



RÉPUBLIQUE
FRANÇAISE

*Liberté
Égalité
Fraternité*

Céreq

In and Around

° Training \ Employment «#2-2021

Do firms facilitate
the construction
of competences?



In and Around

is presenting articles about education, training and employment. The publication is edited by the Céreq, Centre for Studies and Research on Qualifications.

#2, 2021

Publication director : Florence LEFRESNE - Céreq



In and Around

°Training `Employment "#2-2021



Do firms facilitate
the construction
of competences?

DEPARTURES			
Time	DESTINATION	Platform	Expected
14h00	Corporate school	A	on time
15h03	Career development	13	delayed
15h14	Vocational training	C	cancelled
15h20	Skills' enhancement	B	on time
15h25	Apprenticeship	10	on time
15h31	Future	D	delayed
			Time now: 13h50

CB.



© Christèle GAUTHIER

Do firms facilitate the construction of competences? 7

Introduction by Céline GASQUET, Scientific Director at Céreq

Foreign expert's outlook: are workplace environments fit for purpose in an age of change? 10

Lorna UNWIN, Professor Emerita (Vocational Education), Institute of Education, University College London

The impact of digital technology on skills in logistics warehouses. 16

Mathieu HOCQUELET, Researcher at Céreq

Subcontracting in value chains: the weak link in firm-based training. 24

Josiane VERO, Senior researcher at Céreq

Jean-Claude SIGOT, Deputy head of the Training and certification department at Céreq

Constructing the skills of the future in the construction and civil engineering (CCE) sector. 32

Antoine BONLEU, Researcher at Céreq

Olivier JOSEPH, Senior researcher at Céreq

Emmanuel SULZER, Senior researcher at Céreq

Marie-Hélène TOUTIN-TRELCAT, Senior researcher at Céreq's associated centre in Lille

What else?

Continuing vocational training and SMEs: specificities, practices and potentials. 42

Aline VALETTE-WURSTHEN, Senior researcher at Céreq

International outputs 54

Agenda 58

Bibliography 64

Do firms facilitate the construction of competences?



Introduction

By Céline GASQUET | Céreq
Scientific
Director

For its 6th Biennial*, Céreq decided to ask the following question: “Do firms facilitate the construction of competences?”. This new issue of *In and Around* contains a selection of the papers that were presented there.

Why ask the question? The decision to do so arose out of a statement of the obvious, namely that we are collapsing under the weight of the term “competences”. It is true that this is nothing new. The term has already been widely used in the field of employment, training and work and has been the object of numerous debates. But for some years now there has been a strong renewal of interest, to the point where the term has taken on a semantic importance it had never before achieved, a sort of linguistic generalisation and institutionalisation. This should not, however, preclude us from questioning its relevance and validity. On the contrary.

The choice of this question arises also out of a desire or even a need on Céreq’s part to address questions related to competences, which it has been doing for a long time. There are numerous studies on the subject and no fewer than three edited books were published in less than five years at the beginning of the 2000s[†].

What stands out from among the multiplicity of definitions put forward is that



*Céreq’s 6th Biennial (online event),
September 24th 2020

competencies can be characterised by five major features: 1/ competencies are centred on individuals or on groups of individuals (the collective dimension is important). They are neither jobs nor codified qualifications; 2/ competencies are action-oriented knowledge that is put to the test in reality; furthermore, the reality observed is that of the work situation, which cannot be reduced either to a formal qualification or to a job; 3/ competencies are dynamics; thus they are acquired and develop and it is essential to understand how; 4/ competencies are embedded in a particular situation and are consequently not the sole responsibility of any one individual. The context, particularly that of the firm in question, is crucial; 5/ finally, competencies must be capable of being observed, evaluated, measured and recognised.

In order to address the question of competencies today, various contextual elements have to be considered. Thus, the knowledge society in which we live, together with the ecological and digital transitions and their current and future consequences, give rise to some very significant challenges with regard to the development of competencies.

Beyond this, however, there are at least three other contextual elements that also have to be considered. Firstly, it has to be borne in mind that the question of firms' role in the construction of competencies is being posed today in a context in which the freedoms and responsibilities of both individuals and firms have been strengthened. Moreover, this question is being raised in a period in which there has been a sort of revival of the matching approach, together with a strong drive to precisely identify firms' current and future needs. Finally, efforts to address

this question cannot disregard the issues around economic performance in the globalised world in which firms are obliged to operate.

Can firms facilitate the construction of competencies? Obviously, firms are able to do so, and to that end have various levers at their disposal. If the idea that training and competencies are linked is accepted, firms contribute to the development of individuals' competencies through their involvement in initial vocational training. This is reflected in the use of apprenticeship-based training programmes and in the development of closer links between firms and training establishments, links that have been strengthened as part of the reform of the vocational pathway. It is also reflected in the role of the social partners in the actual construction of certifications.

And again, by accepting this link between competencies and training, firms can also facilitate the construction of competencies by developing continuing vocational training for their employees. This is a necessary but not always sufficient condition. In particular, it is impossible to ignore the persistent inequalities in access to continuing vocational training, as the results of the Defis survey remind us. Overall, some 30% of employees have never had access to training since the end of their initial education/training. However, this applies to 51% of those with only lower secondary qualifications, but to only 21% of higher education graduates. The rate of access for managerial and executive staff (*cadres*) is twice as high as that for manual workers, while twice as many employees in firms with more than 2,000 employees receive training as their counterparts in firms with between 10 and 20 employees. And beyond training

provision, it is through work itself that firms can facilitate the construction of competencies.

And human resources policy can also play its part through the development of forward-looking job and competence management, an approach that enables firms to anticipate events and to activate the resources required to adapt competencies and their workforce. However, the Defis survey reminds us that there are still far too few firms that have adopted such a policy (Zizzo 2019).

Ultimately, it is undoubtedly through the adoption of a global, systemic approach, the linking of various channels and a combination of training policy, HR practices and work organisation that firms can really develop competencies. Thus, there are a number of different permutations that will facilitate the real development of competencies.

Should firms facilitate the construction of competences?

If firms are in a position to facilitate the construction of competences, should they actually do so? If we look to the legislation, then the answer is yes. Firms have an obligation to guarantee their workers' employability...even though it remains to be seen how this much-vaunted "employability" is to be measured. The challenge is twofold. On the one hand, there is a need to clarify the links that may (or may not) exist between employability and competencies (Loufrani-Fedida, Oiry, Saint-Germes 2015). And, on the other hand, the key dimension of the recognition, measurement and evaluation of competencies must also be considered.

However, above and beyond the legal framework, firms will not facilitate the construction of their employees'

competencies unless that objective coincides with their own interests and is consistent with their economic strategy. Céreq has shown, through the Defis survey, that the standard dichotomy between large firms that provide large amounts of training and small firms that provide less conceals a rather more complex reality.

The Defis survey shows that firms provide training above all for those they wish to nurture and promote. This throws into sharp relief the whole issue around the securing of individual trajectories: to what extent are firms themselves responsible for the development of competencies? Here we touch on what might be called firms' training responsibilities, which might in turn be close to what Martin Richer terms "socially responsible employability". The aim here is to take into account the mark on society left by firms' practices and to assess the ways in which they facilitate the development of their employees' competencies in order to enable them to progress in their careers not only within the firm but outside of it as well. ■

¹ Brochier D. (coord.). (2002). *La gestion des compétences. Acteurs et pratiques*. Paris, Éditions Economica, 2002, 179 p. Collection « Connaissance de la gestion » ; Dupray A., Guitton C. et Monchatre S., (2003). *Réfléchir la compétence : approches sociologiques, juridiques, économiques d'une pratique gestionnaire* sous la direction de Toulouse : Octares Éditions, 2003, 272 p. ; Cavestro W., Durieux C. et Monchatre S. (dir.) (2007). *Travail et reconnaissance des compétences*, Economica, 224 p.

