Case study France

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 Patrick Werquin

2020-FWC9/JB-APOULIOU/Microcredentials-Learning&Employment/006/20

Disclaimer: this text is presented in its original form. It has neither been revised nor edited by Cedefop. Data collection and analysis undertaken from June to December 2021

Table of contents

List of tables

List of boxes

CHAPTER 1. Introduction

This report provides a case study for France on microcredentials in labour market related education and training. It covers both the introduction and development of microcredentials in France in a context heavily marked by long-standing qualifications catalogues (RNCP, and RS) ([1]) as the main tools for providing readability to the National Qualifications System, and a strong attachment to qualifications. This work is developed within the framework of the CEDEFOP project on 'Mapping microcredentials in European labour market related education, training, and learning – Take up, characteristics and functions' coordinated by PPMI.

The method is based on qualitative interviews, survey data and documentary research. They are used to review the evolution of microcredentials within the French educational and productive systems. However, a first result is that the available material on the subject is rather scarce in the case of France. While the use of quantitative data would have been a very informative step in the preparation of this case study, in the French context it is impossible to account for potential over time changes in this particular case since the data on microcredentials do not exist. The results of the quantitative surveys conducted by PPMI in the context of this Project are not used either since the number of respondents is too small.

As a consequence, this report mostly relies on documents, reports, research articles available online, with the caveat already mentioned above that they are limited in scope and number in the case of France. Due to this lack of robust quantitative evidence, qualitative materials form the basis of the analysis.

In particular, semi-structured interviews were carried out for the purpose of elaborating this case study. Eleven informants, with a wide range of expertise, in government agencies and beyond, were interviewed over a four-month period. Those eleven interviews provide a better understanding of the issues at stake in relation to microcredentials. They are:

(a) A recognised researcher in sociology and economy of education from the IREDU laboratory in Dijon.

(b) A representative of the MOOC France Université Numérique (FUN) platform participating in the European MOOCs Consortium project, a Bologna Follow-

---

([1]) *Répertoire national des certifications professionnelles* and *Répertoire spécifique*. The RNCP is the main catalogue where full qualifications are registered, by right or on request by education and training providers; The RS receives all the qualifications that have a social role but cannot be registered in the RNCP because they do not meet all the criteria.

up Group project regarding the development of microcredentials within European systems.

(c) A representative of the not-for-profit organisation 'Reconnaître' in charge of promoting the development of Open Badges in France.

(d) A representative of the French Association for the Development of Technical Education and Training (AFDET, Association française pour le développement de l'enseignement technique), which who also works as a consultant on qualifications systems.

(e) An expert from the research and development department of a training provider.

(f) A representative of the General Confederation of Small and Medium-sized Enterprises (CGPME, Confédération générale des petites et moyennes entreprises) who has expertise in employment, education and training policies.

(g) The Head of the Lifelong Learning Education Department at the Ministry of Higher Education and Research.

(h) A member of the board of the Vocational Qualification Commission of France compétences, the body overseeing the financing and regulation of vocational training and apprenticeship ([2]).

(i) The Chairperson of the Vocational Qualification Commission of France Compétences.

(j) A manager overseeing training in a private group specialised in robotics.

(k) A manager overseeing in an engineering school.

In practice, a questionnaire with key questions following the general PPMi interview scheme was used to conduct the interviews. It was customised to each different respondent in order to address specific issues in their domain of expertise in relation to microcredentials. All interviews took place online and used the semi-structured interview approach.

In the French case, several pitfalls make it hard to study the development of the usage of microcredentials in the education and training system. Firstly, the word 'credentials' has no equivalent in French. It is clear seen as an anglicism. Consequently, it is even more difficult to translate the expression 'microcredentials' into French. While the European Commission employs the term 'micro-certificates' (Orr et al, 2020), other terms are used to translate the word 'microcredentials'; not all of them fully convincing. Terms such as '*micro-certifications*', '*micro-justificatifs*', '*micro-accréditations*' or '*micro-certificats*' are used in French to translate the term

---

([2]) Since the Law of 2018 that provided for the creation of France compétences, it is the only national governance body for vocational training and apprenticeship.

'microcredentials' and therefore providing an interpretation of what a microcredential is, rather than a translation. As it is clear by now, there is no consensus, nor a clear definition to describe the phenomenon of microcredential in France. The lack of agreement on the term is a source of misunderstanding and tensions. It is also the meaning and the scope of this instrument that destabilise experts in the training-employment relationship and the specialists in qualification [3].

Secondly, in the view of many experts, there is the risk that the term 'credentials' be linked to a theory strongly criticised in France: credentialism. Several sociologists have used the concept to describe 'school inflations', 'degree inflation', i.e., the tendency of modern societies to base access to positions with high social status on increasingly higher degree because they are believed to be socially just and economically efficient (Duru-Bellat, 2006). There is also the question of the use of the term 'micro', which suggests that the credentials acquired is not a fully recognised qualification or rather a part of it. All in all, the introduction of microcredentials in France appears to be problematic within an already very complex and tense education and training system (on-going reforms, moving TVET landscape, two National Qualifications Catalogues with many types of qualifications depending on the awarding ministry).

Despite these pitfalls, the study carried out to prepare this case study shows that there is a favourable context for the introduction of microcredentials in France. On the one hand, recent reforms have encouraged the emergence of new education and training programmes that aim at meeting the needs and expectations of the labour market. On the other hand, France has had a qualifications framework in place for fifty years (CNCP, 2012) and a qualifications catalogue for twenty. In addition, there is as strong attachment of the society – including employers – to qualification. Finally, it has been several years now that a lot of work has been carried out to elaborate the content of the qualifications in terms of blocks of competences. Therefore, microcredentials could be linked to all these instruments, their introduction would be facilitated and widely accepted. The French national qualifications framework is flexible enough to accommodate new devices such as microcredentials. They could be linked to existing qualifications through the block of competences approach.

While there is a breeding ground and many opportunities for microcredentials to be introduced and accepted in France, it seems not all the necessary conditions

---

[3] Incidentally, if the terms 'qualification' and 'certification' are oftentimes used interchangeably in English, they have different meanings in French, and the English term 'qualification' translates into 'certification' in French (as in *Cadre national des certifications* for National Qualifications Framework)

are met so they become part of the National Qualifications framework and its catalogues. For most of the stakeholders interviewed in the context of this study, the usefulness of microcredentials for individuals and the labour market remains to be demonstrated. These two aspects seem to be the *sine qua non* condition for their introduction and harmonious development in France since the institutional actors do not envisage a development outside the National Qualifications framework.

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

In France, the introduction and development of microcredentials within the education and training system is poorly documented. It appears to be rather linked to a supranational will, i.e., to European training, education, and employment policies. According to a report by France Stratégie (Diagne and Donne, 2021), the integration of microcredentials is the final step of a strategy aimed at producing a 'Europe of skills'. It consists of three phases: 1997-2000, 2000-2016, 2016-2021. The current stage is based on a skills pact with particular reference to 'job-skilling' (European Commission, 2020) and the progress of microcredentials at European level. This strategy pursues some of the objectives at the top of the European plan agenda: social-economic inclusion, digital revolution, ecological transition, and support to economic actors.

To these long-term ambitions, the development of microcredentials within European policies goes hand in hand with recent cyclical shifts. The 'assumed' changing nature of the labour market, the increasing uncertainty about the aspect of work in the future and the impact of the pandemic on employment would favour their growth (Orr et all, 2020). As Diagne and Donne point out, microcredentials would express a new trend in competence:

'from a holistic vision of competence oriented towards a capacity to do, to a more analytical, fragmented approach, which analysis that creates a bridge between the new digital tools of the labour market, the competence descriptors and the descriptors of certifications'. (Diagne and Donne 2021, 28).

