EADTU-EU Summit 2015
"Transforming Education; How to take the next steps"
Paul Rullmann, Chair SURF, Association for ICT in Dutch higher education and research

Transforming Education; How to take the next steps

The digitalisation of education in Europe picks up speed. Not everywhere in the same way and not on a full scale, but in general a good basis has been built up in infrastructure and in teaching and learning. That is a good thing, but it is not enough. If we want to accomplish our goals: widening participation, improving the quality, facilitating lifelong learning and bridging the skills gap -, then we need a transformation of education. It is important that Europe takes the right steps to foster this development. In other parts of the world (the US, Canada, S.E.-Asia) they are moving faster. For the knowledge continent that we are the question is: how can we stimulate this transformation in Europe as well?

Transforming education is more than offering existing educational concepts and means digitally. It is about integration of technology in the learning process in such a way that it becomes an integral part of education; resulting in a whole that is greater than the sum of the parts, in educating more students and in helping them to get better results. It is technology and new ways of teaching and learning combined. Although we're on the move, we still know only very little about the way we can transform and improve education with the help of technology. It is a consolation that we know more than ever before. And that also in the past not knowing everything didn't restrain us from choosing new directions. What we surely know is that technology is there in abundance and inevitable; the challenge is to make sensible choices. Doing nothing is no option.

To make sensible choices we have to know how this speeding up does happen.
In educational institutions nowadays two movements come together: on the one side – bottom up- there are experiments with digital teaching by individual teachers and early adopters, and on the other side – from the institutional level- there are the investments in administrative software and digital learning environments. For quite some time these two movements were only loosely connected. And in many institutes they still are. But with the implementation of digital testing and with the interest in learning analytics digital education becomes more and more a strategic decision. It becomes something that has implications for the institution as a whole. And so, transforming education marches on towards the heart of the institution. Teachers and ict-innovators come together and form an early majority.

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And there's another thing: the quick rise of MOOC's (massive open online courses) raised the question: do traditional institutions still have added value? Luckily the answer is: Yes they have. MOOC's and online education in general are very suitable for all those 80 million young people that have no access to higher education whatsoever and for the workers for whom not so much the degree is important as well as the actual knowledge. Yet, this doesn't give us too much comfort. Because the one thing we did learn from MOOC's is that we can do better and that traditional, 'ordinary' education can and should be improved. MOOC's have drastically risen the level of expectation of the students on what good education can and should be.

So - again - the question is: how can (institutions of) Higher Education take the right steps to accelerate this transformation process? I have 10 recommendations for you. Most of them concern the institutional level, because I strongly believe that the starting point of innovations lies there; some are on the systems level:

1. **Treat digital education as a whole.**
   In higher education there are three main areas in which digital developments are visible nowadays. We talk about *on campus blended learning*, we talk about *online and flexible learning* (that is lifelong learning) and about *open education* (MOOC's and so). There is a tendency to treat these three as separate areas of development, with their own ways of doing, their own rules and regulations and their own business plans. But when it comes to new ways of teaching, new methods and pedagogics (think about flipped learning, game-based-learning, collaborated learning, peer-to-peer learning etc.) then the dividing line is artificial. It is because of the MOOC's that blended learning is enriched and becomes more efficient and – due to all the learning analytics - can be made to measure for many. And it is because of MOOC's that flexible, off campus learning can become as good as blended. So let's not divide everything in segments and separate frameworks, but look for similarities and crossovers and use each other's experiences.

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2. **Set the path as Executive Board**

   It is very important that the Executive Board of the institution shows leadership and formulates its digital ambition without hesitation; that the Board stimulates a culture of innovation and that it offers room and support to speed things up. When a clear institutional ambition is missing you won't get far and are at best muddling through in individual hobbyism. There is still a lot of hidden resistance and reluctancy that kills innovations easily. A clear position of the Board is much more important than often assumed.

3. **Create a special place for development**

   In education – with so many fixed rules, frameworks, schedules, year cycles etc.- changes take a lot of time. You easily overstretch the possibilities of the organisation. So it's better to start small and scale up later, when the innovation has proven to be a success. Start your experiments in a special corner of the institution, in a university college, a new course or programme, an extension school or whatever. But also then: do it on the basis of a plan and a programme. The time of hobbyism has passed.

4. **Be sure that the teacher is the pivot**

   Many digital developments are initiated by highly ambitious ict-departments or by education developers. Very commendable, but the main subject is education in the relation between teacher and student. All too easy the ict-influence pushes the teacher away and puts him in a suffocating mantle of software; it should be the other way round: the teacher should keep the initiative, with the software and the tools as supporters.