Foreign expert's outlook

DO FIRMS FACILITATE THE CONSTRUCTION OF COMPETENCES?



**Lorna UNWIN, Professor Emerita (Vocational Education),
Institute of Education, University College London**

Discipline: Education; political economy; social policy

Main research areas: Development of occupational expertise; apprenticeship models of learning; workplaces as learning environments; educative potential of vocational education; policy history

Are workplace environments fit for purpose in an age of change?

Places of work (in whatever shape or form) and the ways in which people produce goods and services have always undergone change in response to technological developments, consumer demand, and economic and societal upheavals (Edgerton 2008). I prepared my response to the articles in this edition of *In and Around* in the midst of the COVID-19 pandemic whose impact on working life and levels of employment is proving to be significant. For example, a shift is already underway in terms of large companies' attitudes to homeworking, a practice which some employers previously either discouraged or actively prohibited because they feared it would harm productivity. Research for the *Financial Times* newspaper has found that some financial sector companies envisage using their city-centre offices mainly for meetings and socialising rather than traditional desk-based work (Giles and Thomas 2020). In their analysis of household survey data from the UK's Understanding Society Covid-19 Study, Felstead and Reuschke (2020, p.2) note that the imposition of a three-month lockdown in the UK from April to June meant, 'the UK government, like many others around the world, has therefore unwittingly engineered the largest homeworking experiment in history'. Homeworking is still most prevalent amongst the better paid and better qualified and, of course, many jobs cannot be performed from home (see Adams et.al. 2020 for a study of patterns in the US and UK). However, the phenomenon of lockdown is contributing to an acceleration of broader questions triggered by the advance of digital technologies and artificial intelligence (AI) about the way work is and could be organised. These questions pose considerable challenges for existing models of initial and continuing vocational training.

In their analysis of the challenges facing sectors, individual companies and workers as they confront increasing automation, hostile business environments, and precarious forms of employment, the articles in this edition of *In and Around* shed much needed light on the ways in which expertise (across all forms of work) is developed, utilised and distributed. Importantly, they provide evidence to remind us that, whilst some of the challenges are new, many are long-standing.

Close to my home in Derbyshire is the John Smedley knitwear company, founded in 1784 and still producing high quality garments on a mix of hand operated and computerised machines with some final stage procedures completed entirely by hand. The factory has witnessed many changes, but walking through its different departments, from the design studio to the dyeing rooms, the noisy main production floor and the administrative offices, we see a classic productive system and division of labour at work. Raw materials arrive at one end of the factory and emerge as packaged knitted garments at the other end. Yet, if we observe and listen closely, we see the free-flowing ways in which people

cross occupational and task boundaries to share their expertise, to give opinions and seek advice, to support each other, to complain and disrupt, to adapt and to learn.

It is this relational and contingent nature of the work process that has remained unchanged and which, I want to argue, provides the key to increasing companies' capacity to enable people to acquire professional expertise and capability. In addition, I want to modify the use of the term "firms" in the title of this edition of *In and Around* by proposing that we broaden our scope to include both private and public sector organisations, as all are faced with similar challenges in relation to building expertise and capability

Conceiving training as a work-based process

One of the biggest problems facing researchers and certainly policymakers when considering ways to improve workplace capacity by boosting the take-up of training is the heterogeneity of what constitutes a workplace and employer behaviour. Understandably, given the complexities involved, the chief way in which countries and supranational agencies construct their understanding of the extent to which organisations engage in workforce development, both on and off-the-job, is through various forms of counting: for example, days spent per worker attending training courses; number of training events provided; and the level of expenditure involved. As the article by Agnes Checcaglini and Isabelle Marion-Vernoux shows, this quantitative approach enables in-country, cross-country and cross-sectoral comparisons to be made and can indicate shifts in the nature of the training provided. In France, as in many countries, investment in formalised training is often the first line in an organisation's budget to be cut when economic problems arise. National government policy interventions, such as levies, skills' investment funding, and tax incentives, can help to correct for market failures, but ultimately, as the article indicates, it is the organisations themselves that make the choice about how much training they are prepared to support (see also Unwin 2017).

At the heart of the problem is a well-entrenched mindset (within governments and organisations) that conceives training as somehow separate from everyday business and workplace activities. Training approaches tend to follow a standard educational model of developing an individual's competencies on the basis that the individual will then improve their performance in the workplace. If the individual needs further training, this is expressed in what Paulo Freire famously called the 'banking' approach whereby the individual (student or worker) is regarded as a recipient to be topped up with new facts, rather than an active learner with existing expertise that can be deployed to solve problems. Providers of vocational training often 'sell' training to employers as a discrete product. Hence, statistics are collected on rates of participation and numbers of credentials awarded at the end of a training 'event'.

I am conscious that despite earlier noting the heterogeneity of organisations, I am making several generalisations here. As my own research with my colleague, Alison Fuller, has shown, some workplaces (regardless of size or type) display the necessary characteristics to create what we have called 'expansive learning environments' (Fuller and Unwin 2019). Using these characteristics, we developed the 'Expansive-Restrictive Framework' as an analytical tool to help organisations analyse how they strengthen

the way they organise work and fully utilise the expertise of their employees to better support learning as an everyday part of the work process. Working with employers, training providers and trade unions, we have continued to develop the framework so it can be used as a basis for a co-production approach to vocational training.

Key to the more expansive workplaces is the willingness to capitalize on the potential of their employees, to create an atmosphere of trust in which people's expertise is respected and they are given the discretion to make judgements and have some autonomy over their work (Felstead et.al. 2009). They instinctively generate learning opportunities by organizing work in ways that enable people to share and create knowledge and solve problems together as part of their everyday interactions. It follows from this that these more expansive workplaces value and nurture the skills of their managers, placing emphasis on their ability to support employees. Poor management skills have long been cited as being a key factor in the UK's poor productivity record (Haldane 2018).

The framework takes account of the broader context or productive system in which any organisation sits to acknowledge the dynamic way in which both internal and external forces can affect a workplace's capacity to maintain or diminish its expansive characteristics. This is illustrated in the article by Josiane Vero and Jean-Claude Sigot on the significant rise in subcontracting in France and the associated shift to 'cascading subcontracting' whereby first-tier subcontractors devolve some of their risks to second-tier contractors and so become principal contractors. Employees at the end of the chain have less access to training and to different types of training. The training they receive tends not to lead to changes in their work activities or offer opportunities for greater responsibility, but rather focuses on routine areas such as health and safety.