Although few official documents in France refer to microcredentials. Despite this lack of documentation, the introduction of microcredentials alert – sometimes even upset – the actors and other key stakeholders about the importance of monitoring and understanding the changes in the relationship between education/training and employment (e.g., individualisation of pathways, especially for access to education and training and for at-risk groups). In an always evolving education and training system, microcredentials question the type and scope of competences that will be recognised. Microcredentials come at a time when, in France, successive reforms have encouraged the emergence of a market for education and vocational training all together. It is likely that these recent transformations are conducive to the introduction of new and flexible instruments such as microcredentials.

2.1. How familiar are the stakeholders with the term 'microcredentials'?

In France, microcredentials are not yet part of the National Qualifications Framework that is the official classification of different awards (e.g., degrees, diplomas, titles and purely ([4]) vocational qualifications) ([5]) and therefore are not registered with the National Qualifications Catalogues. Therefore, the logic of microcredentials is not really developed in the institutional rhetoric. It is difficult to find references to this term in the documents that were used in the analysis. The paucity of available materials on microcredentials is also strong evidence of the lack of awareness in the broad public.

The institutional stakeholders interviewed were recently asked about the specific topic of microcredentials. The representatives of the Ministry of Higher Education and Research and those of the Vocational Qualification Commission of France compétences recently responded to the European Commission consultation about microcredentials that France needed more input about definition. In addition, the higher education stakeholders involved in the development of microcredentials have solicited their ministry and relevant public agencies (e.g., France compétences) on the matter. For ministries officials, the issue of microcredentials is central, with requests arising from both national and supra-national levels. One official related to the qualifications framework notes that the demand comes rather from actors of the education and training market who want to set up courses, rather than from the labour market.

The creation of courses adapted to the requirements of the labour market appears to be the driving force behind the development of microcredentials. According to one expert, the development of microcredentials seems to be linked 'to a fairly strong desire of development through the rhetoric of the need for employability, a relationship to competences, experiences, a fairly economic vision of education and training perceived as an investment'. It corresponds to the logic of individualisation of education and training and occupational pathways fostered by supranational policies (Maillard, 2012). Institutionally, in France, the successive laws on technical and vocational education and training, from 2014 to 2018, promote this individualisation.

([4]) The French National Qualifications Framework is called National Vocational Qualifications Framework and all qualifications are considered vocational even those that would be considered the most academic ones in other countries (e.g., Bachelor, Master): see the RNCP where P stands for Vocational.

([5]) France has a highly structured qualification system where diplomas, titles and certificate may be delivered by different actors.

In this context, in France, there is a breeding ground that could fast-track microcredentials. The focus on competences for a trade-job is at the heart of the French National Qualifications Framework (degrees, diplomas, titles, and other qualifications) and, since 2014, they are defined in terms of blocks of competences. As one interviewee puts it: The RS, and then the RNCP, which guarantee the recognition by the State of qualifications are flexible enough to accommodate constructs like microcredentials. Registration in the RS would therefore be the first step since microcredentials are not linked to a level of qualification, which is a condition to be registered in the RNCP.

In addition, according to one expert from a private provider, there is a demand on the part of individuals and employers for access to shorter education and training courses and less cumbersome programmes in general. Finally, still according to this expert, the development of a portfolio of competences introduced by France compétences and the *Caisse des dépôts et consignation* ([6]) will contribute to the emergence of microcredentials. According to him, there is a strong expectation from actors for the development of microcredentials in France. However, he adds that 'we do not know how to really articulate them with the French qualifications, and in the National Qualifications Framework.'

The scope of the competences recognised by microcredentials is not very clear and most of the speakers were in favour of valuing transversal skills. Effectively soft competences are very poorly recognised in the existing National Qualifications Frameworks, which is what the introduction of microcredentials could improve. However, on this subject, there is no consensus. Many interviewees consider that it is still important to assess competences, however, higher education degrees are already doing it. For example, degrees prove the ability to adapt to change, to evolve in different work environments, to converse.

For some of the institutional stakeholders interviewed, the introduction of microcredentials means new opportunities in the field of adult learning. They are seen as a great way to open-up the market for education and training, and to promote its development in specific sectors of the education and training system. Therefore, according to an expert the vision of the enterprises seems to be:

'There is a logic of profitability, a market in its own right for education and training, seizing new economic opportunities. Practices in large companies with a fairly strong use of micro-certifications which is part of a desire to be a learning organisation, to reinvent the organisation of work, the circulation of information, as part of knowledge management.'

([6]) Body that manages the money of the recently entirely re-vamped individual learning account (*Compte personnel de formation*, CPF)

In some educational sectors, the introduction of microcredentials opens up real opportunities for progress. In higher education, according to one expert, microcredentials will allow 'universities to offer non-degree courses that will have credibility at European level'. They appear to be a means of disseminating lifelong learning education within universities, which has proven difficult until now. In contrast to this enthusiasm for the development of microcredentials, some specialists rather see an attempt at aiming for the destruction of the well-established relation between education/training and employment system, which they say is an instrument for social regulation. Indeed, the fact that some GAFAs (Google, Apple, Facebook and Amazon) propose to accredit their own qualification standards constitutes for others a danger, an 'uberisation' of the National Qualifications Framework. For some experts, the introduction of microcredentials even reveals the failure of European policies to establish a European classification of skills/competences, occupations and qualifications ([7]) involving all stakeholders, especially from the productive sector, in all member States. In countries where the national qualifications framework is underdeveloped or underused, it is feared that microcredentials would be used for structuring the national framework. In this context, these countries would be the most likely to adopt microcredentials and push for their wider use within the European Union. If this scenario comes true, other countries (i.e., those with strongly and sustainably structured qualifications framework) would have concerns about the articulation between microcredentials and existing national qualifications frameworks.

In summary, in France, the opinions about the introduction of microcredentials in the qualifications system and framework are rather contrasted among the different experts interviewed. Depending on the position of the experts interviewed during the fieldwork their sector of expertise and their experience within the qualifications framework, microcredentials constitute a threat or an opportunity.

2.2. How are microcredentials defined by different stakeholders?

As already mentioned, in France, there is some confusion and a lack of understanding regarding microcredentials. Part of the problem is the French translation of microcredentials into '*micro-certifications*' but also the lack of a common and shared definition of the term. It is as well their introduction into a particularly complex, highly structured, and evolving qualifications framework that

---

([7]) The expert explicitly referred to the introduction of ESCO.

brings confusion. For example, for some informants, the term 'micro' refers to the duration of the training while for others it refers to the fact that microcredentials are a fraction of a qualification.

Since there are no official documents that address the issue of their development and their recognition within the educational and productive systems, there is no description of microcredentials in the French legal framework either. It is therefore international or private sources such as training providers that specify the contours.

The European Commission defines microcredentials as 'statements that acknowledge that a person has acquired a discrete competence, i.e. knowledge, skills and/or experience in a well-defined and limited area' (CES et CSEE 2020). The European Trade Union Confederation (ETUC) uses the following definition:

'Micro-credentials verify, validate and attest that specific skills and/or competences have been achieved and are endorsed by the issuing institution, having been developed through established faculty governance processes and designed to be meaningful and high quality'.

The actors of the MICROBOL consortium – for which the French representative is FUN – which aims to develop microcredentials in European countries, define them in the following way:

'A microcredential is a small volume of learning certified by a credential. In the EHEA context, it can be offered by higher education institutions or recognised by them using recognition procedures in line with the Lisbon Recognition Convention or recognition of prior learning, where applicable. A microcredential is designed to provide the learner with specific knowledge, skills or competences that respond to societal, personal, cultural or labour market needs. Microcredentials have explicitly defined learning outcomes at a QF-EHEA/NQF level, an indication of associated workload in ECTS credits, assessment methods and criteria, and are subject to quality assurance in line with the ESG.'

