# Case study The Netherlands

# Microcredentials for labour market education and training

First look at mapping microcredentials in European labour-market-related education, training and learning: take-up, characteristics and functions

By Renate Wesselink

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# CHAPTER 1.    Introduction

Microcredentials are put in practice in Dutch Vocational Education and Training (VET) to some extent. Although the majority of the attention has gone to the ICT side, there are first pilots in which experiences and findings with regard to the actual use of microcredentials are gathered. Higher education, consisting of universities and universities of applied sciences do have a bit more experience. The focus in this report is on vocational education and training (VET), and where applicable or relevant the experiences and practices in higher education (HE) are considered as well. This is explicitly highlighted. Furthermore, the focus is on the educational implementation part of microcredentials and not so much on the ICT side. Only in cases where the ICT side is hindering or helping the educational side of the implementation, it is mentioned. Finally, the difference between open badges (not for credentials) and edubadges (i.e. microcredentials; MCs) is made. Whereas open badges are used to some extent in the labour market, edubadges are only in a piloting phase.

The case study begins with the description of the aims and objectives followed by the methods applied. Second, it highlights the difficulties encountered during the analysis and provides a description of the structure of the case study.

## 1.1.    Aim and objectives of the case study

The aim of this case study is to present a status of affairs with regard to the educational uptake of microcredentials in VET sector, in the Netherlands. First, in the Netherlands, the concept of microcredential is hardly used, however, the concept of edubadges is. In the Netherlands, open badges refer to badges issued following informal learning, whereas edubadges represents knowledge acquired following learning in a formal setting. Most of the time microcredentials are considered equal to edubadges; both can be linked to the official credit system and therefore only the government recognised institutions can issue edubadges. Open badges can be issued by anyone, there are no official guidelines for that. Because of the connectedness (and maybe transferability) between open and edubadges, both concepts are studied in the case study.

VET in the Netherlands is a very much used track in education. On average about 40% of the population joins VET (SCP, 2020) and according to the number from 2019, approximately 507 900 students joined VET (MBO Raad, 2021). It is visible that in higher education (Universities of Applied Sciences and regular universities) the uptake of microcredentials is developed to a further extent (SURF, 2019), whereas in the Dutch VET system the development and uptake of

microcredentials is still in its infancy. In total three cases were discovered in VET in which microcredentials are implemented to their full extent (meaning that students received microcredentials), although still in piloting stages and not related to the national credit system but related to other frameworks. Two initiatives were implemented with students (Albeda and mboRijnland) and one of the initiatives mostly concerned teachers (Deltion). Following this short introduction, the objectives of this study are as follows:

(a) to find out the ambitions of Dutch VET in relation to microcredentials;
(b) explore the level of uptake of microcredentials in Dutch VET also in relation to existing frameworks;
(c) explore and identify the stakeholders who are involved in the development and application of microcredentials;
(d) explore the possible benefits and risks of a possible further uptake of microcredentials in Dutch VET.


## 1.2.  Methods used in the case study

For this draft report of the case study, three methods are used. First, desk research is used. Desk research is based on documents provided and websites affiliated with organisations in the field of VET, such as schools, labour market representatives, ministries and advisory organisations. By means of snowballing more and more relevant documents and websites were discovered. Second, in total, 9 interviews were conducted with:

(a) three stakeholders representing VET institutions;
(b) a stakeholder representing an umbrella association which includes all of VET providers in the Netherlands (MBO Raad);
(c) two stakeholders representing a consultancy organisation (CINOP);
(d) a researcher involved in discussions surrounding microcredentials;
(e) a director of a private VET provider (NCOI);
(f) one employee of a VET institute held responsible for the exploration of microcredentials in Dutch VET (over 4 conversations).

Third, a survey was sent out by CEDEFOP. In total 5 people responded to the survey:

(a) 3 from educational institutes (1 from HE and 2 from VET);
(b) 1 employer;
(c) 1 national authority.

Due to the low number of respondents, remarkable observations from the surveys will be shared in the respective chapters. There will be no full analysis of the results as there are only a few respondents.

## 1.3. Difficulties in preparing the case study

The main difficulty was to make a clear distinction between the content-wise development and actual application of microcredentials and the technical/ICT issues that are at stake. The case study focuses predominantly on the content and the educational application of microcredentials and not on the technical issues.