Mathieu Hocquelet identifies two ways in which employer behaviour could be seen as exemplifying the expansive and restrictive characteristics discussed above. His paper on the impact of technological developments and e-commerce on the French logistics sector, which employs around 13% of all manual workers in France, highlights the turbulent nature of a sector whose workplaces are facing considerable pressures within their productive system. During the UK's lockdown period, logistics workers were in the media spotlight as the country woke up to their role as key enablers connecting different parts of the economy and ensuring citizens could buy goods online. The first example reflects the restrictive tendencies of employers in the sector. Although logistics workers are increasingly required to be highly adaptable to work in a digital and virtual environment, Hocquelet reveals that employers seem more focused on what they perceived to be deficiencies in soft skills ('savoir-être') of potential new recruits such as punctuality and attendance. In a statement that would apply equally to the way some employers in the UK revert to this decontextualised language of skills deficits, he notes that, 'The polysemous use of the concept of soft skills particularly conceals the practical difficulties of getting to the workplace'.

The second example provides evidence of a more expansive and relational approach to tackling the sector's challenges. Hocquelet discusses how a range of stakeholders (public authorities, labour market intermediaries and employers) in an area of southern France have been working together to tackle ways to improve the sector's image,

training and workforce retention. I was particularly struck by the attempt to identify common tasks among employees of a logistics company, ‘from inventory managers through to warehouse drivers and order pickers as a means to encourage more flexible working’. The concept of boundary crossing within workplaces has long been discussed in the workplace learning literature, but Hocquelet’s example points to more fluid conceptions of expertise. Expansive workplaces often organise work in teams and/or on a project basis to break down occupational hierarchies (see Lahiff et.al. 2019 for examples involving apprentices in the aerospace sector). Perhaps the stakeholders working on more expansive ideas from the logistics sector could be connected to those in the construction and civil engineering sector, discussed in the article by Antoine Bonleu, Oliver Joseph, Emmanuel Sulzer and Marie-Helene Toutin-Trelcat, who are struggling to retain apprentices and find their companies’ business models and volatile life-cycle (particularly those of SMEs and independent companies) militate against expanding training outside their existing workforces.

Expanding access to training

Each of the articles discussed here remind us to a greater or lesser degree that access to training and the development of expertise is still beset by inequalities. It would be interesting to know the extent to which employees in the logistics and construction and civil engineering sectors and those working in the lower echelons of sub-contracting chains in France are engaging in what Wrzesniewsk and Dutton (2001) have termed ‘job crafting’ as a means to break out of the rigid frameworks often imposed by restrictive job descriptions. Alison Fuller and I used this concept when we were asked to carry out a study of the work of porters in a large hospital in the UK (Fuller and Unwin 2017). Porters sit at the bottom of the UK’s National Health Service occupational hierarchy and their job descriptions limit them to moving patients, equipment (such as oxygen cylinders) and clinical samples from one area of a hospital to another. The hospital concerned was keen to explore ways of developing training programmes to enable the porters to move up the hierarchy. We discovered that many of the porters were carrying out tasks that were not included in their very minimalist job descriptions: for example they were assisting, supporting and even ‘teaching’ student nurses how to use the syringe pump drivers effectively, and were involved in providing patient care by reassuring patients as they wheeled them to operating theatres.

Job descriptions are a technology that can be used in an expansive or restrictive way, but their impact is poorly understood. They often serve to render invisible types of expertise that are the lifeblood of organisations and reflect the adaptability and conscientiousness that employers and policymakers espouse as being critical to productivity and innovation. In a world of work where ‘intangible assets’ (ideas, brand marketing, networks, developing customer loyalty/service over the long term) are becoming increasingly important, finding ways to enable all employees to develop and utilise their expertise requires more than increasing the supply of training courses (Haskell and Westlake 2018). Hocquelet captures the scale of the challenge in his article: ‘This will involve helping the workforce to improve their skills rather than to adapt in a more restricted way to production processes’.

The articles in this edition of *In and Around* provide the type of detailed empirical research evidence we need to make progress. ■

 **FURTHER
READING** Read all
Céreq publications
on www.cereq.fr/en

Adams, A., Boneva, T., Golin, M. and Rauh, C. (2020) Work Tasks That Can Be Done From Home: Evidence on Variation Within & Across Occupations and Industries. *Centre for Economic Policy Research Working Paper*. https://cepr.org/active/publications/discussion_papers/dp.php?dpno=14901

Edgerton, D. (2008) *The Shock of the Old: Technology and Global History Since 1900* (London: Profile Books)

Felstead, A and Reuschke, D (2020) 'Homeworking in the UK: before and during the 2020 lockdown', *WISERD Report*, Cardiff: Wales Institute of Social and Economic Research. Available for download from: <https://wiserd.ac.uk/publications/homeworking-uk-and-during-2020-lockdown>

Felstead, A., Fuller, A., Jewson, N. And Unwin, L. (2009) *Improving Working for Learning*, London: Routledge.

Fuller, A. and Unwin, L. (2019). Improving workplace capacity as the prerequisite for effective work-based learning: a co-production approach.

In A. Bahl and A. Dietzen (eds) *Work-based learning as a pathway to competence-based education – Research and implementation strategies from a comparative and global VET perspective*. BIBB and UNESCO-UNEVOC. Opladen: Barbara Budrich.

Fuller, A. and Unwin, L. (2017) Job Crafting and Identity in Low-Grade Work: How Hospital Porters Redefine the Value of their Work and Expertise, *Vocations and Learning*, 10(3): 307-324.

Giles, C. and Thomas, D. (2020) 'Cities count cost of lasting exodus from offices'. *Financial Times*, September 14th. <https://www.ft.com/content/203cc83c-72b0-49c9-bea5-6fb38735a8fc?shareType=nongift>

Haldane, A. (2018) 'The UK's Productivity Problem: Hub No Spokes'. Academy of Social Sciences Annual Lecture. London, June 28th. <https://www.bankofengland.co.uk/-/media/boe/files/speech/2018/the-uks-productivity-problem-hub-no-spokes-speech-by-andy-haldane>

Haskel, J. and Westlake, S. (2018) *Capitalism Without Capital*. Princeton: Princeton University Press.

Lahiff, A., Li, J., Unwin, L., Zenner-Hoffkes, L. and Pilz, M. (2019) Industrial standardisation as a driver for cross-national convergence in training processes: Aviation apprenticeships in England and Germany, *European Journal of Training and Development*, Vol. 43 No. 7/8, pp. 752-766.

Unwin, L. (2017) Employer-led In-Work Training and Skill Formation: The Challenges of Multi-Varied and Contingent Phenomena. In C. Warhurst, K. Mayhew, D. Finegold and J. Buchanan (eds) *The Oxford Handbook of Skills and Training*, Oxford: Oxford University Press.

Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: revisioning employees as active crafters of their work. *The Academy of Management Review*, 26(2), 179–201.

Highlight

DO FIRMS FACILITATE THE CONSTRUCTION OF COMPETENCES?



E-COMMERCE
FORWARD-LOOKING OF JOB MANAGEMENT
MANPOWER MANAGEMENT
MANPOWER NEED
LOGISTICS
TREND IN QUALIFICATIONS



Mathieu HOCQUELET, Researcher in the Work, employment and professionalisation department at Céreq

Discipline: Labour sociology

Main research areas: Labour intensive industries (retail, logistics) sectoral and productive restructurings “unskilled” jobs - digitalization - ecological transition workforce management - industrial relations global value chains and companies



Article available online:

www.cereq.fr/en/impact-digital-technology-skills-logistics-warehouses

The impact of digital technology on skills in logistics warehouses

Driven by both technological developments and the boom in e-commerce, the logistics sector is currently undergoing far-reaching changes in its production processes. These dynamics could well lead to radical changes in working and employment conditions in a sector in which the demand for manual labour is very high. Addresses the various challenges-including digitalisation, the sector's attractiveness to workers and skill and career management-that French warehouses and logistics platforms are currently having to face.