Beyond these descriptions, for some interviewees it is important to dissociate the concept of microcredential from the medium that supports it. On this point, there is a lack of understanding in France. For many, microcredentials are like open badges and, etymologically, in this case it would be more appropriate to use the terms 'micro-justificative' or 'micro-certificate' in English. For a specialist, to define microcredentials it is enough to say what they are not:

'Microcredentials are all forms of recognition other than the diploma, other than the certification or the professional or follow-up attestation quite common in short professional training, other than the titles that are awarded to you'.

Finally, if we use the term '*micro-certification*' in French, for some interviewees it is a qualification broken down into micro parts, into micro blocks, but the

utilisation of the term '*certification*' is problematic for some. Indeed, due to these misunderstandings surrounding the introduction of microcredentials, some experts have attempted to specify their scope. The French Association for the Development of Technical Education and Training (AFDET, *Association française pour le développement de l'enseignement technique*) therefore proposes a definition of microcredentials, translated here into French as micro-certifications:

'Each 'micro-certification' is designed to be displayed as soon as the mastery of a specific competence. They can be awarded, for example, by a training provider after the individual has participated in a course'.

However, beyond this definition, AFDET explains why the translation of the term 'microcredentials' into 'micro-certifications' in French is problematic:

'The translation of microcredentials into 'micro-certification' is problematic. Indeed, the term 'certification' as it is defined in France implies that a certain number of conditions must be met in order to guarantee, among other things, the reliability of the document produced and its possible inclusion in the framework of official classifications negotiated between the social partners'.

In conclusion, the association considers that the term *micro-certifications* cannot be used to translate microcredentials since:

'Qualification are part of the perspective of a universal recognition of individuals' competences and represent, among other things, one of the references in the regulation of the relationship between training and employment, to date, one of the references in the regulation of the relationship between training and employment, between training and work, as well as one of the foundations of economic and social dialogue in our country.'

Beyond these aspects related to social dialogue, the development of microcredentials rather questions qualifications achieved, certificates of attendance and other documents/media (including "why not, Open Badges", to quote one of the interviewees), but without confusion as to the nature and therefore the quality of each medium.

Faced with the ambiguity and in order to better respond to various requests from the European Commission on the matter of microcredentials, French institutions have expressed a need for explanation about microcredentials. For example, defining microcredentials by duration is perceived as not very convincing. Clarification is needed on quality assurance, learning outcomes and the added value for learners and employers. Consultations at European level with other French-speaking countries have led to the translation of microcredentials into '*micro-certificats'* in French. The term 'qualifications' (again '*certification*' in French) has therefore been removed from the translation since it refers to objects recorded in the main National Qualifications Catalogue (RNCP). Nevertheless, the institution

stakeholders that were interviewed agree that microcredentials can be a block of competences attached to a full-fledged qualification or may be listed in the second National Qualifications Catalogue (RS) as a qualification. However, the qualification must remain the outcome of a learning process, and not necessarily of a formal course. It is the core of the French approach that values recognition of prior learning outcomes (VAE, Validation of Experiential Learning Outcomes).

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?

As expressed above, the issue of microcredentials is important in the French context since there is an on-going transformation of the vocational education and training system. The overall trend is for microcredentials to growth at the moment in France. If definitions are lacking, it remains true that the French Qualifications Framework has embarked on a route that largely accommodates the microcredential model. Therefore, microcredentials could very well fit into the vocational education and training system as it has been developed since the mid-2010s.

In the Law n° 2018-771 of the 5 September 2018 for the freedom to choose a vocational future ('*pour la liberté de choisir son avenir professionnel'*) individuals would be responsible for their education/training and career paths. In this context, several trends suggest that microcredentials may become an important part of the French education and training landscape. Firstly, the philosophy of the reform encourages the progress of short training courses that are easily accessible to learners – adult learners – during their occupational careers. The development of approaches based on portfolios of competences, or 'e-portfolio', is consistent with the introduction of microcredentials. It is therefore legitimate to think that microcredentials could be integrated into this general framework.

Secondly, microcredentials are fully in line with the digitalisation movement that has been set in motion within the French vocational education and training system. This movement has been put in place in parallel addition to the 2018 reform. The reform of the individual learning account (CPF, *Compte personnel de*

formation) (⁸) which heavily relies on digital tools is the best example (Werquin, 2020).

Thirdly, according to one expert, one of the consequences of the 2018 Law is the liberalisation of the education and training market. This has caused an increase in the number of purely vocational qualifications (⁹) awarded by private providers. Although quality assurance has been set in motion (Law of 2018) for training providers to deliver quality education and training delivered, the approach is still not operational. Therefore, there is a window of opportunity for the opening of the education and training market to be conducive to the introduction of microcredentials.

The way the actors see the possible development of microcredentials in the French education and training system varies from one to another. In this moving context (e.g., opening of the market to more private providers, and even if the issue of microcredentials is not present in the official documents, all the actors are trying to take hold of the matter. Again, for many experts, the development of microcredentials is part of a movement to liberalise the vocational education and training market, and microcredentials would be a relevant tool to serve this movement. Microcredentials would also be a way to significantly multiply the number of courses and therefore constitute a potential market in great expansion. There is strong evidence that the multiplication of courses already took place thanks to the revamping of the individual learning account (CPF, *Compte personnel de formation*) in 2018. In addition to these purely structural aspects, there are conjunctural effects. The outbreak of COVID-19 and the successive [more or less complete] lockdowns has fostered the use of these instruments (e.g., CPF) and the development of distant and dematerialised education and training activities.

At the institutional level, the issue of microcredentials has been taken up by higher education institutions that now promote this type of education and training. The organisation FUN MOOC (France Université Numérique MOOC) is the leader of this movement as it participates to the European consortium of microcredentials. France compétences, the newly created body that, among others, manages the registration of qualifications in the National Qualifications Catalogues (RNCP and RS), is now considering whether it should also accept the registration of microcredentials. So far, the discussion revolves around the question of whether micro-certifications can be integrated into the National Qualifications Framework.

(⁸) CPF (*Compte personnel de formation*) in French.
(⁹) 'Titres à finalités professionnelle' in French.

As a matter of fact, the issue of the registration in the National Qualifications Catalogues has recently become a central issue for the development of microcredentials in France. This is mainly because access to the funds individuals have on their individual learning account (CPF) is restricted to education and training activities that lead to a qualification registered on the National Qualifications Catalogues (RNCP and RS). The issues cannot be divorced as the funding of education and training individually decided activities is entirely dependent on the outcomes of these education and training activities being registered on the National Qualifications Catalogues. This is historically due to the many education and training activities that were just not visible because not leading to any award of any sort. There is strong evidence that this is true in many countries (OCDE, 2003, 2006) but such a strong link between access to individual funding and registration of the outcome in the National Qualifications Catalogue is a particularity of the new approach to vocational education and training in France. Incidentally, this does not mean that there are only education and training activities leading to a registered qualification in France nowadays, this is only true for access to the funds available on the individual learning account (CPF, 500-800 EUR per year for ten years a most) and individuals as well as enterprises are very well free to pay for any kind of education and training activities, but this would be on their own resources.

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

For the education and training specialists interviewed, the currently witnessed improvement of new tools in the education and training sector corresponds to the logic of profitability. It is a matter of developing and integrating original instruments and selling them. For public institutions, the fact that the education and training sector is the main one pushing for the development of microcredentials is problematic. The needs of employers are very difficult to identify in the use of microcredentials. On this point, as we shall see later, there is no real agreement among interviewees from companies on the necessity to introduce microcredentials. If the microcredential model is rather promoted by the education and training industry, some actors consider that there is a requirement to produce short qualifications and short courses that respond to the needs of the labour market. Given this requirement, microcredentials or similar initiatives have recently emerged.