Furthermore, it was difficult to get people on board for an interview, especially in the labour market. Within VET institutions people were quite willing to contribute, however the connections which were tried to make in the labour market, remained unanswered. So, throughout the report there might be a slight bias towards VET institutions.

## 1.4. Structure of the report

In the next chapters, first, the uptake, characteristics and functions of microcredentials in VET sector in the Netherlands are explained. Second, the evolving relationship between microcredentials and national qualification frameworks is described. Third, the study provides the analysis of the added value of microcredentials, and the possible risks related to the wider uptake. Last, a general conclusion based on the former chapters and research questions is drawn.

# CHAPTER 2. Analysis of the take up, characteristics and functions of microcredentials

This part of the report will talk about the take up, characteristics and functions of microcredentials which are currently taking place or are foreseen in the Netherlands.

## 2.1. How familiar are the stakeholders with the term of microcredentials?

This part of the report will focus on the familiarity of stakeholders with MCs or edubadges. To explore this issue several groups of stakeholders are identified, representing several sectors: society, government, education, academia, labour market and intermediaries such as consultancy offices. For each of the sector the familiarity with microcredentials is identified as far as possible. Not all stakeholder groups encountered microcredentials or edubadges yet, and it is assumed that they are not familiar with microcredentials as such. Some stakeholder groups are only familiar with open badges, which is taken into account, however, as will become clear in the remainder of the case study, open badges are not the same as MCs.

### 2.1.1. Society

In general, society is not familiar with microcredentials or any equivalent. Aside from the students, teachers, parents and other stakeholders involved in microcredential pilot projects, the wider society is not aware of microcredentials. They might have some encounters with open badges, e.g. in safety training open badges are applied as recognition for training. This is underpinned by the observation that handing out the first microcredentials at Albeda was newsworthy. The local newspaper even reported this event ([1]).

Furthermore, when we look at the employers association, such as VNO-NCW, they are expected to support edubadges, this is stated in the policy

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([1]) See: https://www.ad.nl/rotterdam/albeda-student-kan-nu-cv-oppoetsen-met-edubadges~a0e5fcdc/

agreement between MBO Raad and the Ministry of Education ([2]). However, on the website of the Confederation of Netherlands Industry and Employers (VNO-NCW) nothing can be found in relation to edubadges or microcredentials.

### 2.1.2. Government

The government, or at least the House of Representatives, has initiated a motion to explore the potential of microcredentialing already back in 2015([3]). With the aim to make education more flexible, they want to know more about it especially with regard to higher education. To make an inventory for this, SURF, the governmental ICT organisation for education and research, explored amongst Higher Education Institutions (HEIs), Ministry of Education, the Confederation of Netherlands Industry and Employers (VNO-NCW) and some other relevant parties the potential of microcredentialing. As a result, they wrote a White Paper about this topic (SURF, 2019).

In this White Paper, they present, after a short introduction about what a badge is, three stakeholder groups: (a) the badge owner (e.g. student or learner), (b) the badge supplier (educational institutions, e.g.) and (c) the party who wants to verify the badge (other educational institutions or employers). Furthermore, they present three scenarios. In the context of this case study, the first two scenarios are relevant. The other scenario concerns the gamification of education. With regard to the first two scenarios, they are about the recognition of 1) formal and 2) informal learning especially the mutual exchange between (predominantly higher) education institutes of small learning trajectories are of interest as well as the recognition of informal learning of students throughout their educational careers. Although the White Paper is positive about the role of microcredentialling in relation to more flexible education, it also raises some issues in the domain of ethics (to what extent can one trust other institutes in their assessment of learning?) and technics (how to open up badges, have a unified system, etc.). The considered way forward is to start working with pilots in a controlled and systematic way. These pilots mainly took place in HE, however, some pilots took place in VET. Consequently, the government initiated the discussion about microcredentialling and SURF, as an executive body of the government started to explore the possibilities. Currently, both HE and VET are still in the piloting phase. As of this

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([2])See:
https://www.rijksoverheid.nl/documenten/convenanten/2018/02/07/bestuursakkoord-mbo-2018-2022-trots-vertrouwen-en-lef

([3])See:
https://www.tweedekamer.nl/kamerstukken/detail?id=2015D49573&did=2015D49573

moment, no other developments or initiatives are taking place at the government level.