At the interface between manufacturing industry and services, the transport and logistics sector is often cited by government bodies as one of the drivers of change in industrial policy and energy transition. Logistics in particular relies on a largely manual workforce, and now has to deal with the development of ad hoc digital tools in warehouses: bionic exoskeletons, pallet stacker cranes, voice commands, inventory drones, inventory management software, “smart” shelving that can send articles to handlers, etc. More generally, the sector is having to contend with the development of e-commerce, which is being driven by new international actors and presages the reorganisation of its value chains. Although these reconfigurations of production processes can lead to profound changes in work, employment and training in the medium term, as is already being seen in transport, the current problems in workforce management in warehouses and logistics platforms (WLPs*) currently have little to do with this radical transformation of the sector.

Automation still far from commonplace and a digital transformation driven by e-commerce

Logistics is characterised by low profit margins and competition on costs, resulting in a cautious attitude towards the adoption of technologies. Logistics companies are reliant on their customers' and suppliers' needs and face fierce competition. They also have to deal with serious constraints in terms of deadlines, flexibility, diversity of merchandise and the frequently cyclical nature of business. The capitalist structure of warehouses

*Warehouses and logistics platforms (WLPs) of over 5,000 m² incorporate all storage facilities and logistics operations such as order preparation, packaging and the acceptance and dispatch of merchandise. A logistics platform is an area where the merchandise is to be forwarded the same day, whereas a warehouse is a place where merchandise is stored for longer than a day.

and logistics platforms in France highlights the significant influence of ten big groups that specialise not only in retail but in also transport and storage, two areas in which more than 50% of WLPs are to be found. With more than 30 WLPs each and accounting for 12% of all facilities, these large groups are one of the main drivers of technological change in the sector. In contrast, the vast majority of WLPs - almost nine in ten - belong to small groups that operate one or two of them [5]. Although the digitisation of logistics activities tends to be associated with the automation of operations, this remains the exception. In 2016, only 5% of Warehouses and Logistics Platforms carried out at least one logistics operation using a fully automated system. In contrast, in more than a third (37%) of WLPs, logistics operations are mechanised but remain under the control of an operator. The most common scenario, however, remains warehouses that still rely exclusively on manual labour assisted by simple logistics tools (61%) [5]. So what are the major motives for and obstacles to introducing new technologies in warehouses? If we look further than the very real problem of the cost of the equipment for SMEs, it is likely that technological changes will bring about a reduction in labour costs through the automation of production processes. Although this aspect is by no means insignificant, there are also other factors that can influence companies' decisions on whether or not to apply new technologies in warehouses. A tight labour market, rising land prices or increases in merchandise turnover are among the main factors that encourage logistics companies to explore new technologies. Conversely, the unpredictable nature of the business, the dynamics of delocalisation or even inertia and the degree of advancement

BOX 1: FROM LOGISTICS TO E-LOGISTICS IN THE UNITED STATES

The numerous prospective studies and discussions on the opening of ever-bigger, vertical, and sometimes completely automated warehouses raises the question of the future of unskilled or low-skilled employment in a sector that still employs many manual workers. However, this analytical framework tends to mask a very nuanced reality when it comes the forms taken by the transformations brought about by this recent digital shift. Widely impacted since the 1970s by the rise of large-scale retailing, logistics is now being disrupted by the big domestic and global e-commerce players. With the arrival of these players, logistics has gone from large-scale retailing in superstores, where people go to do their shopping by car, to online orders placed through a computer, tablet or smartphone and then delivered to the home or a nearby shop, in most cases free of charge and on the next day. The principles behind the success of e-commerce have both widened the scope of logistics (last mile logistics and delivery, returns logistics), and, at the same time, reorganised its working patterns (faster pace and greater uncertainties) and methods (smaller quantities of goods), resulting in the reorganisation of supply chains, from its working patterns to the actors involved via the employment and working conditions of the sector's workforce. In fact, like immediate delivery platforms, companies are competing with one another to reduce delivery times and costs. This approach involves seeking to reduce costs right across the supply chain, between the optimisation and outsourcing of production, transit and delivery costs. So, although it is unlikely that the sector will see a dramatic fall in the number of jobs in warehouses over the next decade, various studies conducted in the United States on the hegemonic development of Amazon [1; 3] indicate that large numbers of workers will see a change in their work content and job quality. As in France, e-commerce represented around 9% of retail sales in 2019, having seen a similar increase (a doubling of its market share in 7 years). The implications of the development of e-commerce for day-to-day work include the potential emergence of new forms of work intensification and the deskilling of many jobs, in turn encouraging the increased use of temporary staff. Furthermore, the reconfiguration of the production system as a result of the ongoing e-logistics revolution is likely to bring with it more extensive changes in the industrial fabric and in industrial relations (growth of subcontracting and self-employment, fewer unionised workplaces, racialisation of the workforce) right across the transport and logistics sector.

of the technological innovations themselves are all factors that deter companies from investing in such equipment [3]. E-commerce - which accounted for 9.1% of retail sales in 2018, up from 5% in 2011 - and retail sales more generally (accounting for 48% of the total surface area of WLPs) [6], were the main areas in which new technologies were trialled.

These areas are characterised by the existence of several large WLPs, where storage time is shorter and workforces are larger. Small packages (individual orders) combined with more frequent orders are motivating factors and are better suited to process automation, which is being driven by the rapid growth and establishment of new global e-commerce businesses such as the American Amazon group and the Chinese group Alibaba. So, rather than digitisation per se, the logistics sector appears to be experiencing a technological surge driven by the development of digital distribution channels [9]. In this context, and faced with a sectoral landscape dominated by the big distributors and big transport and storage companies, the recent arrival of new global and domestic e-commerce businesses is playing a key role in the reconfiguration of value chains in the sector: processes, equipment, boom in last mile/urban logistics and returns logistics (see Box 1).

A manual labour industry now short of job applicants

Having been a job creator for the last five years, the Transport and Logistics sector now faces a shortage of trained applicants in some areas. Logistics, in particular, which employs more than 800,000 people, 700,000 of whom are manual workers (that is 13% of all French manual workers) [2], is not immune to these problems. The recruitment problems in WLPs, that both employers and temp agencies have complained about, are due primarily to the lack of attractiveness of jobs when warehouses are located in dynamic employment zones and the issue of career stability in a sector where employment insecurity is high. The employers questioned mentioned the difficulty they had in recruiting and retaining their workforce in “unskilled and less attractive jobs” due to the sector’s poor image, the significant entry cost for manual workers, and the difficult work and employment conditions: the need to hold licences for different types of vehicles, workplaces located away from residential areas and with poor or non-existent public transport, low wage levels and an above-average frequency and severity of accidents. Logistics is characterised by high labour needs, mainly for unskilled or low-skilled manual jobs. 80% of warehouse employees are men, working mostly in manual jobs, and with a relatively low level of education: three quarters of manual workers have a CAP qualification. The age distribution also indicates that employees in transport and logistics are getting older: although half of them were under the age of 40 in 2006, this had fallen to 44% ten years later (18% under the age of 30) [7]. The Association pour le développement de la formation professionnelle transport et logistique (Association for the development of vocational training in transport and logistics - AFT) puts this ageing down to a “loss of job applicants” and to the existence of retraining jobs such as driving heavy goods vehicles. Finally, logistics is a manual labour industry where workers face significant job insecurity. Workforce management is as lean as possible, with extensive but uneven recourse to temporary staff: 14% on