For the time being, microcredentials are not well developed in all education and training sectors. Experiences are very confidential and concentrated in higher education, especially in private institutions such as business and engineering schools. The first microcredentials have appeared in France in recent years but, for the moment, none of them are listed in the RNCP. Innovative medium-based devices such as microcredentials or others such as open-badges are for the time being disseminated in very specific education and training sectors.

For instance, when Open badges appeared in France, they seemed to be derived from, or close to, the concept of microcredentials. Open badges, as an outcome of digitalised training courses, appear to be the experiments that are developing the most. The fact that they allow for the recognition of transversal competences makes them similar to microcredentials. In addition, some open badges have been listed in the Second National Qualifications Catalogue (RS) in recent years.

In this study, several actors have been identified as promoters of open badge development. The not for profit association '*Reconnaître*' accompanies and federates the actors and projects of open recognition on the territories. It is represented, at the regional level, through the actions and initiatives of the '*Badgeons*' Group. Since the creation of the association in 2017, no less than five Groups have been set up: Normandy in 2017, the Centre Val de Loire in 2018 and New Aquitaine, Pays de la Loire and Bourgogne Franche-Comté in 2019 ([10]).

This Association is working at rethinking the principle of recognition, which is usually granted by an institution. The representative of the association '*Reconnaître*' promotes open recognition, i.e.: 'everyone participates in an eco-system of recognition and the recognition does not necessarily come from the institution, but it may come from a community, it can be transmitted to an institution'. The association also wishes to broaden the spectrum of competences and learning that are generally recognised under the traditional National Qualifications Framework. In fact, open badges appear to be a way of valuing multiple experiences and competences, particularly transversal, informal, and behavioural competences. They appear to be more flexible and make it possible to leave the formal qualifications framework. In summary, according to the representative of the '*Reconnaître*' association, open badges have two advantages: they aim to make visible what was not visible, i.e., non-formal and informal learning; and rethinking the principle of recognition. Now, open badges are used by local and regional authorities to, for example, recognise

---

([10]) See https://reconnaitre.openrecognition.org/

apprenticeships linked to a territory. Higher education institutions appear also to be particularly active in the development of open badges.

The association 'Reconnaître' provides a mapping of the characteristics and philosophy of open badges ([11]).

The online site ([12]) 'openbadges.info' defines what an open badge is. To fit with the def of a badge, a construct has to contain the following information:

(a) Who issued the badge?
(b) Who is the badge recipient?
(c) What does it recognise and on what basis was it issued?
(d) Is there any evidence attached to the badge?
(e) When was it issued?

To understand how they work, we can look at the 'BRAVO-BFC' scheme ([13]) developed by the Association '*Reconnaître*' in the 'Bourgogne Franche Comté' Region (Box 1).

([11]) See https://reconnaitre.openrecognition.org/ressources/
([12]) See https://openbadges.info/tout-savoir-sur-les-open-badges/
([13]) See https://bravo-bfc.fr/le-projet-bravo-bfc/

Box 1. The BRAVO-BFC Scheme

The objective of BRAVO-BFC project is to put in place all the elements necessary to build a culture of recognition in Burgundy-Franche-Comté based on three pillars:

- A partnership dynamic between the project leaders for an effective collaboration towards a shared objective;
- A team of actors in the field to promote the use of badges in different contexts: adult training, support for low-skilled people, initial training, associations and professionals;
- A technical infrastructure to issue badges but also to collect them (backpack), hosted locally, to guarantee data control.

The project brings together local authorities, economic actors, public institutions, the University of Burgundy-Franche Comté and the IREDU research laboratory in educational sciences.

Within the project, 4 badges can be awarded:

- '*Les open badges, ça m'intéresse'*: for those who are interested in open badges and open recognition, but don't know how or where to start.
- '*J'ai découvert les open badges'*: for those who have discovered open badges and open recognition and want to make their new knowledge and skills visible.
- '*On badge en Bourgogne-Franche-Comté'*: for those who are developing a project around open badges and open recognition and who want to make their experience visible and share it.
- '*Acteurs-trices de BRAVO-BFC'*: for those who actively participate in the action of the BRAVO-BFC collective.

In France, in higher education, GRADEO ([14]) appears to be the closest concept to the one of microcredential as conceived in the European approach. As one vocational education expert explains, the programme aims at:

'laying the foundations for a new international accreditation system, enabling universities to meet the requirements of the European Union of a new international accreditation system, enabling universities to respond to the needs of lifelong learning and to make accreditation more readable and understandable across different countries and their understandable across different countries and their higher education systems.'

GRADEO 'allows you to develop and/or consolidate vocational competences in various fields through short, recognised, quality online courses' and 'at the end

---

([14]) GRADEO is part of the Erasmus+ EMC-LM project, the European MOOC that brings together European academic platforms for online courses: France Université Numérique (FUN), FutureLearn (Great Britain), MiríadaX (Spain), EduOpen (Italy), and the OpenupEd portal operated by EADTU (European Association of Distance Teaching Universities) have launched a common micro-accreditation framework. See https://gradeo.fun-mooc.fr/

of the training, it allows you to obtain a certificate of achievement as well as a certificate validating the recognition of acquired competences issued by our partner establishments'.

It remains that although GRADEO is designed as a set of blocks of competences, it is not considered as a qualification because it is not recognised by the National Qualifications Framework. As a representative in charge of the development of the GRADEOs explains: 'for the time being, GRADEO is so far more of a brand than a (micro) qualification as such'.

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

Higher education appears to be the sector where microcredentials or related forms of credentials are most developed. In France, it is mainly private or similar organisations (such as FUN-MOOC) that develop and use microcredentials.

Several recent developments can explain the spread of microcredentials in higher education. For a very long-time higher education institutions have had the possibility to develop their own degree outside of the RNCP. For example, University Diplomas (DU, *Diplôme d'université*) are widely used within the higher education system even though they are not degrees and are regarded as second-best credentials. Some of them are registered in the RS and therefore they engage the reputation of the awarding institution.

The possibility, for higher education institutions, to develop and offer new qualifications in the sector of technical vocational education and training could explained the development of microcredentials, which are consistent with a lifelong learning approach. According to one expert, despite the lack of [competences in] education and training engineering, microcredentials appear to be appropriate devices for the development of lifelong learning education in universities. Again according to one expert: microcredentials will give universities the possibility to offer courses not leading to a degree that will have credibility at European level thanks to the awarding of microcredentials. Finally, for some institutional staff interviewed, within the framework of the Bachelor-Master-Doctorate system, microcredentials would offer the possibility of partly certifying competences acquired in education and training in the event of failure to obtain a degree. In the absence of a qualification, the achievement of microcredentials could be valued in the labour market and could be included in a portfolio of competences. However, the central question remains which learning outcomes will be recognised in the

context of microcredentials. This question is central for the GRADEO representative.

For him, if microcredentials are not yet recognised as such in France, they are an important lever to develop the reflection on articulation, modularisation, and definition of blocks of competences. Thus, it is the recognition of transversal, behavioural competences – whether acquired in the formal system or not – that is at stake in the development of microcredentials, that is to say: 'how informally acquired behavioural competences could be recognised in a microcredential'. The debate is open, and France compétences and the *Caisse des dépôts et des consignations* are exploring avenues for these competences to be recognised in the National Qualifications Framework. As a matter of fact, they are currently working on identifying them.

