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DIGITAL BADGES AND MICRO-CREDENTIALS

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FUTURE SCENARIO
"Yes! I've got a gold badge for my '17th century history' module!" shouts Leah. "I missed the class on 'seafaring' but thanks to my video blog of our visit to the National Maritime Museum I've completed the badge. I'm going to put it on LinkedIn straight away. Maybe I'll get that internship at Christie's after all!"

Leah's mother Marianne is also on the computer. She has been looking for a job as translator for a few months now. But Marianne has not been idle in the meantime: she has completed the English for Doing Business in Asia MOOC on EdX and been awarded a badge by Hong Kong University. Today, she is preparing for an interview with an Asian investment bank that contacted her as a result of this badge.

Wat zijn badges en microcredentials?
A badge is a digital icon that indicates the knowledge or skills a person has acquired in a particular field. A badge contains links to information on acquired knowledge or skills as well as the underlying evidence and details of the body that issues the badge. Employers, educational institutions, professional organisations and other stakeholders can verify the claim online. They can therefore be sure that the claim made by the badgeholder (the student or professional who is undertaking further learning) is genuine. The student owns the badge and decides how and where on the web they want to display it.

Open badges make it possible to combine badges from different institutions. By using an open framework, students can collect their badges in a 'backpack' (similar to an e-portfolio). They can then make their badges available to third parties.

Badges pave the way for a potentially radical change in education: the introduction of micro-credentials. At present, students who follow accredited higher education programmes obtain only a single formal confirmation of the knowledge and skills that they have acquired during the course of their studies, i.e. a Bachelor's or Master's degree. With micro-credentials, however, educational institutions break their programmes down into smaller units to which they link an assessment or

recognition. They can offer these individual units not only to their own students, but to other new target groups such as schoolchildren or professionals. The institutions can then issue digital badges to anyone who successfully completes such a unit. As a result, these units have a value in themselves. The fact that an educational institution awards badges for particular achievements does not automatically mean that it will award credits for them within the standard curriculum. An institution or study programme can also use badges for other purposes, e.g. as gaming elements within a course.

Badges and micro-credentials in practice

Concordia University Wisconsin: Master's in Educational Technology
The 125-year-old Concordia University Wisconsin has an online variant, Concordia University Online, which currently provides education for 2,400 students. Since August 2014, this university has offered an online masteropleiding in Educational Technology, which is aimed at educational innovators. This master's programme, to which students are admitted every eight weeks, comprises more than 50 modules. Each module is associated with a badge. Students can display these badges on their profile or on the Internet. Depending on the pace at which they work, students can complete the Master's in one to two years.

Micro-credentials and MOOCs
MOOCs demonstrate how educational institutions can offer non-formal education in the form of courses. A student who successfully completes a MOOC or a series of MOOCs can be awarded a certificate. The various platforms refer to the latter as nanodegrees (Udacity), specialization (Coursera) and programs (Futurelearn). EdX also offers a number of MOOCs that allow students to transfer their achievements as credits to a standard programme provided by a number of (US) educational institutions. Students can display their achievements through badges or (digital) certificates. They may be 'verified', which means that the student's identity has been verified and, where applicable, an examination has taken place under controlled conditions.

What is the potential of badges and micro-credentials for higher education?
The use of badges and micro-credentials will allow the higher education sector to reach new target groups, particularly professionals. People in this target group often do not want to follow an entire degree programme, but only specific parts of it. They then want to be able to demonstrate that they have completed this additional learning.

Badges can also play a role in accessing Master's programmes, for example, where they provide a new tool for the recognition of prior learning (RPL). For (potential) employers, badges help clarify the courses a person has completed: badges make the individual skills more transparent.

Finally, micro-credentials and badges help align formal and non-formal learning (see second case study above). The recent publication *European guidelines for validating non-formal and informal learning* offers guidance on this. The publication calls for greater recognition of informal and non-formal learning, in which it maintains that micro-credentials should play a key role.

How can badges and micro-credentials contribute to customised education?
Badges allow a discrete value to be assigned to individual modules. This makes the available education more flexible, because students have greater freedom of choice when building their curriculum. Students can look for modules (for which they can earn badges) that suit their own background and learning pathway.

Opportunities and challenges
Students and professionals can choose from a wide range of flexible programmes anywhere in the world. They are no longer dependent on the programmes offered by a single educational institution. Educational institutions benefit in the sense that they can reach new target groups with their

programmes. The downside of this is the potential fragmentation of education. This may jeopardise the goal of 'Bildung', or rather students' all-round personal development. Can this be adequately guaranteed if everyone follows their own learning pathway? Who will monitor the consistency and level of a curriculum created in this way?

Another potential challenge is that students may, in the initial phase of their studies, be less inclined to complete a full Bachelor's or Master's degree if an employer is happy for them to take a shorter learning pathway whose completion results in a badge. The volume of administrative work will probably increase, because there are far more results to be recorded in the case of micro-credentials. On the other hand, recognition of prior learning (RPL) will be more straightforward and may make transfers easier.

If educational institutions want to use badges, they have to make a number of choices. They must decide which learning achievements they want to award badges for (accredited or non-accredited courses). They must also define the scope of the units they want to award badges for and decide whether they want to use the badges internally only or display them externally as well.

In summary, badges, used as micro-credentials, are an ideal way of making education more flexible and combining non-formal and formal learning. Clearly, however, this entails risks, because the diploma system that currently guarantees the value and cohesion of the education provided will be put under pressure. The education sector's job is to now experiment with a range of options and mutually decide on exactly how it wants the sector to evolve. The aforementioned EU publication *European guidelines for validating non-formal and informal learning* may offer guidance on this.

Want to know more?

- Cedefop (2015), *European guidelines for validating non-formal and informal learning*
- Educause (2014), *7 things you should know about Badging for Professional Development*
- ELI Brief (2015), *Developing a Higher Education Badging Initiative*
- European Commission (2016), *Validation of non-formal MOOC-based learning*
- SURFnet is also due to publish a white paper on this topic in December 2016

Student feedback

I think badges are an interesting idea. They give students a lot of scope to decide for themselves which areas they want to focus on. Badges definitely have potential for education. They give students more control over their own curriculum. This allows them to differentiate themselves from other students and to gain recognition for this.

Obtaining a degree is important for students, but the 'Bildung' (personal development) aspect should not be ignored. It is important to ask yourself, 'What am I actually learning from my studies?' In this context, this trend has two sides to it: the first is that it makes specific skills transparent, which is a good thing. The second is that it is important for students to be offered a loosely related collection of topics rather than a complete set of skills. As things stand, then, I see badges primarily as a useful addition to standard programmes.

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