

# Re-Designing the Traditional University: An Answer to Learning-On-Demand for Employees

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**Abstract**—The student is changing at universities and university colleges. Also adult-learners find their way to the universities. Formations for adult-learners have to be more efficient. The biggest cost for formations for adult learners is their absence at the workforce. Question is how to open knowledge in a traditional university (college), taking into account that the students are no longer an homogeneous group. A solution is found in the Goettingen catalogue of instructional models, where for twenty didactic models the possible integration of e-learning or blended learning is presented. Lecturers are supported to develop blended learning courses. Specific formations for lecturers to handle the new situation with very heterogeneous learners are developed and seems to be necessary.

**Index Terms**—Blended learning, e-learning, didactic model, virtual learning environment (VLE).

## I. WHO IS OUR STUDENT?

Due to the Bologna-process in European higher education, the students are no longer the regular young people between 18 and 22 years. Also adults are taking opportunities to study at universities and university colleges. Adult students have however another status: they combine learning and working, have a family to take care for, and study not necessarily for a diploma. If they need a course they subscribe only for that course. The mix of these students and regular students is a challenge for lecturers.

Especially the adult-learners, with a job, have some specific characteristics, that university colleges and lecturers are not used to. The content of the existing courses are mostly not personalized enough for learners. They are mostly considered as too general and theoretical. “Heterogeneity was too big”, “Level not appropriate”, “I didn’t learn nothing new today”, “Much too difficult” are often heard critics of adults on formations. However is the specific knowledge that is desired by employees without any doubt present in universities. On the other side is developing specific courses that meet the requirements of adult-learners very expensive. Adult learners also prefer just-in-time and just-what-is-needed learning. For employers the highest cost of formations of employees is mostly not the cost of the course, but the cost of being absent and non-productive at the work floor. Employees are more and more encouraged to attend evening courses or even self-studying courses at open universities. In the knowledge-economy of tomorrow lifelong learning will be a must for every-one. Efficiency of formations will have to increase and at the same time will cost have to

decrease. Learning what is already known by employees is not affordable anymore.

E-Learning, in the meaning of offering content through the internet and content management systems didn’t brought the desired solution. Personalized contacts and discussions with lecturers and peers, socializing activities are considered as important as content, also for adult-learners. A simple example can illustrate this. An employee informed for a specific and short-time course on graphics in Excel. Where ever she informed she was sent to courses either at a beginning level either at an advanced level, but always was there a lot of content in the formation that she already knew or even didn’t need. Important to remind and to know is that at least twenty lecturers in our university college have the desired knowledge, but not the format of offering that particular course. The research question is: how to open knowledge in traditional university (college)?

## II. RESEARCH PROJECT

A three-year research proposal and project was approved by the Flemish government. First of all was to do research on why e-learning didn’t meet the expectations? First steps for explaining possible explanation can be found in the three next quotations: “If content is all we need, why would we need universities? Libraries could do the job!” (D. Wiley). If content is king, then context is queen (E. Duval)! Context is king. Content is just another part of the learning environment (P. Baumgartner).

Starting from the fact that content is just another part of the learning environment, our question is what else can make the VLE successful. An answer was found in the Goettingen catalogue of instructional models (Haller, 2006), in which twenty didactical models were described and most important in which way or another e-learning can support the didactic models. *The didactic models are especially usable for the planning of Blended Learning arrangements which are didactic settings using a blend (mix) of different methodologies and learning environments such as classrooms, web-based learning environments as well as practical learning on the job or in learning projects.* (Haller, 2006)

The difference with the past is that ICT and the VLE are no longer the main or dominant factor. The lecturer and his course with his/her students is the main focus with the fact that the students are no longer a homogeneous group between 18 and 22 years, with the first task to attend courses.

With these information a questionnaire is made and carried out in five test-cases. The test-cases are spread

upon the different departments of the university college, like e.g. teacher training, industrial sciences and engineering, accountancy, Spanish, ... Lecturers, who are volunteer, will be supported in transforming their courses into a course with an e-learning component. In the first appointments a conversation will be set up about the didactic models they use and which didactical principles they think are the most important in teaching with their students. The research group will carry out the ictelements in the VLE.

For some formations, like e.g. industrial sciences and engineering, the production of digital learning materials seems to be very important. As they wish, digital learning materials will be made in Flash and published online in the VLE. For some test-cases the production of online or digital learning materials is really not important. E.g. in pedagogical sciences in the teacher training lecturers are more and more convinced that students can work together in or out the classroom to produce comments and even own learning materials. The basic learning materials will still be books or printed course materials. For them there is no need for producing and publishing learning materials in the VLE. However a wiki seems to be more appropriate for them and a wiki is then made for them. This is one of the most essential changes in comparison with the introduction of the VLE a few years ago. Lecturers had to use the same ICT-tools, without realizing if this fit into their teaching practice. VLE's, WEB 2.0 applications, online office applications, Flash are used when there is a need for it, not because the tools are available.

Support will be offered when necessary on an individual basis, as well for lecturers as for students. An e-learning helpdesk will be set up. Due to the fact that ICT is integrated in a very different context for the different test-cases, the students will be offered basic courses and support, depending on the tools that will be used. The e-learning helpdesk will serve and support both parties, the teachers and the learners, and that on an individual basis.

One of the problems that will still have to be solved is the cost of the model after the funding. Offering support on an individual basis is very efficient but at the same time very expensive. A business model will be worked out. The main question remains if employers really will be ready to pay more for a formation that meets the requirements of a modern job, namely just-in-time and to-the-point learning in combination with a reduced absence at the work floor?

### III. FORMATION

What was already established very early is that an extra formation for lecturers is necessary to make the shift in the new way of teaching, in which they teach at the same time to different target groups. A postgraduate 'e-learning and teaching and learning with ict' is developed and will start next academic year. This postgraduate is open for lecturers of our own university college and for lecturers, teachers and interested people in all kind of organizations. What was remarkable, was that by announcing, a lot of colleagues react very enthusiastic. For the moment there are 27 registrations from the most diverse organizations.

The postgraduate consist of four modules: a pedagogical module in which the main topic is the changed vision on teaching and learning. Also attention is

giving to the characteristics of the younger generation, often called the generation Einstein, or the WE/ME generation. It is essential for lecturers and teachers to realize that the younger generation has another view on ICT. What for the present generation high tech is, like e.g. WEB 2.0, PDA or iPhone, is just part of the life-style of the younger generation. This will have for sure consequences on the use of different ict-tools. In the second module, the technical module, the main goal is to offer the course participants an overview of existing ict-tools that can add a surplus value to the didactics. It is not a goal to learn lecturers, e.g. flash. I flash is needed, the flash-files will be made for them. The third module is a module about communication, change management, ethical and judicial aspects about the "E" in teaching practice and organizations. In the fourth module learners are asked to take first steps into a changed didactical process. With support of the coaches they will try to teach in a blended learning approach to different target groups.

### IV. CONCLUSIONS

How to open knowledge in a traditional university college, regarding the fact that the student is changing, is the question that needs an answer. E-learning, in a sense of offering content online, without sufficient supporting activities for the learners did not work. Blended learning is a possible strategy. For redesigning courses the Goettingen Catalogue of instructional models is used. Teachers didactical practices are discussed with researches and checked on possibilities for moving into an integration with e-learning opportunities. Blended learning means that the didactical model is still the core-element and that when an VLE can offer a surplus value it is integrated. The shift into the new role of the lecturer facing very heterogeneous learners is a challenge and an appropriate formation seems necessary. Additional research on the business model is still to be done.

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