For the public institution stakeholders interviewed, one proposal often comes up: microcredentials would easily fit into the framework of the implementation of portfolios or competences passports.

Microcredentials also seem to be of interest to other educational sectors than higher education. As noted by a representative of AFDET, in vocational education and training, organisations also seem to be strongly interested in developing microcredentials as part of their offer. He gave the example of the trade union UIMM SUD (Union des industries et métiers de la métallurgie – Pôle de from du sud) training centre that is developing innovative education and training programmes as part of the 'Factory of the Future' ('*Fabrique de l'Avenir*'). The integration of new forms of qualifications based on the use of digital technology could be developed within these education and training providers.

2.6. Who are the main users of microcredentials?

For the moment, in France, there is no readily available information on the main users of microcredentials since microcredentials are not recognised as such in the National Qualifications Framework. It is therefore not possible to identify users' profiles. In addition, as a specialist in the use of e-learning systems states:

'there is a very diverse use of education and training schemes (e.g., MOOC), and the strategy to achieve a qualification depends on the learner. Therefore profiling users of microcredentials is complex.

Nevertheless, the increasing development of online platforms specialising in the development of microcredentials highlights the initiatives from French higher education institutions. According to Class Central ([15]), a search engine listing more

---

([15]) See https://www.classcentral.com/

than 10'000 MOOCs offered by more than 900 universities worldwide, French higher education institutions are offering dematerialised courses leading to microcredentials. According to the website that gathers information about the main microcredentials (Coursera, edX, FutureLearn, and Udacity), major French business schools offer microcredentials. HEC (Haute école de commerce) Paris and EDHEC (*École des hautes études commerciales*) are both private business schools and offer access to microcredentials (see Table 1). The presence of leading business schools in the provision of microcredentials is in line with the global trend and allow for minimal profiling: 'a Class Central analysis shows that approximately 75% of the microcredentials are in business and technology.' (www.classcentral.com)

In the framework of the GRADEO project, four GRADEOs have been set up in 2021 (see Table 1). These GRADEOs are deployed in the framework of the Erasmus + EMC-LM (European MOOC Consortium for the Labour Market) project of the EMC, which brings together European academic platforms for online courses. They are based on a cooperation between ESTIA (*École supérieure des technologies industrielles avancées*) and the company ORACLE. It can be noted that in a press interview, the ESTIA representative used the term 'micromaster' to define the GRADEO developed by the engineering school ([16]). To ensure the quality of this common micro-accreditation framework, the award of a GRADEO is subject to a series of specifications and allows the delivery of academic credits (European Credit Transfer and Accumulation System, ECTS).

Some remarks can be drawn from these examples. First of all, the first French microcredentials were developed within the French system of '*grandes écoles*' (leading engineering or business schools) in the first place, and in the fields of commerce or technology. In some cases this was in partnership with large companies. Therefore, it seems that access to microcredentials is more accessible to the most highly qualified and/or to managerial positions in organisations and is strongly linked to highly specialised sectors of activity ([17]) such as business and technology.

([16]) See https://www.estia.fr/fileadmin/user_upload/2020-12-10
ESTIA_A___BIDART_L_e__cole_d_inge__nieur_de__veloppe_Moocs_et_Gradeo.pdf
([17]) See https://www.classcentral.com/report/list-of-mooc-based-microcredentials/

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

Still using the work of the business schools mentioned above. HEC Paris offers two programmes: 'Inspirational Leadership: Leading with Sense' and 'Managing Innovation and Design Thinking'. For the latter for instance, the courses are offered in English and are subject to a fee. It takes place over a 25-week period at a rate of 6 hours per week. At the end of the course, a certificate is awarded to the student.

The four GRADEO set up in 2021 are composed of the following courses: 'GRADEO Data Base Fundamentals', 'SQL Programming', 'GRADEO Big Data and Artificial Intelligence', as well as 'Development Web-mobile Full-stack and Full Stack Mobile Web Development'. These courses are fee-based, and the notional workload includes contact time, personal work and assessment time, which is somewhere between 100 and 150 hours.

Table 1. Microcredentials in France

Name	Institution	Area of specialisation	Hours or number of courses	Lists of defined competences	Free of charge	Association with a company
Specialisation Investment Management with Python and Machine Learning	EDHEC (Business School)	Business-Finance	4 courses	Yes (12)	No	Yes
Specialisation Leadership stimulant : bien diriger	HEC (Business School)	Business, leadership management	4 courses	Yes (4)	No	No
Leadership et Management	HEC (Business School)	N.A.	N.A.	N.A.	N.A.	N.A.
GRADEO Advanced SQL Programing	ESTIA (Engineering school)	Technology	2 courses	Yes (3)	No	Yes (Oracle)
GRADEO Big Data et intelligence artificielle	ESTIA (Engineering school)	Technology	3 courses	Yes (3)	No	Yes (Oracle)
GRADEO Development mobile full-stack	ESTIA (Engineering school)	Technology	2 courses	Yes (5)	Yes	Yes (Oracle)
GRADEO Full stack mobile development	ESTIA (Engineering school)	Technology	2 courses	Yes (5)	No	Yes (Oracle)

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

Thanks to the diversity of economic actors that were interviewed, using the methodology proposed in the Project, representatives from the metallurgy, digital and training sectors were asked about the use of microcredentials in their industry sector. The material provided by these interviews reflects the different views of the sectors involved. Indeed, real oppositions on the opportunity of developing microcredentials appear within the three sectors of activity.

In the education sector, as already discussed, microcredentials appear as an additional means of increasing the supply of education and training opportunities in a highly competitive market. In France, the introduction of microcredentials coincides with profound movements to structure the private education sector. The digitalisation of the education and training provision proposed by the training providers is in line with the introduction of new approaches such as microcredentials. The breakout of the global pandemic has also encouraged the emergence of distance learning activities (OECD, 2021), particularly for the most highly skilled occupations that have been able to work and learn from home. More structurally, the atomisation of career paths allows individuals to choose when they want to learn regardless of the provider or training organisation. The main aim of 2018 Law is to boost the number of learners and the number of education and training activities, in particular those leading to a qualification. One of the main avenues for doing so is the revamping of the individual learning account (CPF, *Compte personnel de formation*) which is now more flexible and more transparent (monetisation and digitalisation, including with a smartphone application). Training providers are invited to develop short and flexible education and training activities that lead to improved employability and therefore can be used in the labour market, i.e., which meet the competence needs and expectations of socio-economic players.

If the signals are green for training providers to engage in offering microcredentials, it remains to be defined how individuals could find resources for their participation in the corresponding education and training activities. Aiming for the qualifications that are registered in the national qualification catalogues (RNCP and RS) is the only way to access the money available on the individual learning

account (CPF) which is provided by a payroll levy. According to the representative of the Ministry of Higher Education, the failure rate for registering a qualification in the RS (the second best qualifications catalogue after the RNCP) is close to 85%, which discourages many providers and organisations from engaging in the process. According one expert of France compétences, the registration of qualifications in the RS has indeed become stricter, as France compétences has undertaken a process of homogenisation and credibility of the catalogue. Without registration, providers may still develop courses, but they will not be financed by the State. This raises the question of the credibility of the providers awarding the qualification. Such qualification may not be recognised – i.e., accepted as a proof of competences – in the labour market, and therefore has little or no currency in the labour market.

