

Deep Learning in a Digital World

Tony Glover Defining Deep Learning

TONY: Deep learning, it means exploring the world of which we're a part, and society of which we're a part, in a meaningful way that will enable young people to draw conclusions for the future, and prepare them as life-long learners, and prepare them as what Michael Fullan describes as the forces for societal change, the antithesis of shallow learning or surface learning, which is just the acknowledgment and the recording facts. So deep learning, it's learning that goes into a subject area, into the rationale, into why society is as it is, and then looks creatively into solutions into how the world may continue. So it's to prepare young people to be life-long learners, and to prepare young people to be able to have that very active part in shaping the society that they will inherit.

I think that there is a whole body of research by which I am completely convinced that the best learning takes place when students are actively engaged, when students are genuine co-leaders of their learning, and where students genuinely have that sense of ownership and sense of purpose. And if we look at the core purpose, the core purpose of learning is not just to put a body of knowledge into students. The core purpose of learning is to prepare young people to be life-long learners within a society that will change constantly. And they will be the forces, the agents of that change.

So this kind of approach, it really helps those students to think critically, to think independently and to think collaboratively. And if I can give another illustration of how it works, when those students go to university, where the focus is on the students to follow their own individual work, it comes very naturally to them. They don't have that culture shift, whereas students who come from a traditionally-managed school, where they have more presented learning, more direction, then that shift can become quite difficult. But it's very natural for students who come up with a self-directed approach, to be questioning, to be challenging, to be looking for answers, to be looking for solutions rather than for them to just wait to be directed.

So the only researches I know of that relates to a more presented form is, I think it was an 1854, Charles Dickens produced "Hard Times," and Thomas Gradgrind, the education superintendent who just wanted facts and nothing else -- well, I don't know of any research since then that has shown that deep learning comes from students just being presented with information. There's a wealth of research, much of which is based here, that shows the other -- the best learning comes when students are co-leaders of that, and where there's the relationship between the teacher and the students, and

where there's a genuine collaboration between the students, and between the teachers and the students. I'm just completely convinced that it works.