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On the Development of Inclusive Key Competences within the French Educational and Training System

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Abstract

Key competences are becoming increasingly important for coping with inclusion and the requirements of change in today's rapidly changing world of business and technology. In France, although the debate concerning the notion of competences was launched by social partners in the 1970s, the move towards the use of a multidimensional practice-based concept of competences was effectively launched during the 1980 (Cannac & Cegos, 1985; Bouteiller & Gilbert, 2005). At the beginning of this period, the Ministry of education introduced its own VET qualification referential standards connected with the targeted occupational profiles in terms of three descriptors: capacities, know-how competences and associated knowledge. In connection with these competence-based VET referential standards, the labour market authorities created in 1993 the “Operational Repertory of Trades and Occupations (ROME)” which underwent further enrichment and improvements during the last decades (Dif, 2010). Then followed further actions and reforms for the promotion of more inclusive key competence development framework instruments such as: (a)-the establishment by the Ministry of National Education (Decree of 11 July 2006) of a common ground key-competences programme within initial compulsory education, which was recently reformed and extended (Decree of 31 March 2015); (b)-the introduction of a “framework programme for sustainable integration within the labour market through access to key-competences of mainly vulnerable people by the Ministry of labour in 2008; (c)-the establishment of a “referential standards framework for professionally situated competences (CCSP) in 2006 by the “National Anti-Illiteracy Agency” (ANLCI, 2009); d)- the introduction by the social partners of a referential standards framework for the development of knowledge and professional competences called S3CP or CléA (Decree 172, 13 February 2015). This paper is an investigation into the development of key competence instruments and their inclusive role of young and adult people (including disadvantaged people). The adopted investigation methodology is mainly based on recent scientific desk research and documentation, completed by a set of interviews conducted with experts and representatives of different involved stakeholders. One of the main outcomes of this research shows that the key competences are generally observed to be effectively more inclusive when they are implemented through work-based learning programmes (as in apprenticeship-type schemes) than in those of the school-based system.

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Keywords

inclusion, key competences, specific competences, professionally situated competences, competence-based qualifications.

1 Introduction

After an early development of a predominantly behavioural competences approach in the USA and an occupational functional model in the UK, a holistic multidimensional concept of competences followed more recently in the continental Europe, especially in France. The emergence of this model in France accompanied the progressive development of a multidimensional competence-based approach during the last three decades in human resource management, in labour market inclusion policies and within the whole educational and training system especially in its IVET and adult education segments. It is an overarching simplified framework combining the following trilogy: *savoir* (compétences *théoriques / conceptuelles / cognitives*, i.e. knowledge), *savoir-faire* (compétences *pratiques / fonctionnelles*, i.e. functional competences / skills) and *savoir-être* (compétences *sociales et comportementales*, i.e. social and behavioural competences) (Bouteiller & Gilbert, 2005; Klarsfeld, 2000; Loufrani-Fedida, 2008; Winterton, Delamare-Le Deist & Stringfellow, 2006). In this connection, the paper's adopted investigation methodology is mainly based on related recent scientific desk research and published documentation and data, completed by conducting a set of semi-directive interviews with experts and representatives of different involved stakeholders. The research outcome is presented through the following main sections of the paper: a)-Competences development within the educational and training system, b)-Competences development within the framework of human resource management, c)-Competences development within labour market and related CVT inclusion policy instruments, d)-Outcome conclusions.