In the survey, 1 representative of the national government mentioned that the term microcredentials is being used and that the concept is in development.

### 2.1.3. Educational institutions

To get a good picture of to what extent educational institutions are familiar with microcredentials the distinction is made between HE and VET. As said in both fields the institutions are still in a piloting phase. In HE, a total of 14 institutions participates in the pilots, as they offer the possibility to award edubadges [4]. The institutions are comprised of six universities and eight universities of applied sciences. In total, they offer 157 badges out of which 129 are so-called open badges (not related to a formal educational unit) and 28 are edubadges and represent a formal part of the educational programmes. The programmes mostly concern ICT or technical business management. At the level of VET, four institutions participate in pilots as far as it is visible on the edubadges website, and they offer 167 badges out of which 164 are open badges and only three are edubadges and these are in the field of medical mathematics. The table below provides a detailed overview (Table 1).

**Table 1. Overview of edubadges per educational institutions**

| Level | Total number of institutions | Total number of badges | Total open badges | Total edubadges |
|:---:|:---:|:---:|:---:|:---:|
| University | 6 | 83 | 79 | 4 |
| University of applied sciences | 8 | 74 | 50 | 24 |
| VET | 4 | 167 | 164 | 3 |

*Source:* https://edubadjes.nl/catalog

Also, private institutions like NCOI [5] work on microcredentials. They have experience with somewhat similar to private initiatives but are currently making up their minds about edubadges. The organisation has drafted a policy document according to the interview with a representative from the NCOI.

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[4] See https://edubadges.nl/catalog

[5] See www.ncoi.nl

In the survey, only 3 respondents representing educational institutions completed the survey. One of them was from HE and 2 from VET. They all are familiar with the concept of microcredentials.

### 2.1.4. Academia/research institutions

Aside from the fact that HEI participated as educational institution, no research has taken place, as far as it can be traced. During the search two other persons were identified who conduct research on edubadges in the Netherlands. The first one is Pieter van Knippenberg and he was interviewed for this case study. Next to Pieter van Knippenberg, Rick West, an associate professor from Brigham Young University from the USA, has studied, during his sabbatical in the Netherlands, the Dutch edubadges system. His presentation is used in this case study. Finally, SURF and the Ministry of Education evaluate the pilots that already took or will be taking place.

### 2.1.5. Labour market and its representatives

As stated before, the Confederation of the Netherlands Industry and Employers (VNO-NCW) was expected to stimulate and promote edubadges, but nothing can be traced on their website. However, there is some familiarity with the labour market. VNO-NCW was involved in setting up the earlier mentioned White Paper.

DEEN, a supermarket concern, joined a team within SaMBO ICT. SaMBO-ICT is the platform for accelerating ICT in VET and one of their teams focuses on edubadges. DEEN was represented and therefore familiar with edubadges. All in all, it is somewhat limited. These persons were asked for interviews, but unfortunately, they did not agree or respond on the multiple requests.

In the survey 1 representative of the labour market respondent and this was a non-profit organisation on recognition. This single respondent already shows how low the level of familiarity with the concept is and this respondent indicates that only sometimes microcredentials are used in the labour market. So, the conclusion is that the labour market is not familiar with microcredentials.

### 2.1.6. Intermediaries

SaMBO-ICT is the association that is responsible for aligning and developing ICT within all VET institutions in the Netherlands. They have several tracks and one of their tracks is Education logistics. Part of this track is the development of edubadges. Floor van der Zwan, interviewee nr. 5 is a member of this track and is responsible for the development of edubadges. She is employed for one day a week to bring this topic to the next level. For this case study, she was interviewed several times.

CINOP is an intermediary which was involved in one of the pilots, not specifically for the edubadge as such, but for the development of a qualification framework to base the (open) badges on.

NTRO (Dutch sector organisation for training and education) is involved in SaMBO ICT as well, to ensure the alignment with the private education providers.

To conclude, some intermediaries are involved, and this list is incomplete, however, the work on edubadges is not widespread yet.