   The teacher in the middle in online education, leads to another very important effect: the growing visibility of the teacher. Visibility or reputation mainly is the domain of the researchers, due to the central role of citation indexes and rankings. But now, with all those online presentations, also a good teacher can be visible all over the world. Some have an audience of millions. This surely influences the status balance

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between teachers and researchers and is a big incentive for teachers to modernise.[1]

5. **Organize a support structure around the teacher**

   The teacher should be the pivot in education, but he cannot and should not do everything on his own. He/she is part of a whole chain of production. Ict-specialists, facility employees, education developers are all part of it as well. It is difficult to mould this chain into a collective team, but when you succeed, it is remarkable how smooth teachers and supporters can work together and how eager teachers are to use the knowledge of media-specialists, instructional designers and education specialists. In the past teachers sometimes cherished some disdain for the supporting staff, now all are part of a team. And the result is: education as a collective and better product, team members that are responsible together and feel proud of it together.

6. **Differentiate between the tool and the content**

   Everyone has a smartphone with the same possibilities, but everyone uses it differently. It is a tool with multi possibilities. It is frustrating when your smartphone tries to dictate special content (Apple only Apple, Google only Google, Microsoft only Microsoft; very irritating). Keep that in mind. The same shouldn't happen with educational instruments or software. The tool is just a helping hand. It should be independent from the content, from the teachers, from educational logistics.

7. **Use Learning Analytics**

   If there is one big advantage that comes with online education, MOOC's etc. then it is the huge amount of data that is generated on how people learn (when, how long, how deep, which questions appeal, what generates which result etc.). Although we think we are very good teachers, in fact we know very little about effective and efficient learning. And now data come in abundance to help us; from our administrative systems as well as from online learning. So use them, study them,

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[1] In addition to this – coming from the discussion afterwards: it is important that the university also develops supportive (HR-)policy to underline and formalise this upgrading of lecturers and teachers.

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analyse and exchange them. They are of great value.

8. **Take security matters and privacy serious**

   This is quite an obvious one. The more you want to know, the more careful you should handle the data; are they save enough, is privacy secured? Often optimism and a belief in progress are the drivers behind educational development. But don't be naïf. By now there are enough examples of how things can go wrong. Dataleaks can devastate your whole project. The organisation, but also teachers and students should learn to be aware of that.

9. **Let government primarily concentrate on supportive actions**

   Policy makers and politicians do not always see the link between the transformation of education and their policy agenda. But that link is inevitable. Digitalisation together with new modes of teaching and learning widens the access to Higher Education, improves the quality, facilitates lifelong learning and bridges the skills gap. Maybe the most important success of the digitalisation of education is the new *elan* that comes with it and the new interest in the innovation of education, in experimenting, in good teaching, in measuring effects, in wanting to be the best. That is seriously worth stimulating.

   A few minutes ago I emphasized the crucial role of executive boards in setting the strategic path towards digital education. In the same way it is important that national and European governments underline the importance of the digitalisation of education. It is only then that this movement can make volume and really can transform education. This is the crucial point. Of course adequate funding and selective subsidising are needed as well, if it was only to underline the collective ambitions or to provide us with a fast and accessible infrastructure. At the same time: money is not the most important issue. The main thing is to set direction with conviction, make room for focussed experiments and stimulate flexibility (which is very difficult for governments: to be less spasmodic on time-tables, study-load, legal status, degrees, qualifications).

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10. **Emphasize teacher training**

The current generation of teachers has mastered its digital qualifications most of the time through self-education. For the new generation of students this won't do. That is why digitalisation and skills should explicitly and deeply be interwoven in the teacher training courses for new as well as practicing teachers. This is another field where government can play an important stimulating role.

To finish off: in the Netherlands we have SURF. It is an organisation that organizes the collaboration on ict for all Higher Education Institutes: research universities, universities of applied sciences, academic hospitals and knowledge institutes. SURF invites and seduces institutes to involve themselves in ict-innovation (whether it is hard- or software, networks or online experiments) and to move more or less with the same speed. Institutes work together, innovate together, exchange experiences and decide upon new developments. It isn't all sweetness however; there is competition as well and a strong wish to be better than the neighbours. But overall it works quite well and it has done the Netherlands a great deal of good. I wish every country a kind of SURF as a step towards European ict-collaboration. But even without that these 10 recommendations count. They are nearby for every institute that wishes so.

Thank you.