For the time being, the development of microcredentials outside the qualifications framework is the path chosen by the digital sector. For the promoters of GRADEO for example, the aim is to develop an education and training offer that is sufficiently flexible to adapt to the needs of the large digital sector (bottom-up). For them, this is contrasted with the traditional education and training approach that is developed from the top down, i.e., from the academic to the professional, it is a question of reversing the direction and starting from the needs of the labour market. For the promoters of microcredentials in the digital sector, the valid question is: 'do I need to participate in a two-year course if I want to acquire specific competences that can be used directly in the labour market?' According to a specialist in digital education and training provision, there are two main reasons, for the development of microcredentials:

(a) 'The rapid increase of the number hybrid e-learning activities, based on MOOCs and amplified by Covid (and high-speed internet), with the delivery of full-blown qualifications';

(b) 'Short-term (3-6 months) professionalising certificates corresponding to skills (upskilling, reskilling) leading to jobs; this important typical service is mainly provided by GAFAM and private companies.'

In this system, which assumes complete liberalisation of the education/training and qualifications markets, it is a high level of trust in the body awarding the qualifications which guarantees the competences acquired in training. Microcredentials appear to work as a complement to the national qualifications framework, i.e., having a role in matching competences with the needs of the labour market.

In contrast to these developments, in the metallurgy sector and more specifically in the robotics sector, which combines digital competences with one another, the need for the development of microcredentials is not expressed. For a

very long time, this sector has been characterised by the lack of qualifications able to reflect the specific competences of the various robotics occupations (e.g., home automation, robotics on production lines). Occupational-related skills were not recognised either in the qualification or occupational standards. Both in initial and continuing education and training, there is an expectation of competences recognition in the fields of robotics. The sectoral qualifications framework in robotics is currently not adapted to the spectrum of the different occupations in the sector. This situation is worrying because there is a strong push from the sector to develop the automation of production lines and therefore to develop the corresponding competences. For the representative of the sector that were interviewed, the inclusion of short courses leading to a qualification registered in the National Qualifications Catalogues is a non-issue, as the focus is on the strong expectations for the development of trade-related qualifications. For this person, there are reasons to be somewhat upset with regard to the registration of qualifications in France: 'short course in MS-Word and MS-Excel are registered in the Catalogues whereas our sound courses and full-fledged certificates in Robotics are not recognised'. And to conclude, she goes: 'the issue is to build on what already exists and finalising what is existing, rather than focusing on microcredentials that are, for me, instruments that are only meant to replace the existing media to make learning outcomes in the formal education and training system visible, but are not justified.'

CHAPTER 3. Analysis of microcredentials and evolving qualifications systems

The development of microcredentials is not really completed in France, and there are great hopes and also great concerns. On the promoters' side, many experts and professionals see it as a great instrument for developing learning tools for at-risk groups that are remotely connected to education and training and oftentimes stigmatised in the labour market. As mentioned above, microcredentials fit in quite well with the on-going reform of vocational education and training, which advocates individualisation of education and training pathways and increased autonomy of individual potential learners. Others see the introduction of microcredentials as a threat to the national qualifications framework (including its catalogues) and to the governance of the qualifications system all together, i.e., everything in a country that leads to the recognition of learning outcomes (OECD, 2007).

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

Three questions appear central in regard to microcredentials and qualifications systems:
(a) the place of microcredentials within or alongside the qualifications framework taken here as one of the many components of a qualifications system;
(b) the type of medium to represent the corresponding learning outcomes;
(c) the type of competences that may be recognized into a microcredential.

These issues appear to be interconnected. In addition, it is important to remember that the individual financing of vocational education and training in France is based on whether the learning activity leads to a qualification and therefore on actual registration in the National Qualifications Catalogues. The future of microcredentials is strongly linked to the issue of registration.

The first aspect to consider is the articulation between microcredentials and qualifications already registered. There are several opposing views. The first position aims at including microcredentials into the existing national qualifications framework and catalogues. For the French representatives of the European MOOCs Consortium, the answer to this observation will come from the legislator. It is indeed necessary to ask the legislator about 'what is meant by vocational

qualification, and how to design microcredentials so that they are recognised?'. One of the solutions could be to establish 'a new specific national framework recognised by France compétences that includes microcredentials'. According to him, what prevents the development of microcredentials for the moment is the articulation with the blocks of competences as building blocks of qualifications given the way they are defined (see the 2016 Labour Law). Therefore 'it would make sense to imagine another way and to say that the block of competence is too broad and sometimes ill-delineated with blurred borders, especially the transversal blocks of competences.' For the time being, the concept of 'blocks of competences', too broadly defined, does not allow for the introduction and development of microcredentials. The fact that microcredentials are not recognised within the National Qualifications Framework is a major problem because, without this step, it is impossible to make them a common tool within the European Qualifications Framework.

The second position is a clear opposition to the inclusion of microcredentials in the National Qualifications Framework. It is voiced by independent experts. For these opponents, the development of microcredentials appears to some to put the National Qualifications Framework in jeopardy. The idea of what large companies would do without this form of regulation, the relationship between education/training and employment appears hazardous. In fact, the general idea behind the development of microcredentials may be to shorten or even avoid the tedious and costly certification process that leads to the awarding of a qualification, whereas it has the advantage of being a tool for social regulation. The question of the atomisation of knowledge and skills is also important and constitutes a point of vigilance for all those who are in charge of thinking about the development of blocks of competences within qualifications. There are other arguments for opposing the introduction of microcredentials in the National Qualifications Framework. Indeed, it would be better to consolidate what already exists within the qualifications framework than developing new constructs. This is the most important line of arguments among the detractors because the French National Qualifications System and Framework are very complex (multiple qualifications types and providers, multiple certifying bodies, several coordination mechanisms, long-standing recognition of prior learning system). Conceptually, for those who promote microcredentials, the idea is that individuals are merely an accumulation of competences. Reducing them to a list of microcredentials is very hazardous.

The third and last position gathers those who consider microcredentials to be ancillary to the National Qualifications Framework. It brings together the actors who promote the development of Open Badges in France and who consider that it is quite clear that all this should take place outside the National Qualifications

Framework. Therefore, for instance the badges are a complement to existing national full-fledged qualifications recognised in the two catalogues. Without inclusion of microcredentials in the National Qualifications Framework, the main issue becomes the recognition of microcredentials in the labour market. What will be at stake is the recognition in the labour market and more broadly the place of badges, for example, when addressing the strength of the relationship between education/training and employment. According to a researcher in Education, the problem with badges is that they only have currency for the people who award or use them. For the moment, it seems difficult to generalise their use in the labour market. However, this is not a new issue in the debate about the relation between education/training and employment: it is a well-known issue for all qualifications and, for example, for DUs (*Diplômes d'université* seen above).

The institutional position promotes the inclusion of microcredentials in the National Qualifications Framework, which are flexible enough to allow for the possibility to bring in qualifications that correspond to the needs of the labour market. This is why some Open Badges have already been registered in the RS. In this context, what appears to be important for the microcredentials is to disconnect the learning process from the outcome of this process (the qualification). At the institutional level, three conditions appear central to the development of microcredentials:

(a) 'A better definition of microcredentials; at least a definition somewhat more operational than the one proposed by the European Commission.'

(b) 'Microcredentials have currency in the society, and first and foremost in the labour market, and are not only pushed by the education and training supply side.'

(c) 'Microcredentials do not put in jeopardy the existing National Qualifications System and its Framework (including the two Catalogues) which took quite some time to build. This means in particular that the definitions that will be proposed are flexible enough to naturally fit in the French system.'

In other words, microcredentials may be registered as such, or certify blocks of competences within a full qualification, as long as they have currency in the labour market and correspond to a need for the competences they represent. The institutional position therefore appears to be pragmatic, considering that the relation between education/training and employment is constantly evolving over time. This evolution ought to be considered when talking about the registration of microcredentials in the National Catalogues. In addition, it is the labour market and the jobs that are changing and not the microcredentials that change the labour market and the jobs. Finally, there are strong opportunities in France for the inclusion of microcredentials into the National Catalogues, which would open up

the possibility for individuals to use their CPF for accessing learning activities of their choosing. However, as noted above, the process for registering a qualification in the Catalogues is difficult, and microcredentials will have to comply with the expected standards.