## 2.2. How are microcredentials defined by different stakeholders?

In this paragraph, the general definition of edubadges is shown. It is not considered appropriate to provide definitions per different stakeholders, as the uptake of the concept of edubadge is not that advanced for different stakeholders to hold different definitions. In general, edubadges are considered as digital signs, based on a website or platform, that represent the acquisition of knowledge or skills (SURF, 2019). In the same paper, SURF distinguishes between two categories of badges - open badges and edubadges. Open badges represent informal learning activities, such as committee work or participating in challenges, on the contrary, edubadges resemble formal learning activities in which formal means that ECTS are granted for these learning activities. Based on these definitions open badges are not considered MCs.

## 2.3. Are microcredentials or similar credentials referred to in policy discussions and strategic documents? What are the main activities related to microcredentials that are taking place in different contexts? What are the recent developments related to microcredentials?

In the Netherlands microcredentials, or as they are called edubadges, are a piece of the puzzle on the road to more flexible education and lifelong learning. In 2015 a motion was successfully handed in which members of the parliament asked for more flexibility in higher and vocational education ([6]). Flexibility by means of modularisations means that educational programmes are cut into smaller pieces

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([6]) See:
https://www.tweedekamer.nl/kamerstukken/detail?id=2015Z24500&did=2015D49573

and that students or professionals can take such a small piece and get recognition for meeting the requirements of that smaller piece. This is in addition to the fact that students only get recognition in the form of a diploma, meaning that they have taken the whole programme successfully. Edubadges are put in place to make this flexibility work and give students (and professionals) official recognition for those parts of the educational programme they took successfully. These smaller pieces enable professionals to take some educational elements and that motivates them to continue learning (without doing a whole programme) and therefore edubadges are also considered an accelerator of lifelong learning. Therefore, policy mainly encourages roads towards flexibility and lifelong learning facilitated by funds for experimentation.

In the case of VET, SaMBO-ICT, with the sponsorship of the Ministry of Education and MBO Raad, pilots are held to experiment with edubadges [7]. In addition, as where SURF hosts the edubadge platform for HE without asking them additional money for this service, this is not the case for VET institution. They have to pay for edubadge services. From the technical perspective, SURF is piloting with edubadges as well. Based on the experiences in higher education, the Ministry of Education, SaMBO-ICT, MBO Raad, SBB, SURF and Kennisnet initiated a stimulating grant to invite a total of six pilots in VET (aside from Deltion and Albeda) to experiment with microcredentials. These pilots ran between January 2021 and June 2021 and the final report is almost ready. The six pilots were evaluated in the autumn of 2021. In November 2021, a position paper is expected to be produced in which SaMBO-ICT takes a position on how VET institutions in the Netherlands and VET sector, in general, should move further with edubadges. VET is still in its piloting phase. What VET institutions are doing is solely based on pioneers, one interviewee has stated. Nothing is embedded in VET policies yet.

With regard to the ICT side, SURF has installed a platform and as long as students are registered at an educational institution that have a service agreement with SURF (all HEI, not all VET institutions), students can claim their edubadge. The approval loop is developed by SURF.

Finally, according to one interviewee, the Dutch VET institutions do not get any money for edubadges, there is no financial incentive in the current financial structure. Therefore, this structure has to change as well, to give the introduction of edubadges a fair chance.

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[7] See:
https://www.tweedekamer.nl/kamerstukken/detail?id=2015Z24500&did=2015D49573

## 2.4. What is the extent to which microcredentials are used in the labour market related education, training and learning?

Microcredentials are developed and piloted for the first time. In four VET schools they handed out microcredentials to students. In two schools (Albeda and mbo Rijnland ([8]) for students who did additional work on 21st century skills and these skills were not part of the formal curriculum. It concerned skills such as collaboration and entrepreneurial behaviour. Based on a national movement to accredit these skills led by KOMPAS21([9]) the first students received microcredentials. In another VET institution, Deltion, teachers were awarded microcredentials for their efforts to develop themselves in the field of ICT in the courses they teach and especially during COVID-19 times. As far as it is known, there was no formal accreditation framework used for neither of the pilots. Considering the private sector, there is no data available but based on the interview with NCOI, edubadges are still in their infancy in the sector and only described in policy paper.

