

Deep Learning in a Digital World

Michael Fullan The Impact of Deep Learning

MICHAEL: The question of measuring impact and other evidence related to that is a very difficult one because we are leaving one system where the evidence was narrowly tested. Still important for literacy obviously, and math, but still limited at the same time. So we're leaving not entirely behind but we're adding to that. Still do that, but plus. And that we're adding to is into new fields where the measurement is not available and some people would say it would be a mistake to measure it too carefully because it would destroy the nature of it. So it's contentious and I recognize that. But at the same time I said earlier that we are looking at the new pedagogies in relation to the causal pathways to measurable outcomes. So what are the new measurable outcomes is the question?

And some of those are more proximate, such as a big increase in engagement on the part of students and teachers, and families. You can measure that. You can see it, you can feel it. So without question in deep learning we've seen the engagement equation go really intensify, be exciting and go up. So that we know I think it's on the right track. Satisfaction, excitement, all the things go around it. And then I think you go a step further. You start to look at some of the outcomes and the outcomes are improvement projects that are coming out of this are measurable in terms of the creativity, their impact that they can have on society on local or larger problems. So you can actually measure those. But we also are trying to measure the global competencies of the six Cs and we're able to measure them. We have a rubric so we can measure individual students, how are they going on this? Are they on the higher end of this rubric? Instead of searching up character education is formulated.

We have quantified the qualitative data if I can put it that way. That is we have examples of it and so we can say it's looking like this. But we also working with OECD, the OECD has been the body doing the PISA measurements which are the measurements of literacy, and numeracy, and science for 15 year olds across the world, 65 countries. And now we're working with them, they have project 2030 they call it which are students entering today and graduate in 2030. So our actual agreement with OECD is we're trying to measure they say, or assess these global competencies. You're developing them on the ground, can we have a partnership to learn from each other, which we're doing.

The problem is not measurement. It's when to measure, and how to measure, and how to get it right. It's not like for example citizenship you can't say why you can't measure that. Creativity, all the leading people in creativity, Ken Robinson being the big star, will say you can assess creativity. Just because it's new doesn't mean it's creative.

So we can assess these things, we just don't have the methodology at the conceptions so I think the unfinished business is to build on the engagement and the if you like products of the deep learning and to say how can we convert these also into measuring the six Cs because that will help us do it better. And I want to say a few words about accountability.

We have in our coherence book that I did with Joanne Quinn, we have four pieces that go together. There's focusing direction, collaborative cultures, deep learning, and securing accountability. So I want to just comment on securing accountability. And securing accountability is a good way to put it but accountability for us, and for a lot of people now is internal accountability, let's call it collective responsibility as well as individual. And if a group is responsible for its learning which is happening in deep learning, if they convey those results all the time--transparency we call it, if there's a climate of trust and risk taking built into it, if there's a commitment to using and showing evidence which is our securing accountability part the main reason you're doing all of that is not for external accountability. It's for specificity and proof that you're getting somewhere. And if you can get the specificity and proof about outcomes that you're getting somewhere it serves perfectly the accountability function.

So we want internal accountability to interface towards extra accountability than the other way around which is typical. So I think we will create new measures this way and they'll be embedded in what is being developed and also they'll lead as well as reflect the new evaluation evidence, external accountability systems that politicians want, that the public wants, and that OECD represents for example.

The other major factor within this panoply of events that we're talking about in deep learning is the teaching profession. And the teaching profession, and the role of unions and management--so it's big and it's fundamental and there are some countries where this has been a problem. U.S. is huge problem with the teaching profession. Canada has been better off and it's had a better teaching profession, better development. Finland is very strong. I did a blog for the Google Education Team about a month ago and they commissioned an independent research study of what's happening in Finland and what can other countries learn from Finland? So they said here's our findings, please comment on it.

So my blog was called Find Your Own Finland, and you can see where I'm going with that. You won't find the answer in Finland for your own. The answer has to be learn from Finland but find it and create it in your own place. So the rallying point for us--I'm talking about Andy Hargraves and Carol Campbell, and Gene Clint and myself as advisors to

the government, several other people--is collaborative professionalism. This is the answer for the future of the teaching profession grows in capacity and importance to the country. And collaborative professionalism is a little bit tricky because it includes autonomy plus collectivity, and normally we think if we say collaborative profession, where's autonomy? Well we know that autonomy is important for people to be good in groups. So autonomy doesn't mean isolation. It means you're not just controlled by the group all the time.

So Andy Hargraves and I just did a call to action called Bringing the Profession Back In. We did it for the learning forward conference which is going to be in Vancouver in December 2016 and in this we're going to present this I'm gonna call it formulated solution. And the formulated solution is to see the teaching profession rise in its commitment to student learning through collaborative professionalism with union and management co-endorsing it. So this is the complicated part. How do you get the governments and unions to be partners in this equation? [INAUDIBLE] on the local picture as well as the big picture. This is unfinished business for Ontario and for almost all jurisdictions I know, and certainly across Canada, British Columbia another one and so I'm thinking in the future we call this call to action Bringing the profession Back in. Bringing the Profession in, and so I want to think of another by-product of deep learning, or maybe even part and parcel of it is that the profession including the union rises to the occasion, becomes partners and causes even greater depth of learning than I've described.