3.2. How are microcredentials linked to credit systems?

The debate of linking microcredentials and credit systems is vivid only in the higher education sector. Those involved in vocational education and training and lifelong learning in university departments are already thinking about how to link microcredentials with pre-existing credit systems. The articulation with ECTS is seen as a real opportunity for the development of microcredentials in the French higher education. In addition, as already presented, the GRADEO is the only existing microcredentials in France: it is subject to a series of specifications and allows the awarding of ECTS credits. However, according to all the experts, there are several obstacles. The first is that university departments in charge of vocational education and training appear to be poorly equipped in terms of capacity for education and training engineering (defined as 'education and training system design'). This is again the thorny question of the competences that will be recognised by the microcredentials, and that will have to be different from those recognised in already existing ECTS credits. Once this obstacle is removed, the second is that there is a real issue of modularity and French of the competences acquired within the blocks of competences that define most French qualifications. In higher education, the articulation between competences and ECTS appears complex because ECTS are built on notional time and not on competences. The question is therefore whether microcredentials will have an equivalence with the ECTS or not. Considering that the microcredentials will recognise quite diverse competences and be disconnected from the corresponding qualification, this seems very complex. According to an expert this is a big concern of the Ministry of Higher Education (MENESRI ([18])).

On the institutional side, the articulation between microcredentials and ECTS is not straightforward. Some of the institutional stakeholders express some concerns that it is proposed that an articulation between microcredentials and ECTS is established, for instance because higher education institutions are active in the field and because the ECTS is recognised in the European Higher Education

---

([18]) MENESRI : Ministère de l'Education Nationale de l'Enseignement Supérieur de la Recherche et de l'Innovation.

Area. Nevertheless, the idea of connecting credits and microcredentials is seen as interesting since it would allow the recognition of competences and experience acquired during education and training even if the full qualification could not be achieved. However, there is a difficulty in associating constructs (microcredentials and ECTS credits) that are not built the same way. On the one hand, the definition of microcredentials is not stabilised and the competences they are supposed to certify are not defined yet. On the other hand, ECTS credits are not built around the acquisition of competences but rather around the duration of the courses. In the ECTS, the scope of acquired competences is expressed in broad terms.

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

Nowadays, in France, the first microcredentials or equivalent are developing outside the National Qualifications Framework. Individuals can therefore accumulate microcredentials without them being officially certified, and therefore not recognised, in the same way as full-fledged qualifications are; because they are registered in the RNCP or the RS. Similarly, they do not have the assurance that microcredentials are recognised in different socio-economic spheres. It is also clear that it is difficult to combine microcredentials and ECTS. Faced with the pressure of change and the introduction of these new forms of qualifications, it is necessary to reflect on the articulation of microcredentials with the existing approach.

To that extent, the AFDET proposes the following developments regarding the introduction of microcredentials:

'The arrival of Open Badges and microcredentials in France probably prompts a reflection on the urgent need to implement a system on a French (or European) scale, of an e-Portfolio of a reliable and secure e-portfolio system for competences, which would be made available to each individual.'

According to AFDET experts:

'E-portfolio would enable to progressively gather and organise all qualifications (diplomas, degrees, titles and purely vocational qualifications - CQP), various certificates and other documents (including, 'why not', Open Badges), but without confusion as to the nature and therefore to the value and currency of each of them. Individuals could then use them as needed not only in the labour market but also on Internet. Approaches of this type have already been initiated on an ad hoc basis by the Ministry of Education in initial education and training (in particular with at-risk young people).'

In this context, it should be noted that the Law of 5 September 2018 provided for the *Caisse des Dépôts et Consignations* to be entrusted with the development of a 'Competences Passport' which would be linked to the individual learning account (CPF) for everyone.

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

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

As already said on several occasions throughout this report, the introduction and development of microcredentials appears to be linked to the on-going reform of the vocational education and training system in France. Microcredentials appear to be a sufficiently flexible and accessible instruments for individuals to take advantage of during their education/training and occupational careers. They appear to be well anchored in the objectives of securing career paths and increasing the employability of individuals. Several experts point out to the possible benefits to reap from microcredentials through the potential reduction of training time and costs. Microcredentials also appear to be strongly linked to the digitalisation of the education and training system; a turn that was been taken and several times confirmed in the successive reforms of the vocational education and training system. Also, the development of microcredentials appears to be a means of pursuing the logic of individualising the training pathways of individuals. Finally, microcredentials would easily fit into a portfolio system as foreseen in the 2018 reform.

What also emerges from the interviews is that the development of microcredentials is a tool for thinking about which competences deserve to be certified by the qualifications system and used in the labour market. In this context, it is a reflection on the need to certify transversal, behavioural, and competences and those acquired non-formally and informally that seems to be at stake. This aspect is often emphasised by those interested in new forms of qualification.

However, despite these advantages, for the time being, it seems institutional stakeholders are struggling to identify a real demand or even some expectations regarding microcredentials coming from of the labour market. For them it is rather the education and training sector that is pushing for the development of microcredentials. This is clearly a hindering factor for the growth of microcredentials.

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?

Several experts highlight the potential added value of the introduction and development of microcredentials. For individuals, these benefits are multiple. Accessibility is the most common argument for the development of microcredentials. The idea is for individuals to take advantage of short and less burdensome courses even if they lead to microcredentials and not to full-blown qualifications as those offered in the National Qualifications Framework as it is now. In fact, in the permanently changing labour market with more and more attention devoted to individual trajectories, it is thus the possibility to easily engage in learning at various moments of a career that is appealing. As one expert puts it, 'the microcredentials can be used as supplements, for example for people having a break in your employment period to show that they have invested in education and training, that they are autonomous, that they show other abilities, that they have interest in your company.' The Open Badges can be used in the construction of the courses. In fact, what appears to be important in the microcredential framework are the intentions to engage in the acquisition of these supplements. Indeed, as in the MOOCs where there are quantitative and qualitative data, individuals do not only take up these instruments in the context of occupational mobility. This advantage of accessibility is also highlighted by the French representative of the European MOOCs Consortium:

'for employees in companies, for example, the problem is the availability of education and training opportunities. Today to obtain a master's degree you have to take 450 hours of classes. The interest is to recognise competences acquired in shorter learning processes, through distance learning, on off-duty time, to recognise this set of competences that an employee can acquire.'

Thus, for companies, it is a matter of training employees over a shorter period of time and more outside of working hours and through distance learning.

One of the most cited aspect is the possibility of having competences recognised that are often not recognised, such as those related to transversal and behavioural aspects, or those acquired informally. This was emphasised by the educational researcher interviewed in this case study. For him, the interest of microcredentials is

'to allow for the recognition of non-academic competences that fit into the definition of an academic career. It is the idea that you learn things outside of university and even outside of your job. These competences need to be certified and valued. To be given currency in the labour market.'

For the education researcher, the interest of microcredentials is twofold: 'the first is to attest competences and the second is to reflect on what individuals can do in their occupational career.' The idea is also that there is value in certain competences that are not in regular qualifications, and that will help individuals to succeed in their career.'

For the education researcher, microcredentials would also be a way of highlighting what are called 'hidden curricula'. Indeed, in educational science, there is the idea that teachers use all the experiences of the students. In this context, open badges or microcredentials would be a way of highlighting these hidden experiences, it may be inequitable but at the same time it would value these hidden curricula. Even if, for the moment, the development of microcredentials comes up against the problem of recognition in the labour market, for him they would be an alternative exchange variable to the full qualification.