According to the sectoral organisation NRTO, in 2020 1.7 million took part in lifelong learning development activities. 84% took place at a private institute and 41% of these activities were within the formal credits framework. Therefore, the Dutch labour market is quite active in the sense of lifelong learning activities. Only Sweden, Finland and Denmark are more active ([10]). However, as already indicated by the private educator NCOI, microcredentials are in their infancy. The NRTO does not have a single mention of it on their website. Even the SBB (the interface between Dutch VET and the labour market for all sectors) is not actively involved in the discussion about MCs. This was based on a short conversation with a representative of SBB.

From the survey, it became clear that there are VET organisations that offer safety training and trainees get recognition of this training via Credly. Safety training should be repeated, so in this case badges are refreshed. This is the only example that could be traced in the Netherlands. Furthermore, desk research pointed out that it concerns a private training provider. Additional desk research pointed out that there are many private training institutes related to a company oftentimes (e.g. Beamix, Mitutoyo) work with open badges. Employees can follow (online) training and claim their open badge. Sometimes sectors organise these

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([8]) See: https://www.albeda.nl/nieuws/albeda-reikt-als-eerste-roc-in-nederland-edubadges-uit-aan-studenten/

([9]) See: www.cinop.nl

([10]) See: PowerPoint-presentatie (nrto.nl)

trainings, instructions movies, etc. The companies or sectors organise these badges themselves. Within this company or sector these open badges have civil value, however there is no relationship with the official credit system. So, as such, they are not considered microcredentials.

## 2.5. Who are the main actors providing learning activities leading to microcredentials and issuing microcredentials?

The main actors are VET institutions for providing learning activities and students for issuing. As long as students are registered with an educational institute they can issue their edubadges. So, for professionals, not registered at an institute, this is not possible yet, at least not via SURF. Other platforms are there for open badges, however, they are not used in VET.

## 2.6. Who are the main users of microcredentials?

Based on the desk research the main users are students and teachers. And user is portrayed as the receiver of microcredentials. These examples are just from three VET pilots. Although the intention is to use edubadges for professionals as well, the desk research has not indicated any examples of professionals going for or receiving edubadges. Another user group are the employers. Although it is stated in the document written by SURF (2019) that employers might appreciate edubadges because of increased flexibility and lifelong learning, they are hardly involved in the current developments. Based on the document of SURF (2019) in which they present lessons learned, employers are interested in badges, however only if they are used widely and represent a clear value. On the other side, they state that students (HE) are interested in badges only when employers recognise the value.

## 2.7. What are the main and most important characteristics of microcredentials?

The main characteristics of microcredentials is online proof of possessing a certain skill or competence, which either represent a part of a full educational programme or an informal learning activity. Whereas the diploma is an official recognised proof of having successfully done a full educational programme, the edubadge is an

official recognised proof of having done a part of an educational programme or the recognition of a certain quality or competence, such as collaboration. This online proof can be shared e.g. via LinkedIn. This all with the aim to make learning and professional development more flexible and not solely dependent on getting diploma's, but also officially recognise smaller units which might foster lifelong learning.

Another characteristic is that it is transparent which part of a programme is covered or who assessed the knowledge or quality in case of informal learning activity. This transparency is crucial to making it work for employers.

Finally, the idea behind edubadges is that flexibility and lifelong learning are accelerated. The labour market is not in need for employees with a qualification, they need employees with particular skills, according to Eric Verduyn (interviewee 7). And as it was noted in section 3.3., this is risky.

Edubadges are the official counterparts of open badges. An open badge can represent any form of learning or achievement and is not related to the official or Dutch accreditation system. Any party can offer open badges.

## 2.8. Are there any sectors / occupations where microcredentials are prevalent, relevant and important? Please provide a detailed overview of the use of microcredentials in the sector / occupation

In this part of the case study, three sectors are studied in more detail. These sectors are Education, ICT and manufacturing. In none of these sectors, at least at the level of VET, they work with edubadges or microcredentials.

With regard to manufacturing, the Dutch companies in manufacturing are organised via FME. FME is the employers' organisation for the technology industry. Their 2,200 members are techno starters, trading companies, medium and small industry and large industry / multinationals active in the metal, electronics, electrical engineering and plastics sectors. Aside from the open badges as mentioned in 2.4, there is no use of edubadges or microcredentials. The sector demands both the government and the educational institutions for more flexibility in education and they negotiate via SBB (the interface between VET and the labour market) for this flexibility, however, edubadges do not play a part in this discussion as to yet. With regard to this flexibility, the first certificates are officially recognised.