2 Competences development within the educational and training system

Following the debate concerning the notion of competence which was initially launched by the social partners during the 1970s mainly in connection with human resource management and development, the move towards its introduction in France started effectively during the 1980s and intensified particularly since the 1990s (Cannac & Cegos, 1985; Bouteiller & Gilbert, 2005; Delamare Le Deist & Winterton, 2005). In this connection, the major pioneering development appeared at the beginning of the 1980s within the initial VET when the Ministry of education introduced a methodology for designing competence-based referential standards for its own awarded vocational qualifications, and thus shifting from the traditional input curricula model to an output one. This qualification design process was based on two interconnected reference frameworks: The professional activity referential (*RAP- le référentiel d'activité professionnelle*) which describes the professional activity in terms of functions and tasks to be exercised by the holder of the qualification. This referential is then used to produce a grid of corresponding required competences which constitute the qualification (or the certification) referential standards (*le référentiel de certification*). In most cases, three sets of competences are defined: *savoir* (knowledge), *savoir-faire* (know-how: occupational and functional competences) and *savoir-être* (behavioural competences such as the ability to communicate, analyse and report) (Brockmann, Clarke, Méhaut, & Winch, 2008; Maillard, 2003; Dif, 2010). Now, basically all VET qualifications (at all the NQF levels) are provided on the basis of this overarching competence-based (learning outcomes) approach and can be acquired equally either through the formal pathways of the educational and training system or via the validation of acquired prior experiential informal and non-formal learning (*VAE- Validation des Acquis de l'Expérience*). They all fall within the range of three overarching basic categories: a)-National qualifications awarded under the responsibility of different State ministries and designed or

updated on the basis of decisions undertaken by their advisory bodies (such as *CPC*, *CPN*, *CTI* and *CNESER*); b)- Vocational qualification certificates (*CQP- Certificats de Qualification Professionnelle*) which are sectoral or inter-sectoral qualifications, created and developed by the sectors under the responsibility of social partners; c)- Qualifications awarded by different ministries (without advisory bodies), chambers, public and private providers/organisations under their own names (OECD, 2003; Dif, 2010). Since the social modernisation Act of 17th January 2002, all these competence-based qualifications (including the certificate supplement called “*supplément descriptif du certificat*”) are validated and registered by the National Commission for Vocational Qualifications (*CNCP- Commission Nationale de la Certification professionnelle*) within the National Repertory for Vocational Qualifications (*RNCP- Répertoire National des Certifications Professionnelles*).

Under the impulse of the European framework recommendations defining eight key competences for lifelong learning (EU recommendation 2006/962/EC), the Ministry of National Education introduced (via the Decree of 11th July 2006) a common ground educational programme within initial compulsory education. It consists of the following seven key competences: mastery of French language, practising of at least one modern foreign language, basic competences in mathematics and in scientific and technological culture, mastering the usual ICT, acquiring a humanistic culture, developing social and civic competences, autonomy and sense of initiative. For the concerned students at the end of their compulsory schooling at the of age 16 in 2013, it was observed in 2016 that the competences mastered by them were mainly French (competence1) at 79% and competence 3 in mathematics and a scientific and technological culture at 77% (DEPP-MEN, 2017c). However, this framework was reformed (via the Decree 372 of 31st March 2015) and enriched starting from the school year 2016/2017 by a new common ground framework for knowledge, competences and cultures based on five large fields for key-competence-based initial compulsory education: 1)-Languages for thinking and communicating (learning French, a foreign language and where appropriate a regional language; scientific, computer and media languages as well as languages of the arts and the body), 2)-Methods and tools for learning (explicit teaching of access means to information and documentation, digital tools, the management of individual and collective projects as well as the organisation of learning), 3)-Training to be a person and a citizen (learning about life in the society, in the collective action and citizenship, through a moral and civic teaching respectful of personal choices and individual responsibilities), 4)- Learning about natural and technical systems (to develop curiosity, the sense of observation and the ability to solve problems), 5)- Learning about the representations of the world and human activity (understanding learning about societies through time and space, interpretation of their cultural production and understanding contemporary social world).

3 Competences development within the framework of human resource management

The development of the concept of competences within the framework of human resource management emerged in France during the second half of the 1980s as an effective practice within some large companies. On the 4th of October 1984, Cegos, one of the largest private training organizations of that time, had focused its attention on the notion of competence by organising a symposium on continuing vocational education and focusing on the project of creating a stronger link between the CVT and the company's strategies (Cannac & Cegos, 1985). The focus was on new competences needs for the economy and on the role of the enterprises in developing them. One of the pioneering practices in this connection, was that of IBM France. In 1985, this company introduced within its Corbeil Essones plant in the south of Paris, a "competence-based management" approach aiming at facilitating the specialist's search for helping in the orientation and reorientation of careers and the organisation of internal training to meet the company's needs in the medium and long term. This led to the identification of 740

competences defined as "know-how associated with the workstation" (e.g. resin synthesis), classified into 53 specialities (e.g. chemical analysis laboratory) grouped, in their turn, into 12 families (e.g. chemistry). This experience was an effective anticipation of the emergence of competence-based HRM (human resource management) as it is, more or less, practised nowadays (Bouteiller & Gilbert, 2005; Winterton, Delamare-Le Deist, & Stringfellow, 2006).

