Consider this: a teacher uses an interactive whiteboard to show a class how to do long division. She pauses only to reprimand a child who asks why he needs to learn this, as he has just worked out the answer on his phone.

Maybe there are good reasons for learning long division, but they aren’t the same ones that I grew up with. Technology in education can’t just be about changing methods of communicating knowledge – whether via an interactive whiteboard, a wireless netbook or a smartphone being illicitly used at the back of a class. It should also be about changing knowledge itself. What do we need to learn? How might technologies make it possible for more people to learn more things? Yet researchers, schools and policy-makers have tended to concentrate on how technology can enhance teaching without considering whether and how it should change the nature of what is taught. In this talk, I will consider how digital technologies can fundamentally alter concepts and practices, and how – with careful design – more people can gain access to them.