With regard to the education sector, the story is quite the same as within manufacturing. After checking several websites of employer organisations (e.g.

PO-Raad, VO-Raad, MBO-Raad) within education, no trace of MCs or edubadges. There are some private suppliers of open badges (e.g. Microsoft), but these are not edubadges. In this case study, Deltion was mentioned. Their teachers got open badges for their learning in the framework of ICT and online learning. Also in this sector, the first certificates are issued.

Finally, the sector ICT. This is more or less the same story, although within HE, the first edubadges are under development.

# CHAPTER 3. Analysis of microcredentials and evolving qualifications systems

In this chapter the links between edubadges and existing qualification frameworks are explored.

## 3.1. How are microcredentials linked to and/or integrated into qualifications system? How do they operate outside national qualifications system?

In general, the edubadges, at this moment, are not at all linked to the qualification system. There is a strong desire to do so, according to one of the interviewees, especially within the labour market, however, that is not the case. In the two cases that were presented earlier, the edubadges are linked to KOMPAS21. That is a Dutch reference framework for 21$^{st}$ century skills and developed by 12 VET institutions, CINOP and the labour market. This is not an official qualification framework, however, because of the people involved who worked on the framework, the chances are high that it will be used throughout VET in the Netherlands, interviewees stated.

## 3.2. How are microcredentials linked to credit systems?

In the pilots that took place, edubadges are not linked to the credit system. No information yet available on the current pilots. In VET institution no edubadges (in contrast with the open badges) are issued, so it is not linked to the credit systems.

## 3.3. Can microcredentials be accumulated and combined with other qualifications?

In the case of the 21$^{st}$ century skills, the desk research did not point out to any possibility for the accumulation of edubadges towards full qualifications. It is presented as an add on. Currently in VET in the Netherlands students can opt for certificates and several certificates together form a qualification. Certificates are larger units (between 400 and 500 hours of study), whereas edubadges are

expected to be smaller. However, the question was posed by an interviewee about the added value of edubadges when flexibility and lifelong learning can take place in VET using certificates. These certificates are still under construction. In total there are 288 certificates prepared ([11]) across all VET sectors. One certificate takes 400 to 500 study hours to complete. In the healthcare sector, for example, only three certificates are officially linked to the credit system. Because this is an ongoing development, this might explain the predominant focus on informal learning and open badges. However, in a working group looking at the future of VET (MBOin2030 ([12])) did incorporate badges (they did not specify edubadges or open badges) as one way to assess the learning that takes place. Aside from the formal diploma's, certificates they see a role for badges (Van Amersfoort et al., 2021). However, they do not specify that role any further.

An interviewee raised a concern with regard to edubadges, not being the open badges. In case VET sector allows for (personalised) accumulation of edubadges, the risk is that employers will start to cherry-pick. In case their employees need knowledge or additional skills they only allow for those badges that are needed at a certain moment. They will never allow for a full diploma, so the other tasks of VET, such as education to be a civilian, will not be performed and employees will not get a higher degree (and salary). This cherry-picking should be prevented, although the same interviewee also recognised that flexibility and lifelong learning are desired within the labour market.

Another risk that was pointed out by an interviewee is that if you do not allow for open badges and solely work within the existing qualification structure, the needed flexibility will not be realised. The current qualification system always runs behind.

([11]) See: www.s-bb.nl
([12]) See: https://mboin2030.nl/

# CHAPTER 4. Analysis of microcredentials and the added value for end users

In this chapter, the added value for end users will be analysed. This chapter deals more with the expected added value because not so many end users are involved in the pilots. And the end users that were involved are predominantly from higher education institutions.

## 4.1. Is there a need for microcredentials? Why do different stakeholders need microcredentials?

Based on the desk research, the government formulates a clear need for edubadges to stimulate flexibility and lifelong learning. This was confirmed in the survey outcomes, it is all about flexibility and promoting lifelong learning.