These competence-based HRM practices have emerged and developed in connection with certain changes in work organization, labour management and, more generally, in the management of production plants. As the affected people were initially low-skilled workers, this notion has mainly accompanied a progressive move from the previous collective approach towards a more individualising model of HRM. The emergence of this individualising model was a logical consequence of previously occurring economical and organisational changes. Focusing on the notion of competence, this management model is characterized in particular by a forward-looking competence management, focused on the development of employability and individualised competence performance evaluation and development. In the early 1990s, the development of competence-based systems was intensified, and its implementation was institutionalised through both collective bargaining agreements between social partners and legislative initiatives. On the 17th of December 1990, an important agreement concerning the management of the steel companies' activities was concluded and signed between the Group of Iron and Steel Industries and the trade unions (Sectoral Agreement ACAP 2000). Moreover, the forward-looking management of jobs and competences (*GPEC*) became the major vector for competences management and development within a large number of companies (Gilbert, 2006; Bouteiller & Gilbert, 2005).

4 Competences development within labour market and related CVT inclusion policy instruments

In 1993, the public authorities encouraged further the development of competence-based practices when the national employment agency called then ANPE (*Agence National Pour l'Emploi* transformed into "*Pôle Emploi*" since 2006) modified its labour market repertory for trades and occupations (*ROME- Répertoire Opérationnel des Métiers et des emplois*, i.e. the Operational Repertory of Trades and Occupations) to become a competence-based repertory. According to this modified version of ROME, the concept of competence is a set of knowledge, know-how and know-how to be (social and behavioural competences) which are connected with the individual's job or occupation in a given situation of the professional activity within a trade family. In its 1997 version, ROME distinguishes between three types of competences: technical core competences, specific competences (or capacities) and associated competences (ROME, 1997). In its last online version (3rd version) of 2009, they are regrouped for each job-profile (and its potential alternative mobility job profiles) into two main categories: basic and specific competences. Then the descriptors of each of these overarching categories of competences are detailed through two types of competences: Theoretical and procedural knowledge (know-how) and action knowledge (practical specific know-how) (ROME, 2009). In this online version of Labour market repertory, each ROME job-profile is linked to one or several corresponding required vocational qualification(s) registered within the online version of NQF repertory (*RNCP- Répertoire National des Certifications Professionnelles*). Each ROME job-profile is also connected with one or several corresponding "*formacodes*" classified by training domains within the training supply thesaurus FOMACODE (Centre Inffo, 2018). This development contributed effectively to stimulating academic debates about the notions of competences and encouraged the enterprises to adopt an individualised competence approach in human resource management and development and abandon relying on the use of previous non-labour market focussed notion of qualification (Dif, 2010).

Also Under the impulse of the European recommendations framework for the transposition of the recommendations of the European Parliament and Council of 18 December 2006, the Ministry of Labour and employment set out a framework programme for access to key competences for a sustainable integration into the labour market via the Circular of 3 January 2008 issued by its General Delegation for Employment and Vocational Training called the “DGEFP” (now *DIRECCTE*- the Regional Directorate for Enterprises, Competition, Consumption, Labour and Employment). The focus was only on the following five key competences (considering that the other three can be dealt with transversally): communication in French, mathematical culture and basic competences in sciences and technology, digital culture, learning to learn and communication in a foreign language. Although this programme targets primarily vulnerable people (such as job-seekers, early school leavers without or with insufficient qualifications and beneficiaries of assisted vocational inclusion employment contracts), it is also open to all beneficiary employees of various adult education training instruments and related financing mechanisms, including innovative and experimental specific training programmes such as “forward-looking management of jobs and competences” (*GPEC- Gestion prévisionnelle des Emplois et des Compétences*), “validation of acquired experience (VAE)”, alternating vocational training contracts, etc.

