration, as people know, diminishing opportunities for some segments of society. Why knowledge building, why now? What we're trying to do is say that we need a model that can find a coherent way of addressing these issues and, in addition to a coherent model, we believe that schools need to be reconstructed as knowledge-creating organizations. Now Michael was really clear about the problem we have is we take all kinds of new things, we take projects, we take inquiry, we take problem-based learning, and we hold, the curriculum stays the way it is, assessment stays the way it is, we leave everything in place and add these on and it's an additive model and as he says, that what we really need is systemic change, but how do we take this force that's holding everything tight on in the way education has been built for hundreds of years and create the level of change that we need to deal with 21st century capabilities? I'm going to deal some with technology because it's really going to be a powerhouse in how we can change and deal with new issues in society. And I'll try to give you some sense of how we're trying to fill in the parts that are not addressed by 21st century skills, having projects inquiry added to the curriculum.