average, with marked differences between directly operated warehouses and those which are operated on behalf of others, large domestic and international groups, and independent businesses. In 2018, a quarter of people working in a WLP were on a fixed-term or temporary contract, with temporary workers making up 26% of the workforce in logistics companies, as opposed to 15% in directly operated warehouses [7]. Furthermore, it is important to look at the territorial distribution of logistics activities and the workforce. A little over half of those in warehousing and handling occupations now work in towns with “concentrated” logistics zones, where there are at least three warehouses and logistics platforms (WLPs) of over 5,000m² within 2 kilometres of one another. However, these occupations represent on average only 3% of jobs there. In contrast, in certain “specialised” towns in or close to important logistics hubs on the outskirts of major cities (motorways, airports, river and seaports, railways), these occupations account for more than 20% of jobs. Against this background, the overhaul of the logistics landscape, amid the development of e-commerce and the reappraisal of large-scale distribution, presages sectoral spillovers, movements of labour and a major reconfiguration of logistics zones.

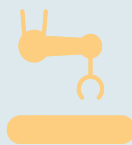
Employment and skills management amid longstanding problems and an uncertain future.

It is against this background that public authorities, labour market intermediaries and employers are now trying to anticipate changes in the sector while at the same time seeking to address the jobs and skills management problems that employers in the sector have been talking about for several years. Measures have been implemented at various levels, including regional workshops bringing together local public stakeholders and employers, the introduction of strategic jobs and skills management in the sector at regional level or the increasingly common presence of a human resources manager in warehouses. The majority of these initiatives are designed to attract, train and retain the workforce, an ambitious objective in a highly competitive sector. Most of these experiments are taking place in local authorities with a high concentration of WLPs. With respect to strategic jobs and skills management, the digital changes in logistics identified through regional strategic jobs and skills management initiatives lie at the intersection between the changeover to paperless systems, the networking of operations in the warehouse and, beyond these, an increase in output as a result of mechanisation, robotisation and improvements in its quality and fluidity (see Box 2). Given the uncertainties surrounding the current process of technology-driven change, the identification of common activities undertaken by handlers, order pickers, warehouse drivers, stock controllers and inventory managers opens up the prospect of more flexible working in warehouses as a means of safeguarding careers. This has resulted in the introduction of a modular common skills certification course that prepares students for the occupation of “polyvalent logistics agent” and leads to the award of a CCP (certificate of competence) or CQP (sectoral qualification). Similarly, occupational mobility platforms have been set up to safeguard and facilitate mobility and career changes. However, although the main skill expected of logistics workers is the ability to adapt to a digital and virtual environment, discussion with stakeholders in the sector tends to revolve around the notion of soft skills (“savoir-être”).

Logistics needs to act quickly to attract young people who have few qualifications but are very adaptable, in a context in which local authorities are injecting resources to support initiatives in the sector. Despite a diversification of recruitment methods, many employers speak of gaps in soft skills, referring to a lack of punctuality, delays in completing work, unjustified absences, failure to comply with safety instructions and also problems in French and mathematics, particularly in urban logistics zones. The polysemous use of the concept of soft skills partially conceals the practical difficulties of getting to the workplace; WLPs are often located on the outskirts of cities and are badly served by public transport at the times when people are arriving at or leaving work, meaning that workers often have to be able to drive and have a car. So one of the first measures that needs to be put in place is a scheme to help young people to learn to drive, so they can enter the workforce more quickly. Other measures suggested include a campaign to promote careers in the sector and, more broadly, a “positive communications” campaign to counteract the sector’s negative image, showing how new technologies can lead to improvements in working conditions and portraying logistics as a provider of stable local employment. Thus between an uncertain future and longstanding labour and employment problems, logistics appears to be a sector in which changes in production processes depend to a large extent on changes in retail distribution, a very similar manual labour industry that faces similar problems with regard to the development of e-commerce logistics. Currently, WLPs in France still seem relatively unaffected by large-scale technological developments, but the digital surge driven by the large groups is triggering an inexorable process of change in a highly competitive sector. This context raises particular questions about the dynamics of employment and working conditions, while a series of studies conducted in the United

NEW DIGITAL SKILLS IDENTIFIED THROUGH TERRITORIAL STRATEGIC JOBS AND SKILLS MANAGEMENT

Coordinating one's actions with automated handling, storage and palletisation systems



Using new handling tools

Controlling autonomous trucks (working in an automated environment)

Using the digital information management tools required to carry out the task



Carrying out first-level maintenance on the connected objects usually found in warehouses

Managing and optimising flows using digital interfaces

Interacting with robots



Communicating and positioning oneself in digital and virtual environments



Integrating the "green" dimension into one's work and behaviour

Source: Céreq, example of territorial strategic jobs and skills management in logistics at Saint-Martin-de-Crau, Bouches-du-Rhône.

States has highlighted a potential deterioration in the years to come (see Box 1). As we are now talking about industry 5.0, emphasising the aspiration of putting human beings at the centre of an increasingly automated production process, there is still work to be done with regard to training in the logistics sector. This will involve helping the workforce to improve their skills rather than to adapt in a more restricted way to production processes. This can only be achieved if measures are put in place to safeguard careers. But this requirement is not nearly enough, particularly in a sector that is greatly influenced by large companies whose strategies are based on low prices and faster delivery times and whose business involves value chains that span international boundaries. ■

BOX 2: SURVEY METHODOLOGY AND DESCRIPTION

This issue is the result of a study conducted in three dynamic logistics zones in the Ile-de-France, Rhône-Alpes and Provence-Alpes-Côte d'Azur regions. The study focuses on how the anticipated revolution is being diffused and appropriated and on the tangible effects these changes are having on systems, work and employment in warehouses. Looking at digitisation plans and business strategies in the sector, the study seeks to ascertain the different types of changes that are taking place, over three timeframes: in the short term, the effects of digital technology on the work people do; in the medium term, changes in the production system and in worker profiles; and finally, in the long term, occupational boundaries and their reconfiguration. It draws on 12 interviews conducted with managers of warehouses and logistics zones, human resources officers, quality managers, logistics project managers (in the Regional Employment and Training Observatories or the Regions). Furthermore, this study is based on an analysis of experiments and projects in territorial strategic jobs and skills management conducted in Saint-Quentin-Fallavier and Saint-Martin-de-Crau, two towns that have high concentrations of logistics operations. Finally, the scoping exercise was based on visits to around 10 warehouses in Essonne, the northern Isère and Bouches-du-Rhône; an international literature review including prospective studies on the subject; visits to national logistics innovation exhibitions; and professional and academic symposiums, conferences and seminars on the topics of digital technology and logistics.



FURTHER READING



Read all
Céreq publications
on www.cereq.fr/en

[1] «The E-Logistics Revolution: E-Commerce, Labor, and the Retransformation of the Southern California Supply Chain», J Alimahomed-Wilson, *Travail et Emploi*, forthcoming (2020).

[2] « Au hasard de la logistique. Quand les mobilités ouvrières passent par l'entrepôt », C. Benvegno, D.Gaborieau, in *Où va la France populaire?*, N. Duvoux, C. Lomba, Presses universitaires de France, 2019.

