Navigating Massive Open Online Courses*

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We agree wholeheartedly with J. Reich that research on the effectiveness of Massive Open Online Courses (MOOCs) must focus on learning rather than mere clicking (“Rebooting MOOC research,” Education Forum, 2 January, p. 34). Our biggest challenge will be figuring out what is most appropriate for an individual student at a given moment.

Ideally, a MOOC would work like the GPS navigation device in your car. You tell it where you want to go, it figures out where you are, and it guides you along the most optimal route. Keeping with the analogy, current MOOCs are like having all GPS navigation devices instruct every car driver to turn right at 9:15 on Monday morning.

If we can’t adapt teaching and practice to the individual learner, MOOCs will never be more than a digital version of classroom teaching. To personalize the learning experience, we first need a detailed description of what a student already can and cannot do. Such information can be determined by traditional tests or by more powerful methods such as the practice-based trackers that already exist in other domains of online education [1]. The A/B testing discussed in the Education Forum provides us with ideal methodology to start putting roads on the educational map. Once we gather information about various conditions, we can map each student’s optimal route.

References

- [1] S Klinkenberg, M Straatemeier, and HLJ Van der Maas. “Computer adaptive practice of maths ability using a new item response model for on the fly ability and difficulty estimation”. In: *Computers & Education* 57.2 (2011), pp. 1813–1824.

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