



"Thinkers in Residence" Programme from KVAB

Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten

Proposal for a

Digital Education Strategy for Flanders Universities

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1. Academic tectonics

Many authors have described the sudden rise of MOOCs through the metaphor of a tsunami. I dislike this metaphor since tsunamis are destructive, but it conveys the force of the phenomenon, as well as the fears it triggers. Tsunamis, earthquakes and volcanoes eruptions are the visible scars of the deeper but invisible movement of tectonic plates. This applies to academia. The question is not whether Flemish universities should or should not produce MOOCs or how much technologies could enrich blended education. There is a slower, deeper more fundamental movement, namely, the evolution of universities in the digital era. Universities have already become digital entities but have not yet adapted their strategies to this reality. Online or blended education is only a facet of this evolution.

Universities have become digital entities because both science and society themselves have become digital. From astronomy to sociology, from theology to urbanism, today's science handles large digital datasets, captured in and stored by digital devices and from which we produce publications as digital documents. Lab instruments and notebooks, sensors used in field studies and scientific models are digital. Even the ethnographer who records video interviews in Amazonia and analyzes them with video analysis software lives in this digital space. As data became shareable, science reached an unprecedented scale, as for instance with the human genome. Society became data-centric: each individual has a digital shadow, the traces produced by his credit card, his phone or the videos that others took of them. For the worst and for the best, our world is digital.

This digital world nonetheless remains physical. The fact that we download music does not prevent us to attend concerts. Billions of books are printed on paper despite the fact that they are digital objects. Humans are animals with physical needs living in a physical world. University campuses still have lecture rooms, labs, cafeteria and sport facilities. **Digital does not mean virtual.** The digital world does not replace the physical space. Universities are made of two interwoven realms, the physical and the digital space. Campuses are both physical artifacts and digital entities, as robots or 3D-printed objects are.

This report invites university members to rethink their campus – and hence the education they provide - as digital entities. This invitation can be turned into a set of questions. How could the digital data available (or to be collected) enhance university functions, teaching and research? How can these analytics enhance decision-making at all levels of management, from the lab to the chancellor's office? Are the measurements that students produce in lab activities available in such a way that the teacher may include them in his next lecture (workflow)? If a student found the course X very interesting, could (s)he be informed that "75% of the students who appreciated course X also appreciated course Y" (social navigation)? Can a student select three successful alumni and ask the system to elaborate a curriculum based on their university path (recommendation systems)? Could a university predict the success rate of students based on their degree of participation in a broad set of activities, ranging from sport activities or online discussion forums (machine learning)? Instead of partitioning professors into rigid structures, such as institutes or schools, could university structures emerge from digital data: units could gather scholars who published in the same journals or conferences and change every few years (social network analysis). Can the train schedule be adapted by knowing when each student currently on campus ends his campus day? These examples illustrate that the impact of the digital revolution on universities is much deeper than producing online or blended courses. Even if this report focuses on the highly visible phenomenon of MOOCs, the invisible transformation of universities is more fundamental.

2. Observations

During this year, we – Diana Laurillard and/or me – visited all Flemish universities and UCL. We also had frequent interactions with the KVAB “Blended Learning” experts group, consisting of experts and stakeholders from universities, government bodies, industry and a student association. Our goal was not to elaborate a systematic survey rather we collected informal observations that influenced my recommendations (Section 3).