In March 2009, a practice-based referential standards framework for professionally situated key competences (*CCSP- Référentiel des Compétences Clés en Situation Professionnelle*) was established by the ANLCI in cooperation with its partners, namely the social partners, CVT accredited joint funding collectors (*OPCA*), regional authorities, the State and several professional sectors. As it is constructed on the basis of observed work situations and not on pre-established definitions based on academic knowledge, the CCSP adopted resolutely a professional approach in identifying and defining inclusive key competences. In fact, it is based on connecting the analysis and description of a work situation in its various dimensions (activities, criteria, professional capacities) with an analytical inventory of general and applied knowledge used in this work situation. The identified professionally situated key competences are organized within this framework according the first three (out of the four) degrees of the “national standards framework” established by the ANLCI in 2003. Additionally, by taking into consideration the recommendations of the EU framework in its inventory of key competences, the CCSP also adopts an interdisciplinary approach where the key linguistic competences (reading, writing, and speaking) are looked at as a broader package covering other dimensions and constituting in all the key competences. The CCSP targets various users, namely: (a)-enterprises and local authorities as employers; (b)-private and public funding organizations and institutions such as the sectoral and inter-professional *OPCA* (CVT accredited joint funding collectors), the State and local authorities and the national centre for local civil servants (*CNFPT- Centre national de la Fonction Publique Territoriale*); (c)-training providers; (d)- consultants and counsellors in VET and vocational inclusion institutional operators such as: the employment poles, local missions and multi-annual local plans for integration and employment (*PLIE- Plans Locaux pluriannuels pour l'Insertion et l'Emploi*); (e)- different employees, their representatives and job seekers (including beneficiaries of various vocational inclusion programmes and contracts) (ANLCI, 2009).

As an implementation of the annex of the article 12 of National Inter-professional Agreement (ANI) of 14 December 2013 and the Act of 5 March 2014 (Art.L6323-6 of Labour code), the “Observatories and Certifications Committee (*COC- Comité Observatoires et Certifications*)” of the National Inter-professional Joint Committee on Employment and Training (*COPANEF – COmité Paritaire interprofessionnel National pour l'Emploi et la Formation*), prepared a referential standards framework for the development of knowledge and professional competences (*S3CP- Socle Commun de Connaissances et de Compétences Professionnelles*) called alternatively CléA referential on the 28th of May 2014 (COPANEF, 2017). It was

formally introduced through the implementation Decree n° 172 of 13 February 2015 and then completed by a set of corresponding referential assessment and validation criteria of acquired competences leading to obtaining a certification-based qualification (called CléA qualification) which is also validated and referenced by the CNCP within the NQF repertory. Its inclusive quality within the labour market is guaranteed by its awarder COPANEF in cooperation with the “National Joint Employment Committees” (*CPNE- Commissions paritaires nationales de l’emploi*) for employees and the “Regional Inter-professional Joint Committee for Employment and Training” (*COPAREF- Comité Paritaire Interprofessionnel Régional pour l’Emploi et la Formation*) for job seekers and the “Inffo Centre” for accompaniment (CNCP, 2016). Like the referential framework “CCSP”, the “S3CP” (CléA referential) is characterised by its sufficiently wide scope which allows for undertaking, within each sector or branch of activity, the relevant adaptation and contextualisation to each learner’s occupational and professional career development needs. It is composed of seven fields (regrouping 28 field units with their corresponding 108 assessment and validation criteria) for the development of knowledge and professional competences: communication in French; capacity of using basic calculation rules and mathematical reasoning; ability to use the usual techniques of information and digital communication; ability to work under defined team-working rules; ability to work independently and achieve an individual goal; ability of learning to learn throughout life; mastering gestures and postures and compliance with the hygiene, safety and basic environmental rules (COPANEF, 2017). The S3CP’s targeted groups include professionally active people, job seekers, individuals on vocational inclusion schemes, training providers, social partners and regions (Decree 172, 13 February 2015).