Although there are doubts about the added value in relation to the qualification framework due to the introduction of certificates in VET, edubadges could serve students at the EQF Levels 1 and 2. These students need of smaller bits and pieces, and certificates are probably still too large. There might be a need, according to an interviewee.

According to an interviewee, there is certainly a need in the labour market. Local industries are in desperate need of professionals and the local VET institutions cannot deliver enough professionals on time and, therefore, local industries create their own learning trajectories. This is not desirable and working with more flexible systems, such as edubadges, would prevent these local training initiatives with the involvement of VET.

## 4.2. What are the main benefits / added value of microcredentials for end users (e.g. learners, education and training providers and employers)? What value do microcredentials bring to the overall qualifications system?

From the report about the lessons learned (SURF, 2020) it became clear that students (predominantly HE students) are not familiar with edubadges. However, students are interested (not a real need, but still interesting to mention) in the recognition of extra-curricular learning activities, like participation in challenges for example. however, students also see a risk: stress. The fear of stress is high.

These extra-curricular activities come in addition to the normal curriculum and students feel the stress to do these as well as this might make them stand out (or not without these extra-curricular activities) in the labour market. This gives them stress. Nevertheless, their main interests go the extra-curricular or informal open badges.

As it was said before, and also based on the document of SURF (2019), employers are interested in badges, however only if they are used widely and represent a clear value. On the other side, they state that students (HE) are interested in badges only when employers recognise the value. Again, this is about interest and not a clear need.

## 4.3. Are microcredentials trusted among different stakeholders? What are the main reasons for trust / distrust in microcredentials? What are the conditions for ensuring the trust in microcredentials?

Due to the technical stage of development and not having found a final way of hosting microcredentials, it is difficult to say anything about this. For now, it is not considered as a matter of trust, but a lot is still to be defined. For educators, it is still unclear who can issue open badges. Furthermore, it requires a vision (for the institutions) on badges, on how the relation of badges to other units of education and how to deal with flexible education (SaMBO-ICT, 2021)

The microcredential holder has to get used to installing a microcredentials in case it is provided digitally on their social media and the possibilities with the badges are unknown. There is no experience yet with the educational institutions or employers who check the microcredentials. This is all based on the pilots in Higher Education and two pilots in VET.

# CHAPTER 5. Conclusions

Based on what is written before, the following conclusions can be drawn. These conclusions refer to the four research questions, as mentioned in the introduction. These research questions concern the ambitions, the level of uptake, stakeholder mapping and the risks and opportunities of MCs. Finally, some critical observations will be shared.

With regard to the ambitions, it is clear that the government and VET institutions want to work with MCs. However, it is still in a piloting phase and therefore the uptake of MCs is very limited. There are examples of issuing open badges and the creation of the first edubadges in HE, but that's it in the Netherlands.

Whereas open badges are applied in the labour market to some extent, VET sector could learn from it. In all the interviews, no one has mentioned these open badges as an example. So, take the labour market more (not just via SBB) on board.

The opportunities for flexibility and lifelong learning are significant, however, by only working with formal credit systems, bureaucracy is at stake.

# List of abbreviations

| HE | higher education |
|---|---|
| HEI | higher education institute |
| VET | vocational education and training |

# References

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# A list of interviewees

**Table 2. A list of interviewees**

| No. | Name and surname of the interviewee | Type of interviewee (stakeholder group) | Country/region/sector | Date of the interview |
|---|---|---|---|---|
| 1. | Wim Sieman | VET provider | The Netherlands | 8 July 2021 |
| 2. | Caroline van Eijk | VET provider | The Netherlands | 8 July 2021 |
| 3. | Thomas Lans | VET research/consultancy organisation | The Netherlands | 13 July 2021 |
| 4. | Tessa Houwing | VET research/consultancy organisation | The Netherlands | 13 July 2021 |
| 5. | Floor van der Zwan | VET provider and national authority saMBO-ICT | The Netherlands | 14 July 2021 |
| 6. | Pieter van Knippenberg | Self-employed researcher in VET | The Netherlands | 20 July 2021 |
| 7. | Eric Verduijn | Private provider | The Netherlands | 16 September 2021 |
| 8 | Hans Swart | VET provider | The Netherlands | 20 September 2021 |
| 9 | Marcel van Oorschot | SAMBO ICT | The Netherlands | 19 November 2021 |