- (1) Learning technologies are commonplace in Flemish campuses. Blended learning ranges from the storage of slides to innovative pedagogical projects. The density of technology usage varies across universities and within universities. There remain – of course- ample opportunities to further enrich blended education, but, in a nutshell, **Flemish universities already integrate learning technologies in their teaching**. Continuing to improve blended learning is a valuable goal and this goal should be on the Universities agenda. However, this incremental process may not have a transformative effect. This is why I propose a more tangible shift towards MOOCs.
- (2) Up to now, **MOOCs are not a priority on the agenda of Flemish universities**. They have been discussed and some projects do exist, but without a strong commitment from the University leaders. In the management echelon of universities, many experts view MOOCs as a non-novelty, embellished by some hype, while some non-experts view them as a threat for campuses. Many universities face this dual culture, risk taking in research but risk averse in education.
- (3) **Flemish universities have on their payroll the pedagogical and technical expertise required for a MOOC initiative**. In some cases, the technical and pedagogical expertise is distributed among several units, such as the ‘e-Learning Center’ and the ‘teaching & learning center’. In some universities, there is both a unit that provides services to the university staff and some labs conducting research on learning technologies. These teams know each other and they do interact with each other, but more collaboration could create great opportunities.
- (4) **Flemish universities invest a significant amount of funding in blended education**. This funding takes various forms: grants for innovation in teaching, staff and licenses for the Learning Management System (LMS), etc. This funding is not fully available for launching a MOOC initiative, but, with some flexibility, it could be partly re-purposed, as explained later on.
- (5) There exist points of collaboration between Flemish universities regarding learning technologies. Various bodies, committees and institutions (e.g. KVAB) created working groups or produced whitepapers on learning technologies. Unfortunately, the expertise and responsibilities seem to be spread over many actors: **Flanders probably misses an entity that could act as the main reference for learning technologies**. Creating such an entity already was already a recommendation from KVAB in 2001
- (6) The integration of the former ‘hogescholen’ into the university system has introduced a certain complexity in terms of geographical dispersion, the number of students, diversity of degrees, etc. My intuition is that these complex multidimensional campuses should not be managed in the same way as traditional campuses, but build upon the digital thinking presented in the introduction.

3. Why? 16 reasons for doing MOOCs

I see 16 reasons to start producing MOOCs. I structured them into 4 clusters.

Cluster 1: "Like it or not, it is happening."

[Point 1] *It is already there!* From the data I obtained from Coursera and EdX, I estimated¹ that about 50'000 persons have taken a MOOC in Belgium in 2 years. Citizens and students pick on the web anything they consider useful, including MOOCs, without asking anyone for the authorization to do so.

[Point 2] *Universities are losing control.* On the one hand, they lose control of who enters their digital teaching space. Participants join MOOCs, from teenagers to old ladies, without any control of pre-requisites. Employees in companies take MOOCs without asking their HR manager. On the other hand, what students learn is not restricted to what their university provides them. In lecture theatres, some students google their teacher's claims in order to verify them, others search YouTube for better explanations, etc. Students are no longer the prisoner of the professor assigned to them but may follow the MOOC of his colleagues.

[Point 3] *Universities are losing their semi-monopoly.* Citizens and students take whatever is useful and credible. Many engineers have already taken expensive training courses such as those for a "Cisco certified engineer". There is a growing diversity of actors who offer training, such as sport associations, NGOs, religious bodies, etc. To remain on the map, universities have to rethink what differentiates them from other training providers.

[Point 4] *There is no way back.* Nowadays, most university students take for granted that the teaching material (slides, examples, demos,...) is available on-line. Some students spontaneously record lectures when a friend is absent. Video has become an everyday substance: citizens record videos in any public event; they produce videos for wedding or parties, they ski or cycle with a camera on their body, etc. I expect that, very soon, our students will complain if the videos of a course are not available somewhere. The current format of MOOCs may disappear, but the ubiquity of videos -in diverse forms- is only in its infancy. Video has become an everyday substance.

Story. DuoLingo is a language learning platform that attracted 38 millions participants in two years. It proposes simple language learning activities. Access is being entirely free. What is striking is their financial model, which breaks away from any academic idea. The company uses crowdsourcing to translate into many languages the texts produced by other companies, such as CNN: the learners receive sentences to translate, beginners translating simple sentences and advanced students translating more complex ones. The quality of their translation can be checked since several thousands of them may be translating the same sentence. Using crowdsourcing to finance education maybe shocking from a Humboldt perspective, but this approach illustrates how far digital education may be different from the way we think our university teaching.