[3] *The Future of Warehouse Work: Technological Change in the U.S. Logistics Industry*, B. Gutelius, N. Theodore, Berkeley, CA: University of California, Berkeley Labor Center and Working Partnerships USA, 2019.

[4] *Transport et Logistique - Rencontre interministérielle sur l'offre de certification et les métiers*, Kogut-Kubiak F. (coord.), Céreq Echanges n° 13, 2019.

[5] «L'activité des entrepôts et des plateformes logistiques en 2016 : une automatisation encore émergente», *Datalab Essentiel*, CGDD/SDES, 2019.

[6] *E-commerce: les chiffres clé 2019*, Fevad (Fédération e-commerce et vente à distance), 2019.

[7] «Que représente la logistique dans l'emploi en France ?», CGDD/ SDeS, *Datalab Essentiel*, 2018.

[8] «Atlas des entrepôts et des aires logistiques en France en 2015», CGDD/ SDeS, *Datalab* n°14, 2017.

[9] «Les mutations du travail : leurs registres et leurs temporalités», *Annales des Mines - Réalités industrielles*, M. Lallement, 2016(4).

[10] *Digitalisation and low-skilled work*, H. Hirsch-Kreinsen, WISO Diskurs, 19, 2016.

Highlight

DO FIRMS FACILITATE THE CONSTRUCTION OF COMPETENCES?



CAPABILITY APPROACH
DEFIS SURVEY
SUBCONTRACTING
CORPORATE
SOCIAL RESPONSIBILITY
CVT IN COMPANY



Josiane VERO, Senior researcher in the Training and certification department at Céreq

Discipline: Economics

Main research areas: Lifelong learning policies - theories of social justice - the Capability Approach - socioeconomics of organisations



Jean-Claude SIGOT, Statistician and deputy head of the Training and certification department at Céreq

Discipline: Economics and statistics

Main research areas: Management of quantitative surveys, vocational training and vocational pathways



Article available online:

www.cereq.fr/en/subcontracting-value-chains-weak-link-firm-based-training

Subcontracting in value chains: the weak link in firm-based training

Subcontracting strategies in labour-intensive industries have escalated over the past forty years. They are reflected in the fragmentation and geographic dispersion of the activities that make up the so-called value chains. It is already known that these strategies tend to influence employees' employment and working conditions. This new study points to the existence of cascading effects in training opportunities, participation and valuable outcomes. The lower down the production chain a company is located, the more its position correlates with low levels of training opportunities, participation and outcomes.

The use of subcontracting is not a recent phenomenon. However, it has increased considerably since the 1970s, essentially as a result of greater production specialisation, globalisation and increased product complexity, all of which have led companies to refocus on their core activities. It is expanding significantly in France, in parallel with channelling strategies, that is the establishment of channels consisting of a number of subcontractors organised around a principal contractor to whose activity they all contribute. The nature of the links between these various actors has changed as a result. In the increasingly common instances of “cascading subcontracting”, a dependency chain is built up in which the first-tier subcontractor devolves some of the risk linked to economic activity on to the second-tier subcontractor for whom the former is the principal contractor, and so on down the chain. Whereas it has been

shown that it is the employees of subcontractors at the end of the value chain who most feel the effects of economic dependency and have less good employment conditions and pay [1][2], the effect of subcontracting on training has until now remained a blind spot. And yet the challenges associated with the increased skill requirements confronting these companies have been highlighted [3]. How does the position of subcontractors affects employee training? The training and employee trajectory surveys (dispositif d'enquêtes sur les formations et itinéraires des salariés/Defis) offer an opportunity to provide some preliminary answers to that question. They identify several dimensions in which the employer's position in the production chain seems to influence training, namely opportunities, the access process and actualisation.

Pure principal contractors: larger companies that employ more managerial staff

According to the “companies” section of the Defis surveys, 16% of companies with at least 10 employees act only as pure principal contractor, 13% are both principal contractors and subcontractors (intermediate subcontractors), 16% are lower-tier subcontractors and 55% are neither principal contractors nor subcontractors. Principal contractors are identified in the surveys by the outsourcing of part of their activity and subcontractors are defined as companies for which the largest proportion of turnover is dependent on a small number of clients or prime contractors (See Box 1). Pure principal contractors are usually the parent company of a group. They are twice as likely to be companies with 250 or more employees whose workforce contains higher shares of managerial staff (cadres) and employees in intermediate occupations on permanent contracts. Smaller in size than pure principal contractors, intermediate and lower-tier subcontractors employ more manual workers than the other companies. Most intermediate subcontractors are active in manufacturing industry and construction, while lower-tier subcontractors are concentrated in manufacturing industry and services. Another difference is that intermediate subcontractors are more likely to be subsidiaries of a group than lower-tier subcontractors. Finally, in companies that are neither principal contractors nor subcontractors, which tend to be smaller, more feminised and with higher shares of young workers, the employees tend to have white-collar clerical or office jobs. Concentrated in distribution and services, they are less likely to be part of a group.

BOX 1: WHAT IS SUBCONTRACTING AND HOW IS IT MEASURED IN THE COMPANIES SECTION OF THE DEFIS SURVEYS?

The relations between principal contractors and subcontractors are not governed by a single item of legislation but by various acts that have evolved over time in order to take account of the changes in subcontracting relations.

Act no. 75-1334 of 31 December 1975 defines subcontracting as “*the process by which a general contractor entrusts to another person, known as the subcontractor, on the basis of a subcontractor agreement and on their own responsibility, fulfilment of all or part of a business contract or of a part of a public procurement contract concluded with the contracting authority*”.

The definition proposed by the Association française de normalisation (French Standardization Association/AFNOR) reads as follows: “*all the processes contributing, for a specific production cycle, to one or more of the processes of design, development, manufacturing, implementation or maintenance of the product in question, the realisation of which a company, known as the*

principal contractor, entrusts to another company, known as the subcontractor, which is required to comply strictly with the instructions or technical specifications issued in the last resort by the principal contractor”.

Although the Commercial Code prohibits the abuse of economic dependency through subcontracting, the latter is very often analysed from the point of view of dependency on the principal contractor.

According to the latest information report*, the term “cascade” or “chain subcontracting” are used when the subcontractor company in turn decides to commission another company to carry out part of its own assignment.

* *Les relations entre les grands donneurs d'ordres et les sous-traitants dans les filières industrielles, D. Sommer, Information report no. 2076 filed pursuant to article 145 of the Regulation by the Commission for Economic and Social Affairs and registered at the office of the President of the National Assembly on 26 June 2019.*

* www.assemblee-nationale.fr/dyn/15/rapports/cion-eco/l15b2076_rapport-information#

More limited training opportunities in lower-tier subcontractors

Training opportunities depend to a large extent on the funding companies allocate to it. Lower-tier subcontractors spend less on employee training. All other things being equal, and particularly for companies of the same size and sector, their financial contribution rate is 1.7 times more likely to be lower than 1% of the wage bill than that of other companies (see Box 2). The need always to submit the best (i.e. lowest) offer in terms of costs or deadlines seems to exert pressures that are difficult to reconcile with investment in training. The position in the subcontracting chain also seems to influence the quality of training opportunities. Contrary to what is observed among principal contractors, the opportunities offered to subcontractors' employees are directed more towards health and safety. The probability of a lower-tier subcontractor providing this kind of training is 2.2 times greater and that of an intermediate subcontractor 1.7 times greater than it is for a company with comparable characteristics that is neither a principal contractor nor a subcontractor. With regard to safety, the impetus is likely in many cases to come from the principal contractor because of legislation which, in a co-activity situation, makes them liable in both civil and criminal law in the event of a workplace accident*. Above and beyond the health and safety purposes for which training is obligatory, subcontractors are less likely to provide training for other purposes. They draw up training plans less frequently than pure principal contractors. Most lower-tier subcontractors are small and not always well structured and are less likely to offer their employees the opportunity to acquire new knowledge or to prepare for a move. The situation among intermediate subcontractors is, in practice, not so different.