5 Institutional setting of basic involved stakeholders

There is a variety of stakeholders involved (via a networking of cooperation and partnerships) in the development and implementation of inclusive key competences through the whole educational and training system and active labour market policy instruments at national, sectoral and regional levels:

1. *Educational and training providers*: With exclusion of higher education (with about 69 universities) and general compulsory education, the IVET (Initial Vocational Education and Training) providers counted in 2017 for about 62600 senior professional schools (upper secondary colleges: *lycées professionnels*) of which 8900 are private (DEPP-MEN, 2017a & 2017b). Within the CVT system, the training provision is an open competitive market where there are, in 2014, more than 68500 providers involved in CVT provision for employees, self employed individuals, jobseekers and others. They are grouped into two basic categories of training providers: a)-private providers which are dominating in adult education provision in terms of their number (97% of all providers), b)- public and semi-public providers (APLF, 2018).

2. *The State institutions* which include namely: a)-different ministries involved in education and training connected with their field of responsibility (such as the ministry of national and higher education, the ministry of agriculture and fisheries and the ministry of labour); b)- The “national commission for vocational qualifications (*CNCP- commission nationale de la certification professionnelle*)” in charge of the NQF repertory (*RNCP- répertoire national des certifications professionnelles*) which were both created in 2002; d)-the “national council for lifelong vocational learning (*CNFPTLV- conseil national de formation professionnelle tout au long de la vie*)”.

3. *Social partners* which play an important consultative and decision-making role in the competence-based qualification formation processes (such as the creation and up-dating of qualifications, including the design of related competence-based referential standards).

4. *Regions and their networks*: Their role has been progressively reinforced since the launch of the decentralisation process in the 1980s. In order to implement their responsibilities as regional public authorities responsible primarily for vocational training, the regions have created their own dedicated administrative structures and instruments in the form of vocational training committees, VET related directorates, observatories and forward-looking development schemes. Moreover, relevant information and guidance concerning the implementation of different framework programmes and instruments for the development of inclusive key competences are provided through the following networks: (a)- the regional “network for the guidance and follow-up of the access to key competences and employment” (*ROSACE -Réseau pour l’Orientation et le Suivi de l’Accès aux Compétences Clés et à l’Emploi*) notably in cooperation with accredited counsellors, the employment poles, the local missions and DIRECCTE (the Regional Directorate for Enterprises, Competition, Consumptions, Labour and Employment); (b)–the network of regional centres for the organisation and coordination of information concerning VET (*CARIF- Centres d’Animation et de Ressources de l’Information sur la Formation*) or that of the regional observatory for employment and training (*OREF- Observatoire Régional Emploi Formation*); (c)- Regional centres for resources information concerning Illiteracy (*CRI- Centres Ressources Illettrisme*) which take in charge the fight against illiteracy (via the provision of relevant information and technical support and sharing educational resources and teaching tools) (DGEFP’s Instruction of 18/01/2010 and Circular of 03/01/2008).

6 Outcome conclusions

The inclusive role of different competence-based instruments developed within the whole educational and training system and through labour market inclusion active policy measures are evaluated (within this investigation) basically in terms of the rate and the pace of effective access to employment after graduation and obtaining the competence-based qualifications. In this connection, it is important to underline the following main outcome conclusions:

1. 86.8% of all initial education graduates during 2013, 2014 and 2015 on average, were holders of competences-based qualifications covering all levels of the NQF framework (44.5% at higher education levels and 42.3% at those of upper-secondary education). The remaining 13.2% were equally representing the holders of the end of compulsory education certificate (*DNB- diplôme national du brevet*) and those without any formal qualifications (6.6%) (DEPP-MEN, 2017b). Eight out of ten on average among the graduates of the 2013 generation had access to their first jobs within a period of less than six months. This rapid access to employment was, however, accompanied by a great instability, as the majority of their first jobs (70%) were on the basis of fixed duration work contracts. The access to their first permanent employment increases with the increasing level of obtained competence-based qualifications. 43% of the holders of EQF level 7 qualifications started with open-ended work contracts, i.e. with 23 points more than the holders of EQF level 3 qualifications with only 20% for instance (Céreq, 2017). Access to executive and intermediary employment positions was also increasing with the increased level of obtained competence-based qualifications as its rate went up after three years following the graduation from 17% for graduates without formal qualifications to 27% on average for the holders of upper secondary education qualifications to reach 78% for higher education graduates.