¹ Estimation made in April 2014.

Cluster 2: "Better be an actor than a spectator!"

- [Point 5] *MOOCs tickle the academic landscape.* In the US, the rise of MOOCs cannot be disassociated from the financial crisis of universities and from the huge debt that students accumulate during their studies. In Europe, MOOCs tickle the relationship between universities. On the one hand, they increase competition between universities by letting universities "fish" on remote territories. On the other hand, they facilitate collaboration between universities that can more easily than before build joint curricula.
- [Point 6] *MOOCs may kill small universities.* MOOCs re-activate the debate between large and small universities, between research universities and teaching universities, etc. This question is not bound to MOOCs, but some scholars argue that small universities might disappear since successful MOOCs originate mostly from top universities. In contrast, small universities might benefit from MOOCs by giving a professor a worldwide visibility that he could not otherwise get from the reputation of his or her university. I don't know which of these two predictions is correct and how the European academic landscape will evolve in the next decade, but I am convinced that MOOCs will be one of the main factors of this evolution.
- [Point 7] *Risk is an academic duty.* The previous point acknowledges that MOOCs constitute some risk for academia. Risks concern the financial impact of MOOC but also data privacy and intellectual property, etc. It is legitimate to estimate these risks before deciding to engage or not in MOOCs. However, the future is not foreseeable: the MOOCs of tomorrow do not exist; they will be what universities collectively invent. If universities are not willing to take some risks, who else? University professors have a culture of risk taking in their research – writing ambitious research proposals with goals they are not sure to reach. Unfortunately, this culture does not expand to their teaching. It is time to upgrade education to the same level of entrepreneurship as research and MOOCs somehow contribute to this cultural change.
- [Point 8] *The corporate world is going for MOOCs.* Corporate actors are very aware of the disruptive power of MOOCs, in terms of competition between actors but also internally. Moreover, MOOCs tickle the traditional organization of corporate training. For instance, if the employees following a MOOC on management are asked to provide examples of corporate silos, their homework provide the company management with highly valuable feedback on what is happening in the company. If a worker is invited to record a video of his excellent practice, this MOOC is not only a training resource but also a valorization tool for this worker. If a MOOC is designed for the company's customers, should it be produced by the training department or by the customer services unit? MOOCs bypass the usual perimeter of corporate training and yet many companies are exploring their potential.

Stories. A Scandinavian university invited its students who registered to the local course in SCALA, a programming language, to register instead to a MOOC given by an EPFL professor, Martin Odersky, who invented SCALA. Another university is currently negotiating with EPFL to buy two MOOCs and translate them in their national language for their own students. This is happening today. Academia may not like these tectonic movements but I am I don't see any way to stop them.

Cluster 3: "The current situation of universities is far from perfect, anyway!"

[Point 9] *University pedagogy is not very effective.* Lecturing is an effective method from the teacher's viewpoint, since the teacher may deliver a large amount of content in a limited time. It is less effective from a learner's viewpoint: learning is the side effect of processing information and listening requires a shallow processing of information. Eventually, students do learn because they engage in deeper processing outside lectures: they write summaries, they explain to each other, they do exercises, etc. Moreover, the exercise sessions -which are central to engineer training- are also not very effective. Very often, students come unprepared and expect the teaching assistant to carry out most of the work. In both cases, tradition is not always synonymous with effectiveness. Some universities are radically engaged in reforms such as problem-based learning. MOOCs allow universities to explore various forms of pedagogy around the notion of a "flipped class": the registered students watch the lectures at home or anywhere and come on campus for richer activities with the teachers.

