In his 2012 State of the University Address NUS President Professor Tan Chorh Chuan made reference to the “campus tsunami” that followed the launch of edX and Coursera, pointing to their incredible growth in a very short time. Coursera and edX are MOOC (Massive Open Online Courses) platforms, which make available to anyone for free—at least for the moment—courses taught by top professors at top institutions. MOOCs have the potential to increase access and strengthen teaching and learning; they hold great promise not only for people in remote parts of the world, where there may not be universities, or for people with disabilities who may not be able to attend university, but also have the potential to transform teaching on campus itself, for instance by providing rich content to students out of class time. This could help open up more time in classrooms to attend to hands-on work, the basis of the so-called “flipped classroom.”

But the “campus tsunami” does not merely refer to MOOCs. With the launch of Apple’s iPad in 2010—and subsequently tablet computers from other manufacturers — following the success of touch-screen enabled smartphones, a huge number of apps have become readily available, many of them free. The mobility of these devices and the rich array of apps available are changing the ways students and professors are interacting, their relation to knowledge production, and classroom dynamics.

How do we as teachers respond to these waves of digital technologies? How can we best draw on technological developments to teach our students well, to move from an emphasis on knowledge transmission—important though that is—to providing a foundation for students to learn independently? These are important questions as we are moving, seemingly inevitably, towards ever-greater use of technology in teaching.

I of course realize that there can be no single “role” for all teachers, and technology is as old as civilization itself. When it comes to information technology one useful model for thinking about the changing role of the teacher is Ruben R. Puente’s SAMR model, which takes its name from the different ways technology can feature in teaching and learning: Substitution, Augmentation, Modification, and Redefinition. The SAMR model implies a hierarchy: the idea is that each step is better than the previous in that it makes teaching more student-centric. But my own view is that we need not see these as stages in a narrative of improvement and progression. How one uses technology in teaching must depend, I think, on one’s learning objectives, what one wants to achieve as a teacher, and thereby of course by how one sees one’s role as teacher in the first place.

A helpful way for considering the role of the teacher is Pratt and Collins’ Teaching Perspectives Inventory (TPI), which identifies five common perspectives teachers have about their role. There is a self-administered questionnaire one can take to get a sense of one’s priorities as a teacher, and also whether one’s practices accord with one’s principles. In my own case, of the five perspectives

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the Developmental role is dominant, with Social Reform and Apprenticeship prominent, and they thus determine how I think about my use of technology. The dominance of the Developmental role suggests, for instance, that I see eliciting understanding through questioning as important; it is to strengthen this that I use iPads and Apple TV in my classes. Apprenticeship relates to a central aspect of my role as a teacher, namely to help equip students with the ability to write well and think critically. Social Reform, which emphasizes critical thinking about social issues, implies that the technology used should not make the teacher disappear. Indeed, the role of the teacher becomes even more important when we use technology, for it brings with it not only opportunities but also dangers.

We need our students to be “net smart,” as Howard Rheingold puts it in his recent book. This must involve, among other things, teaching students that “awareness of your digital footprints and impacts of your digital profiles ought to precede your conscious participation online. Think before you post, because your digital actions are findable, reproducible, and available to people you don't know, and will remain available to all indefinitely” (p. 249). Sherry Turkle, in her recent ethnographic study Alone Together, highlights the increased anxiety of the young people she interviews, which she relates back directly to the effects of social media, and digital technology more broadly. Turkle worries that such anxiety could lead to self-policing and thereby, paradoxically, less critical thinking (see p. 256).

From my perspective, part of our role as teachers must then involve being attentive to the dangers of information technology. Our role cannot simply be to celebrate its manifold opportunities, but we need to equip our students also with the means—what Rheingold, among others, terms digital literacies (see pp. 246-252)—of equipping them to interact responsibly with technology. If we are to use technical devices, then at the same time we must deny them the right to dominate us.

**Endnote**

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**References**


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**About the Author**

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