Other actors consider that alternative forms of qualification make it possible to rethink the whole recognition process. For the proponents of open badge development, the idea is to rethink the recognition mechanisms and to democratise them. The idea is to have a symmetry between the one who certifies and the one who is certified, thus the objective to develop a double recognition. For the representative of the association 'Reconnaître', open badges ensure an action of recognition, so there is no asymmetry. What is interesting is to think of open badges in a process of symmetrical power – the possibility of receiving and issuing qualifications. Finally, open badges were invented to make visible what was not visible. They have been created to make informal learning visible. For him 'Ninety percent of what we learn is informal learning and it is not visible. Open-badges make them visible.'

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?

The materials analysed in the case study show rather mixed stakeholders' views regarding the introduction of microcredentials in France. On the side of the promoters of these new forms of qualifications, they seem to be in line with the recent transformations of the vocational education and training system as it was renovated in 2018. Indeed, on the face of it, they would fit into the system of blocks

of competences and would also make it possible to value those informally acquired that are not well recognised in the current system, even if the RPL system is well developed in France (VAE, Validation of Experiential Learning Outcomes). As digitalised tools, they would be compatible with the implementation of competence e-portfolios. In addition, microcredentials appear as flexible instruments, they would be easily disseminated by private training providers and by the professional education and training divisions of higher education institutions.

However, the major issue remains that of recognition within the National Qualifications Framework, where for some the introduction of microcredentials is synonymous with 'deregulation'. Beyond the fact that microcredentials are supported by large companies, the social partners and vocational education and training actors see this as a loss of power in the governance of qualifications. The atomisation of individual competences that has been going on for decades in the vocational education and training system is also at stake in case microcredentials would be introduced. Here again, it is the idea that microcredentials would promote the idea that individuals are best defined by an accumulation of microcredentials corresponding more or less valuable competences in the labour market.

To break the deadlock, it appears that new systems such as microcredentials or open badges have the merit of moving the lines in terms of qualification. This raises the question of the recognition process and which competences deserve to be recognised within the National Qualifications Framework and more widely in the different socio-economic spheres. It appears that, in France, all those involved in the relation between education/training and employment and in qualifications are still poorly supported in the changes implied by the introduction of microcredentials or their related forms. Decision-makers, employers, social partners, and learners still have little information regarding microcredentials, even though they can profoundly transform the social regulation system that constitutes the relation between education/training and employment. For the time being, public institutions (e.g., social science research institution and laboratory) responsible for explaining the transformations of the education/training and production system have not taken much interest in the matter of microcredentials.

For the institutions, the registration to the RS appears to be a means of ensuring trust in microcredentials. This would have the merit of structuring the perimeter of microcredentials and ensuring its legitimacy, through a guarantee by the State. In this context, registration in the RS would make it possible to show that microcredentials ensure the acquisition of competences that can be valued in the labour market.   This would be a major breakthrough that would allow for microcredentials to be rolled out within the existing financing system and ensure their harmonious development.

CHAPTER 5.   Conclusion

At the end of this study, the introduction of microcredentials in France does not seem to be really at the centre of the interests of all qualifications and labour market actors or key stakeholders. For the most part, microcredentials are for the moment hardly identifiable objects whose real added value for individuals remains to be shown. The lack of definition in terms of the acquisition of transferable competences in the labour market is problematic. In addition, the actors of the labour market are not, for the moment, in demand of this type of credential, as opposed to full-blown qualifications.

The fact that it is particularly the education and training sector (private, public, higher education) that is most inclined to create and use microcredentials reflects what is happening in France, i.e., a liberalisation of the education and training provision. Similarly, while actors of the National Qualifications Framework advocate the introduction of new forms of representations of competences acquisition such as microcredentials, their promoters have not committed to their inclusion in the two National Catalogue yet. This last point suggests that microcredentials are currently not sufficiently connected to labour market needs.

It remains true that, in France, there are opportunities to develop microcredentials. While the interviewees have different convictions and positions, many are attached to the structuring and functioning of the National Qualifications Framework. The key conclusion is therefore that, in France, microcredentials will have difficulty developing outside the National Qualifications Framework.

List of abbreviations

AFDET	French Association for the Development of Technical Education
ECTS	European Credit Accumulation and Transfer System
EMC	European MOOCs Consortium
MOOC-FUN	Massive Online Open Course – France Université Numérique
VET	vocational education and training
IUMM SUD	Union of Metallurgical Industries and Trades
TVET	technical vocational education and training

References

CES and CSEE (2020). Position commune de la CES et du CSEE sur les micro-certificats dans l'EFP et l'enseignement supérieur.

CNCP (Commission nationale de la certification professionnelle), 2010. Référencement du cadre national de certification français vers le cadre européen de certification pour la formation tout au long de la vie, Groupe de travail français sur l'EQF, octobre, 67p.

Diagne, M., Donne. (2021). Quelle place pour les compétences dans l'entreprise ? Renouveler les approches pour refonder les pratiques. Réseau Emploi Compétences. France Stratégie.

Duru-Bellat, Marie V. (2006). L'Inflation scolaire Les désillusions de la méritocratie. Édité par Seuil. La République des idées.

European Commission (2020). Pact for skills. European Commission.

Maillard, F. (2012). Professionnaliser les diplômes et certifier tous les individus : une stratégie française indiscutable ? 34 (2): 29-44.

OECD, 2007. *Qualifications Systems: Bridges to Lifelong Learning*, OECD Publishing, 282 p. (https://www.oecd.org/education/innovation-education/qualificationssystemsbridgestolifelonglearning.htm)

OECD, 2021. Training in enterprises: New Evidence from 100 Case Studies, OECD Publishing, Paris. https://oecdskillsandwork.wordpress.com/2021/10/15/training-at-the-time-of-covid-a-first-look-at-the-evidence/

Orr, D., Pupinis M., Kirdulytė, G. (2020). Towards a European approach to microcredentials: a study of practices and commonalities in offering microcredentials in European higher education. NESET report. Luxembourg : Publications Office of the European Union: European Commission.

Werquin, Patrick (2019). Adult Learning Country Report : A country report offering an analysis of the environment for providing direct financial incentives for adult learning to individuals in the EU27. December. (https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8337&furtherPubs=yes)

The list of interviewees

Table 2. The list of interviewees

No.	Name and surname of the interviewee	Type of interviewee (stakeholder group)	Country/region/sector	Date of the interview
1.	Jean-François Giret	Head of university research center IREDU in Burgundy University.	France/Burgundy/Higher Education	16 June 2021
2.	Émilien Sanchez	French representative of the European consortium EMC	France/Lyon/Higher Education	16 June 2021
3.	Serge Ravet	Representative of the association 'Reconnaître'	France/Association	15 June 2021
4.	Roland Kastler	Representative of the association AFDET and senior consultant	France/Association	17 June 2021
5.	Éléonore Vrillon	Head of the R&D training department in YOUKNOW	France/ Paris/ Private sector	16 June 2021
6.	Francis Pétel	In charge of the education / vocational training policy for the CGPME (Confédération Générale des Petites et Moyennes Entreprises)	France/Paris/Trade union	16 June 2021
7.	Christine Bruniaux	Head of the Lifelong Learning Education Department at the Ministry of Higher Education and Research	France/Paris/Institutional	8 October 2021
8.	Brigitte Bouquet	A European and international expert on professional qualifications representative to the Professional Qualification Commission of France Compétences.	France/Paris/Institutional	4 October 2021

9.	Françoise Amat	The president of the Professional Qualification Commission of France Compétences	France/Paris/Institutional	4 October 2021
10.	*Request Anonymity*	A training manager in a private group specialized in robotics.	France	30 September 2021
11.	Serge Miranda	The training manager in an engineering school.	France	30 September 2021