[Point 10] *The academic system is not as useful for the society as it could be.* The way students enter and leave universities is not optimal. In some disciplines, too many students enter university to get degrees that will not provide them with a job. In other domains, namely engineering and sciences, universities do not deliver the number of degrees that the economy needs. In all disciplines, many students fail the first academic year. This failure rate represents a huge waste of money for an educational system. After their studies, many students get jobs for which they have not been trained because curricula evolve more slowly than the market. I am not claiming that MOOCs will solve all these problems, but merely pointing out the space for improving current practice and systems.

[Point 11] *Teaching is not valuable for an academic career.* It is a common place to notice that research performance is the key factor for academic promotion. For many professors, teaching is more a duty than a priority. The professor is usually alone in a lecture theatre, teaching being almost a private activity. **MOOCs make teaching public.** This generates a stress for professors when they record their MOOC: any mistake will be publicly visible. However, this visibility is improving the academic status of teaching. It becomes a higher stake activity.

[Point 12] *Do tax payers understand academia?* Europe has the unique chance of publicly funded universities. However, this public funding is constantly threatened by the weaknesses of national economies. How many taxpayers perceive campuses as nice environments for privileged people rather than as an economic priority? Universities should make their contribution to society more visible. I am not talking here about the creation of start-ups or about collaborations with Flemish companies, even though these could be critical aspects of the MOOC strategy, but about training citizens concerning societal issues and providing lifelong learning to all Flemish citizens.

Story. My university, EPFL, has launched two successful introductory programming MOOCs, respectively in JAVA and C++. Teachers reported that, during exercises sessions, students would often ask questions on topics that they had just been taught in the precedent lecture. Their observations – not yet confirmed by robust empirical evidence- is that students who have watched the MOOC at home seem to be better prepared for the exercise sessions. Given the importance of the exercise sessions on the skills of our graduates, if the only benefit of MOOCs was to make exercise sessions more productive, this single effect would still justify the energy we invested in our MOOC initiative.

Cluster 4: "MOOC create new opportunities"

- [Point 13] *Scale is an opportunity.* The scale – the number of students- is perceived as a great opportunity in terms of opening access to education, but also at times as an impediment to pedagogical effectiveness. Some learning activities scale well: how much John learns from watching a video or from answering quizzes will be the same whether there are 10 or 10'000 other students watching the same video. In contrast, some learning activities, manageable with small classes, do not scale up easily, for instance group discussions or solving ill-defined problems. At the same time, scale enables new approaches inspired by crowdsourcing. For instance, the peer grading mechanisms implemented in MOOCs provide some anonymity on a large scale. The pedagogical future of MOOCs is to invent new pedagogical methods that benefit from the new scale of education.
- [Point 14] *Bologna is an asset.* So far, MOOC certificates are not accepted as equivalent to ECTS credits in most European universities. One reason is the rate of plagiarism in students' work. However, techniques for online-proctored exams are rapidly improving. Sooner or later, on-line tests will be as reliable or even more reliable than on-campus exams. When this will be the case, Europe will have a unique opportunity to build the largest educational ecosystem, since it has already the currency for sharing courses, the ECTS credits, as well as the basis for collaboration, the Bologna treaty.
- [Point 15] *MOOCs can boost educational research.* MOOCs expand the methodology of educational research. The empirical methods used for many years on education research can now be applied at large scale by MOOC platforms (A/B testing). The massive accumulation of learning traces can feed machine learning algorithms. Learning analytics brings education to the era of large-scale inductive science that is already shaping many other sciences. The movement of 'open analytics', i.e. sharing empirical data across labs worldwide, mimics the phenomena that boosted other sciences one decade ago. In the future, educational research should not be only conducted by educational scientists, but by any scholar involved in education.
- [Point 16] *Visibility.* I deliberately left this point as the last one, because it has been over-emphasized. Nonetheless, like it or not, universities compete for the best teachers and the best students. Universities and individual professors are concerned by various indices of visibility such as their number of citations, rankings, H-factor, etc. MOOCs participate in this measure of worldwide visibility and I expect them to be soon integrated in international university rankings. If this was the only reason to do MOOCs, it would not justify the effort. But, this visibility is a positive side-effect of MOOC efforts.

