

Time to open up?

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In my talk, I will present my personal experiences with 'open learning'.

'Open' in this context refers to:

- open *standards* that enable the use of a plethora of tools, so that students can create their own 'Personal Learning Environments': of course, the standards that define 'the web' dominate nowadays, though many so-called Learning Management Systems fail to take full advantage of the web as a platform.
- open content or open educational resources, that enable sharing and reuse of high quality content: although there are barriers to reuse, like the not-invented-here syndrome or copyright issues, few professors still create all the content for their courses themselves.
- open courses, where anyone can participate, either as a student or as an external participant: the result is a more networked or 'community of practice' based approach to learning that focuses more on 21st century skills like creativity, communication, critical thinking and collaboration.
- open accreditation, where so-called 'badges' are awarded to students, based on their activities: such an approach can undermine the prerogative of conventional universities as diploma awarding authorities.

So-called Massive Open Online Courses (MOOCs) have gained a lot of attention because of the scale at which they put some or all of these kinds of openness into practice. As such, they have created momentum for rethinking the role of conventional courses and universities.

Together with many colleagues throughout the world, we combine open approaches to learning with 'learning analytics' that relies on tools to collect the traces that students leave behind, both on-line as well as in the analog world. In my own research, we study how we can visualize these traces in personal dashboards for teachers and students that support awareness, self-reflection, sensemaking and that actually impact how we learn and teach.

It is obvious that such open approaches to learning have their own issues, including technical ones, but, more importantly, also issues around privacy and the completely changed role for students (who typically are required to take on a much more active role) and professors (whose conventional authority is challenged by more networked approaches to learning).

Throughout the talk, I will provide numerous illustrations from my own experience in 'teaching', both in the context of KU Leuven's formal engineering courses, as well as in MOOCs and other less conventional settings.

For more details on our research in this area, see for instance:

- D. Suthers, K. Verbert, E. Duval, and X. Ochoa, editors. LAK '13: Proceedings of the Third International Conference on Learning Analytics and Knowledge, New York, NY, USA, 2013. ACM.
- K. Verbert, E. Duval, J. Klerkx, S. Govaerts, and J. L. Santos. Learning analytics dashboard applications. *American Behavioral Scientist*, In press:10 pages, 2013.
- E. Duval, J. Klerkx, K. Verbert, T. Nagel, S. Govaerts, G. Parra, J. L. Santos, and B. Vandeputte. Learning Dashboards & Learnsapes. In *Educational Interfaces, Software, and Technology Workshop at CHI2012: ACM SIGCHI Conference on Human Factors in Computing Systems*, pages 1–5, Vancouver, Canada, May 2012.
- S. Govaerts, K. Verbert, E. Duval, and A. Pardo. The Student Activity Meter for Awareness and Self- reflection. In *Proceedings of the 2012 ACM annual conference extended abstracts on Human Factors in Computing Systems Extended Abstracts*, pages 869–884, Austin, TX, USA, 2012. ACM.
- E. Duval. Attention please! Learning analytics for visualization and recommendation. In *Proceedings of LAK11: 1st International Conference on Learning Analytics and Knowledge*, pages 9—17. ACM, 2011.