While the training opportunities are a response to regulatory requirements, they are not, according to the employers' declarations, limited to those requirements. They are also intended, still according to the employers, to facilitate horizontal internal mobility. From this point of view, differences can be observed between the practices of intermediate subcontractors and those of lower-tier subcontractors. However, the most conspicuous difference is with pure principal contractors who, according to their statements, are 5.4 times more likely to use training for the purpose of preparing for internal mobility and 3.6 times more likely to use it in order to prepare employees for external mobility. This dual purposing is a major differentiating factor. There are also real inequalities in terms of modes of training. Employees of pure principal contractors tend to enjoy opportunities to engage in training in different ways: on training courses, through work-based learning or job rotation, in seminars, etc. All other things being equal, twice as many pure principal contractors as the others state that they provide at least three separate types of training.

TRAINING OPPORTUNITIES BY POSITION IN THE SUBCONTRACTING CHAIN

What the companies report	[Odds-ratios]			
	SC	SC-PC	PC	No PC-Nor SC
Tpf < 1 %	1.7*	ns	ns	Réf.
Health and safety training	2.2***	1.7*	ns	Réf.
Other statutory training	ns	1.8*	ns	Réf.
Statutory accreditations account for virtually all training expenditure	ns	1.9*	ns	Réf.
Training programmes	ns	ns	1.7*	Réf.
Work-based training	ns	ns	1.8**	Réf.
Training by job rotation	ns	ns	2.1**	Réf.
Lectures/seminars for learning purposes	ns	ns	1.8**	Réf.
Periods of self-directed learning	ns	ns	1.8**	Réf.
E-learning	ns	0.4**	2.3***	Réf.
At least three different types of training	ns	ns	2***	Réf.
Drawing up a training plan	ns	ns	1.7*	Réf.
Training policy aims to support technological change	ns	ns	1.6*	Réf.
Training policy responds to statutory requirements	ns	1.8*	ns	Réf.
Training policy seeks to encourage external mobility	ns	ns	3.6***	Réf.
Training policy seeks to encourage horizontal internal mobility	ns	3.3**	5.4***	Réf.
Distribution of companies	16%	13%	16%	55%
Distribution of employees	12%	10%	24%	54%

SC : subcontractor only – SC-PC : subcontractor and principal contractor – PC : pure principal contractor – NoPC-Nor SC : neither principal contractor nor subcontractor.

Note : This table presents the odds ratios of 16 logistic regressions. They include the same set of control variables (size of company, sector of activity, group affiliation, share of men, share of managerial and executive staff, share of employees under 30) that are not reported in the above table. Only the odds ratios for the explanatory variable "position in the subcontracting" are reported.

*, **, *** indicate respectively that the variable is significant at the 10%, 5% and 1% thresholds.

Example : all other things being equal, the probability that a lower-tier subcontractor has a TPF<1% is multiplied by 1.7 compared with that of a company that is neither a principal contractor nor a subcontractor.

Source : Defis, Céreq-France compétences, section "entreprises", 2015.

Scope: private-sector companies with 10 employees or more (excl. agriculture).



The further down the chain a subcontractor is located, the more the training access processes deteriorate

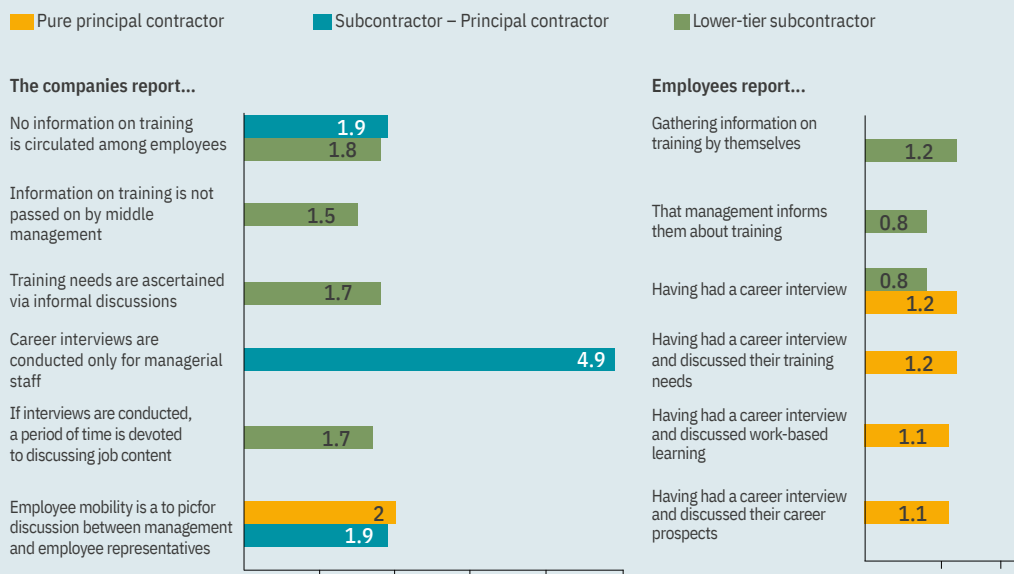
In order to create the conditions under which training needs can be expressed and acted on, a participatory process has to be put in place. This participation takes two forms. The first is individual, based on the face-to-face relationship between an employee and his or her line manager, which in France manifests itself particularly in the career interview, according to article L. 6315-1 of the labour code. The second is collective representation based on an elective system of participation by delegation. Prior to any participation, arrangements for sharing information on training have to be put in place. However, the further down the chain a subcontractor is located, the less information employers provide for their workforce. Intermediate and lower-tier subcontractors are almost twice as likely as principal contractors to state that they do not circulate any information. However, among the intermediate subcontractors that do provide information for their employees, middle management is more frequently the channel of communication than among the lower-tier subcontractors, where to a greater extent than elsewhere employees have to find information for themselves (cf. figures). As far as continuing training is concerned, the career interview may boost participation. However, among the lower-tier subcontractors, the interviews are more likely to represent missed opportunities according to the statements of employees, who report less frequent participation in such interviews than those higher up the value chain. These statements are confirmed by their employers, who report more frequently than their counterparts elsewhere that they gather information on training needs through informal discussions. For their part, intermediate subcontractors are more likely to report that career interviews are conducted only for their managerial and supervisory staff. Finally employees of pure contractors are most likely to regardless of status, to state that they benefit from career interviews touching on a number of different topics, including training needs, work-based learning and career prospects. Collective participation is captured through a question on the opportunities for workforce representatives to discuss mobility with management. In the eyes of employers, such opportunities turn out to be much more widespread among pure principal contractors than among subcontractors. And discussions on training are no more frequent among the former.