2. The weight of on-the-job and work-based learning dimension in the obtained qualification is observed to have an important effect on the rate and pace of its holders' access to employment. This is why, the apprenticeship graduates have a faster and higher access rate to employment than the school-based ones. 69% of all the apprentices who completed their apprenticeship up to EQF level 5 in 2016 had an effective access to employment within the following seven months (54% on permanent employment contracts) compared to only 48% (33%

with open-ended work contracts) for all those completing their school-based VET programmes at the same EQF levels (Marchal, 2018a, 2018b). The access rate to employment within the first seven months following graduation in apprenticeship at all levels is far higher for graduates holding qualifications (73% dominantly on permanent employment contracts with 55%) than those without any qualifications (54% where 48% on open-ended work contracts). By contrast this access is 51% (32% permanently employed) for graduates holding qualifications within the school-based educational track and 37.5% (34% on unlimited duration employment) for those without qualifications (Marchal, 2018a, 2018b).

3. The rate and pace of an effective access to employment are also high for the holders of work and competence-based qualifications acquired within the framework of the implementation of work-based CVT schemes such as the VAE (the validation of acquired experiential informal and non-formal learning) and the professionalisation contracts (*CP- contrats de professionnalisation*). Within the latter, the inclusive performance is even higher than that of apprenticeship. 73% of its beneficiaries had an effective access to employment within six months after the completion of their professionalisation contracts in 2015, dominantly via open-ended work contracts (60%) usually obtained (at 57%) within the same training enterprise (Pesonel, 2018).

References

- ANLCI. (2003). *Cadre National de référence (sept. 2003)*. Lyon : Agence Nationale de Lutte Contre l'Illettrisme. Retrieved from <http://www.anlci.gouv.fr/Mediatheque/Cadre-national-de-reference-sept-2003>
- ANLCI. (2009). *Référentiel des compétences clés en situation professionnelle (CCSP)*. Lyon : Agence Nationale de Lutte Contre l'Illettrisme.
- APLF. (2018). *Formation professionnelle*. Annexe au projet de loi de finance (APLF) pour 2018, Jaune Budgétaire, Automne 2018.
- Bouteiller, D., & Gilbert, P. (2005). Réflexions croisées sur la gestion des compétences en France et en Amérique du Nord". *Relations industrielles*, 60(1), 3–28.
- Brockmann, M., Clarke, L., Méhaut, P., & Winch, C. (2008). Competence-based vocational education and training (VET): The cases of England and France in a European perspective. *Vocations and Learning*, 1, 227–244.
- Centre Inffo (2018). *Le Formacod: Thesaurus de l'offre de la formation* (Version 12.0). Retrieved from formacode.centre-inffo.fr
- Céreq. (2017). *Quand l'école est finie - premiers pas dans la vie active de la génération 2013: résultats de l'enquête 2016* (Céreq enquêtes n°1, 2017). Retrieved from <http://www.cereq.fr/publications/Cereq-Enquetes/Quand-l-ecole-est-finie.-Premiers-pas-dans-la-vie-active-de-la-Generation-2013>
- CNCP. (2016). *Socle de connaissances et de compétences professionnelles (CléA)* (CNCP - Inventaire, Fiche 2203 version 2016). Retrieved from <https://inventaire.cncp.gouv.fr/fiches/2203/>
- Connac, Y., & la CEGOS (1985). *La bataille des compétences : l'éducation professionnelle permanente au cœur de la stratégie de l'entreprise*. Éditions Hommes et Techniques, Paris.
- COPANEF. (2017). *Référentiel CléA*. Retrieved from <https://www.certificat-clea.fr/media/2018/05/Referentiel-CLeA.pdf>
- Delamare Le Deist, F., & Winterton, J. (2005). What is competence? *Human Resource Development International*, 8(1), 27–46.
- DEPP-MEN. (2017a). *Repères et références statistiques sur les enseignements, la formation et la recherche*. Paris : Direction de l'évaluation, de la prospective et de la performance (DEPP), Ministère de l'Education nationale (MEN).