Story. How do you teach a course on Venice? Typically, a history teacher would show traces, pictures, movies and maybe bring students to Venice. EPFL is working on digital environment called the "Venice Time Machine": Venice was a bureaucratic city that recorded in huge manuscripts all construction works, the contents and passengers of all boats entering or leaving the city, etc. The project aims to scan the kilometres of archives using tomography (manuscripts cannot be manipulated by automatic scanners) and thereby to offer to students a unique environment to navigate through the history of the city of Doges.

4. What? 8 project proposals

The previous section provided reasons to engage into the production of MOOCs. However, if Flanders universities would simply start producing a few MOOCs in 2015, this would not generate the same visibility as for those who started in 2012. Therefore, I recommend instead launching an ambitious initiative that positions Flemish universities as front-runners in digital education. The term “ambitious” may refer to various challenging goals. I describe some of them hereafter, among which universities could pick local priorities or the government could identify Flanders priorities.

1. Create a brand associated to a positive learning experience

I recommend Flemish initiatives to strive for courses and degrees that have a higher quality than average MOOCs, creating some kind of “brand” for digital education. The quality of a MOOC is often estimated by the quality of the contents presented and, to a lower extent, by the sound and image quality of the video. I expect that MOOCs will converge to a certain quality standards in terms of video: MOOCs that are below the standard won't attract students, but the investment to produce higher video quality will not necessarily generate more participation or better learning. Instead, I hypothesize that other elements will create a difference from other MOOCs, namely the quality of activities (e.g. using a high-fidelity simulation), the social dynamics among learners and the individual support to participants (coaching, personalized feedback,...). The report produced by the other member of the Thinkers-in-Residence program, Diana Laurillard, proposes methods for high quality digital education. Altogether, MOOCs will be valuable if they provide participants with a positive learning experience. This brand can be associated with one specific university or to the Flanders academic system in general.

2. Improve the transition to university

I do not believe that MOOCs are the magic response to all academic problems, but a MOOC strategy is more robust if it addresses problems than if it relies only on the mythic notion of innovation. The energy invested in digital education should be devoted to the problems of the academic system such as failure rates in the first year, the lack of students in some curricula (e.g. engineering) and the mass of students in other curricula (e.g. psychology). I recommend that Flemish universities could collaborate to prepare 10 MOOCs, i.e. 2 MOOCs in each university. The first 5 MOOCs would address university pre-requisites in mathematics, physics, biology, chemistry and computer science. The next 5 MOOCs will cover the content of the first university years in the same domains. They would be integrated with on-campus exercises sessions in order to increase their effectiveness.

3. Improve the effectiveness of on-campus exercises and lab sessions

Exercises sessions and lab activities are critical components when training engineers and scientists. Yet, they are often criticized by students as being poorly related to theory presented during the lectures. In addition, students tend to behave passively during exercises: many come in order to get the solution instead of trying to solve the problem on their own. MOOCs offer solutions to make these on-campus activities more productive. EPFL experience seems to indicate that students tend to come better prepared to exercise sessions, having digested the theory. For labs, two types of MOOC could be developed. “Lab Debriefing” MOOCs: the data collected in a physical lab can be stored in a database that feeds the next MOOC activities, where the teacher explains what the students are supposed to have learned. “Lab Passport”: in many universities, students and new staff are required to follow short specific courses before using scientific equipment, e.g. how to operate safely a laser, how to sterilize containers, etc. These courses have to be repeated many times every year, which justifies a MOOC. Moreover, since equipment is rather similar across universities, these MOOCs could be developed collaboratively.