- DEPP-MEN. (2017b). *L'éducation nationale en chiffres : 2017*. Paris : Direction de l'évaluation, de la prospective et de la performance (DEPP), Ministère de l'Education nationale (MEN).
- DEPP-MEN. (2017c). *L'état de l'école 2017. Coûts, activités, résultats. 34 indicateurs sur le système éducatif français* (No. 27). Paris : Direction de l'évaluation, de la prospective et de la performance (DEPP), Ministère de l'Education nationale (MEN).
- Dif, M. (2010). EQF effect on national and sectoral qualification processes. in L. Deitmer, M.-L. Stenström, & S. Manning (Eds.), *Proceedings of the ECER-VETNET Conference 2010, Helsinki*. Retrieved from <http://www.b.shuttle.de/wifo/vetnet/ecer10.htm>
- EU. (2006). Recommendation 2006/962/EC of the European parliament and council of 18 December 2006 on key competences for lifelong learning. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32006H0962>
- Gilbert, P. (2006). *La gestion prévisionnelle des ressources humaines*. Paris: Éditions La Découverte.
- Klarsfeld, A. (2000). La compétence, ses définitions, ses enjeux. *Gestion*, 17(2), 31–47.
- Loufrani-Fedida, S. (2008). Les quatre niveaux du management des compétences : individuel, collectif, stratégique et environnemental”. In B. Chaminade (Eds.). *Guide du management des compétences*. La Plaine Saint-Denis: AFNOR.
- Maillard, F. (2003). Les référentiels des diplômes professionnels confrontés à leurs critiques : une mise en valeur de leurs enjeux sociaux. *Revue Française de Pédagogie*, 145, 63–76.
- Marchal, N. (2018a). *L'insertion des apprentis est marquée par la formation et par la conjoncture économique* (Note d'information no.18.08, mai 2018). Retrieved from <http://www.education.gouv.fr/cid53598/l-insertion-des-apprentis-est-marquee-par-la-formation-et-par-la-conjoncture-economique.html>
- Marchal, N. (2018b). *Le diplôme reste déterminant dans l'insertion des lycéens professionnels*. (Note d'information n°18.09, mai 2018). Retrieved from <http://www.education.gouv.fr/cid61014/le-niveau-de-formation-et-de-diplome-determinant-dans-l-insertion-des-lyceens-professionnels.html>
- OECD. (2003). *Definition and selection of key competences*. Paris: The Organisation for Economic Co-operation and Development (OECD).
- Pesonel, E. (2018). Le contrat de professionnalisation en 2016: Des embauches en hausse, une forte reprise dans la construction. *DARES Resultats n°009, Mars 2018*. Retrieved from <http://www.epsilon.insee.fr:80/jspui/handle/1/71833>
- ROME (1997). Répertoire Opérationnel des Métiers et des Emplois. Paris : ANPE (Agence Nationale Pour l'Emploi), la Documentation française.
- ROME (2009). *Répertoire Opérationnel des Métiers et des Emplois*. Pôle Emploi, ROME Version 3. Retrieved from <https://www.data.gouv.fr/fr/datasets/repertoire-operationnel-des-metiers-et-des-emplois-rome-version-3/>
- Winterton, J., Delamare-Le Deist, F., Stringfellow, E. (2006). *Typology of Knowledge, Skills and Competences. Clarification of the Concept and Prototype* (Cedefop Reference series, 64). Luxembourg: Office for Official Publications of the European Communities.

Bibliographical notes

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