4. Increases academic agility

The stability of academic curricula creates cultural references: employers know more or less what they can expect from a civil engineer or an art historian. I do not suggest to abandon these core curricula but propose, in addition, to create smaller curricula that can be elaborated rapidly according to the evolution of the market. These can be certificates at the masters level on topics such as a mobile computing, medical sensing, counter-terrorism, racism, flying robotics, etc. The notion of "agility" refers to the time and energy needed to build these new certificates. To fasten the design and launch of new curricula, I recommend (1) a "fast track" process (not going through the usually slow curriculum revision processes), (2) to involve researchers, namely postdocs, in content production, (3) to collaborate with other universities. Typically, these small curricula correspond to the mission of continuing education assigned to universities. They are expected to generate revenues. They can be conducted in a blended way, e.g. ending by a residential seminar, especially for the MOOCs conducted in Flemish.

5. Reduce unemployment

Despite the fact that unemployment is low in Flanders, I recommend the Flemish government to fund a MOOC-program focusing on employability. This initiative would first develop mechanisms for detecting training needs among SMEs, by monitoring social networks and analysing the questions raised in MOOCs. While large companies often have a corporate training strategy, this is often not the case for SMEs. Second, the initiative would elaborate rapidly some online nano-curricula focused on these specific needs, as explained in the previous point. I would recommend Flemish universities to involve the former "hoogscholen" in this mission.

6. Involve citizens

The citizens who are or have been at University represents only a small fraction of the Flanders population, i.e. of the tax payers. In times where public funding of Universities is facing the need to reduce national debts, I recommend Flemish universities to make their usefulness to the society more visible, namely to make knowledge available to Flanders citizens in a **non-academic format**. This can probably be done in collaboration with other media (e.g. VRT). In the key public debates such as the changes in energy production or immigration, there is no such thing as an "objective viewpoint". Nonetheless, a rigorous and scientific approach, based on empirical evidence, would certainly contribute in a positive way and, in return, discard the image of university campuses as places for privileged people.

7. Build Alumni Networks

European universities have only recently started to develop alumni networks, which are critical in the funding of American universities. One way to maintain relationship with alumni is to offer lifelong services such as a permanent email address or MOOCs that refresh on a 5 yearly basis the knowledge they acquired during their university studies. As suggested by G. Vandepierre, this offer would be like a "diploma with a service contract".

8. Contribute to teacher training

Many high school teachers have left university many years ago, while their scientific domains, such as biology, continues to evolve rapidly. Universities should provide a regular refresh of their domain expertise. This could be developed as collaborative MOOCs (cMOOCs) around teacher communities.

5. How? 8 suggestions regarding organization

To pursue the challenges mentioned in the previous section, I express now some recommendations in terms of structures or organisations.

1. Start from the top management.

On the one hand, the production of MOOCs is a bottom-up process: they only exist if, at some point, a professor decides to invest a significant amount of time. On the other hand though, this engagement will remain sparse if MOOCs are not highly valued by top management, especially the rector of the university. The success of a MOOC initiative depends upon the consistency of the vision across all levels of the institution, from rectors to deans, professors, researchers and technicians. If a rector does not consider digital education as a priority for the development of his or her university, I would recommend not launching such an initiative. I also recommend including in the university board a vice-rector for “digital campus”, who would coordinate all university efforts in that direction.

2. Just do it.

A reasonable way to launch a MOOC initiative would be to gather a committee that will define objectives, elaborate a strategy with actors, resources and responsibilities and, once, this is done, to start producing MOOCs. This committee is proposed hereafter. However, I propose starting immediately with the production of MOOCs and building a reflection group in parallel. Deep reflection does not replace experience, because several phenomena emerge in MOOCs that could not be predicted despite experience. Indeed, many of those – students and professors- who voiced a negative opinion before we launched MOOCs at EPFL two years ago actually changed their mind once they experienced a MOOC. A priori opinions were mostly based on fears that rapidly fade out. I recommend devoting 100 K Euros/Year per university to the MOOC strategy. This budget, combined with suggestion (3), would be enough to produce 2-3 MOOCs per year and to learn from experience.

3. Repurpose part of the resources currently engaged in digital education,

As mentioned earlier, each Flemish university has already parts of what is necessary to address the ambitious goals listed in the previous point. In terms of human resources, each university includes teams that manage the learning management systems, as well as the teams that support teaching activities (e.g. “center for teaching and learning”). These teams possess expertise in technical as well as pedagogical aspects of digital education. Moreover, some universities have research teams in educational psychology and in computer science that are of international renown in digital education. These teams seem to have been somehow more sceptical than enthusiastic about MOOCs, but this scepticism is a healthy attitude needed to filter out the hype around MOOCs from what is pedagogically valuable. Concerning financial resources, the “total costs of ownership” of learning management systems is far from being negligible and could also partly be oriented towards MOOC initiatives. I do not claim that repurposing is easy to implement. It has to be smoothly introduced since many prior engagements have to be fulfilled. My point is that the ambitious goals described in the previous section could appear utopic if universities started from scratch but that they become realistic if one takes into account the current level of development of digital education in Flemish universities.

4. Elaborate an educational strategy, globally, not a strategy restricted to MOOCs

The initiative should not focus exclusively on MOOCs, but include all channels by which knowledge produced in Universities is transmitted to students located on campus or off campus. A course may include any combination of on-line and face-to-face activities, depending upon the constraints of the target audience and the learning objectives. This global approach allows identifying synergies between various training offers: the set of digital and physical resources produced for a course can be restructured for another audience without duplicating the effort.

5. Deliver official certificates

So far, the level of plagiarism prevented most universities from giving official credits to students who complete a MOOC. Sooner or later, the biometry techniques of online-proctored exams will be as reliable - or even more reliable than on-campus exams. Then, if universities give ECTS credits, Europe could – thanks to Bologna- offer something unique. In the meanwhile, Flemish higher education institutions could become a network of testing centres such as no student would have to travel more than 30 minutes to pass an exam.

6. Launch a research initiative on evidence-based education

There exists great research expertise in educational psychology and learning sciences in Flemish several universities. Yet, this excellent research only has a minor impact on university teaching. MOOCs led to a renaissance of evidence-based education. The initiative could consist in creating an interdisciplinary research center that integrates the existing expertise in empirical educational research with the power of learning analytics, or in launching a research funding scheme, managed by the Flemish Science Foundation.

7. Create a Digital Universities Committee

Some projects mentioned in the previous section can only be conducted if several universities collaborate. If each University has a new vice-rector whose mission is to re-think the digital campus (recommendation 1 in this list), they could together become the Digital University Committee (DUC). Administrative staff of VLIR or KVAB could provide the admin support for this committee. In addition to the collaborative projects mentioned before, e.g. joint curricula or transition programs, this committee would have missions that are better tackled collectively:

- To negotiate an agreement with a MOOC provider in order to enable all universities to run open online courses. It has become difficult or expensive to join some platforms. I recommend resisting to the temptation to develop a new platform.
- To define the conditions under which a MOOC may lead to ECTS credits.
- To negotiate with the Flanders Science Foundation to launch a research initiative on evidence-based education or to create a learning science institute.
- To negotiate with OUNL (next point)

Creating this committee is not a condition to start the other projects. This recommendation should not be used as an alibi for slowing the down the pace of the MOOC initiative.

8. (8) Rethink the partnership with the Open Universiteit Nederland (OUNL)

OUNL has a fantastic experience in online education as well as a rich network of centers. It does not however have the scientific reputation of universities such as KU Leuven. It would a mistake for Flanders Universities to “outsource” in some way their digital education to OUNL. I would rather recommend rethinking deeply the partnership with OUNL. Some inspiration may come from the Open University Australia, which is actually owned by standard universities. In simple words, MOOCs are turning all universities into “open universities”, which generates new forms of computation but enables new forms of collaboration

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