Subcontractors' employees are not lacking in aspirations but receive less training

The employees of lower-tier subcontractors do not lack aspirations for the next five years. All other things being equal, the number wishing to see their job content expand is 25% greater than among their counterparts in the other companies and 10% more of them than in the other companies would like to change job or occupation. In contrast the employees of pure principal contractors stand out by being more likely to express a desire to have more time for their personal lives. These differences in career aspirations notwithstanding, and all other things being equal, fewer employees of lower-tier subcontractors enjoy opportunities to undertake training. While aspirations seem to be divided depending on the company's position in the subcontracting chain, fulfilment of those aspirations is equally divergent. 25% fewer employees of lower-tier subcontractors than of the other companies undertook training during the year prior

to the survey. And when they do undertake training, 25% fewer of them do so in order to take on more responsibilities. For all that, compared with the employees of pure principal contractors or of companies not involved in subcontracting, the same number had undertaken health and safety training. The same observation also applies to training aimed at increasing efficiency at work or supporting a change of activity. Although the employees of intermediate subcontractors, do not report undertaking less training than those of pure principal contractors or of companies that are neither principals nor subcontractors, they do not seem to enjoy much room for manoeuvre in choosing their training. All other things being equal and compared with the employees of the other companies, 20% more of them had undertaken health and safety training but 25% fewer had received training to support a change in their work, 25% fewer had undertaken training aimed at increasing efficiency at work and 10% fewer had undergone training in order to take on more responsibilities.

PROCESS OF ACCESSING TRAINING BY POSITION IN THE SUBCONTRACTING CHAIN (ODDS RATIOS)



Note : The graphics present the odds ratios of logistic regressions calculated on the basis of either the “companies” or the “employees” section (wave 1). They include a common set of control variables: size of company, sector of activity, position in the subcontracting chain (reference: companies that are neither principal contractors nor subcontractors), group affiliation, share of men, share of managerial staff and share of employees under 30. The models constructed on the basis of the “employees” section include additional control variables relating to individuals: occupational position in the company in December 2013, age and qualifications. Only the odds ratios for the explanatory variable “position in the subcontracting chain” and significant at the minimum 10% threshold are reported.

Example : All other things being equal, the probability that a lower-tier subcontractor company does not provide any information on training is multiplied by 1.8 compared with companies that are not involved in any subcontracting relationships.

Source : Defis, Céreq-France compétences, section “entreprises” & “employees” (first wave), 2015.

Scope : private-sector companies with 10 or more employees (excl. agriculture).



Principal contractors' responsibility for training

Since vocational training is a major asset when it comes to facing the challenges of safeguarding career trajectories or supporting internal mobility, it gives us occasion to turn the spotlight on to the situation of employees in subcontracting companies. An employer's position in the production chain seems to influence the opportunities for, access processes to and actual provision of training: the capability for training seems all the more limited if workers are employed in a company located at the end of the chain. These results raise the question of the responsibility of principal contractors for the training of workers in subcontractor companies that are economically dependent on them and prompt us to examine the mechanisms that encourage or hinder solidary responsibility in subcontracting chains above and beyond health and safety training. Although the asymmetry characterizing principal contractor/subcontractor relations is generally reflected in a reduced capability for training of employees lower down the subcontracting chain, as the Defis surveys show, these general results merit further investigation. Do they apply to all sectors? Can companies in the same subcontracting tier opt for differentiated training strategies? These previously unpublished preliminary results are an encouragement to undertake further research on training practices in the subcontracting fabric. More qualitative investigations and the production of more detailed official statistics on training in subcontractor companies would facilitate such research. This is an approach that some of the actors contacted for the most recent information report on subcontracting called for. ■



FURTHER READING



Read all
Céreq publications
on www.cereq.fr/en

[1] E. Algava, S. Amira, "Sous-traitance : des conditions de travail plus difficile chez les preneurs d'ordres", *DARES Analyse*, n° 11, 2011.

[2] C. Perraudin, H. Petit, N. Thevenot, B. Tinel, J. Valentin. Inter-firm dependency and employment inequalities: Theoretical hypotheses and empirical tests on French subcontracting relationships. *Review of Radical Political Economics*, SAGE Publications, 2014, 46 (2), pp. 199-220.

[3] D. Sommer, *Les relations entre les grands donneurs d'ordre et les sous-traitants dans les filières industrielles*, Rapport d'information n° 2076 déposé en application de l'article 145 du Règlement par la Commission des affaires économiques des affaires sociales, enregistré à la Présidence de l'Assemblée nationale le 26 juin 2019.

[4] J.-C. Sigot, J. Vero, "Subcontracting chain and workers' participation in continuing vocational training: findings from the French, quantitative, linked employer-employee survey of training and career paths", *International Journal of Training and Development*, 24:3, September, 2020. Article DOI: 10.1111/IJTD.12197.

[5] J. Drahokoupil, *The Outsourcing Challenge: Organizing Workers Across Fragmented Production Networks*, Brussels: CASE, 293 p., 2015.

Highlight

DO FIRMS FACILITATE THE CONSTRUCTION OF COMPETENCES?



TECHNICAL AND VOCATIONAL EDUCATION
MANPOWER MANAGEMENT
FORWARD-LOOKING OF JOB MANAGEMENT
CONSTRUCTION INDUSTRY
SCHOOL-TO-WORK TRANSITION
TREND IN QUALIFICATIONS



Antoine BONLEU, Researcher in the Work, employment and professionalisation department at Céreq

Discipline: Economics

Main research areas: Student mobility - training in building and public works - green competences in the online job offers



Olivier JOSEPH, Senior researcher in the Transition to work and occupational trajectories department at Céreq

Discipline: Economics

Main research areas: Labour market issues VET system - transition from school to work



Emmanuel SULZER, Senior researcher in the Work, employment and professionalisation department at Céreq

Discipline: Sociology

Main research areas: Youth employment research project about changing in skills and professions for green jobs



Marie-Hélène TOUTIN-TRELCA, Senior researcher at Céreq's associated centre in Lille

Discipline: Labour economics

Main research areas: Apprenticeship - vocation education on training - relationships between training and employment transition from school to work - Gender approach



Article available online:

www.cereq.fr/en/constructing-skills-future-construction-and-civil-engineering-cce-sector

Constructing the skills of the future in the construction and civil engineering (CCE) sector

From secondary-level vocational qualifications (CAP) to the elite engineering schools, the construction and civil engineering (CCE) sector offers a range of different training pathways for young people wishing to qualify in one of the sector's occupations. While it attracts large number of apprentices, it does not manage to retain enough of them throughout the apprenticeship period or to settle them in stable employment. Will the evolution of CCE occupations linked to the environmental and digital transitions be an opportunity to make the sector attractive again to young people? A study conducted by Céreq among professionals in the sector provides some preliminary answers.

In the academic year 2017-2018, a total of 197,000 students were enrolled in secondary-level vocational training programmes in CCE occupations (cf. Box 1). Of them, 35% were enrolled in level 3 programmes (according to the European classification) of the CAP type or equivalent, 60% in vocational and technological baccalaureate programmes (level 4) and 5% in brevet professionnel programmes (a level 4 qualification equivalent to the baccalaureate). In higher education, there were 68,000 students enrolled in 2017-2018, of whom 41% were preparing for the brevet de technicien supérieur (BTS), 12% for the diplôme universitaire de technologie (DUT, level 5) and 15% for a vocational bachelor's degree (level 6); the remaining 32% were training as engineers (level 7). The classroom-based programmes in these occupations, from secondary level to the BTS (up to level 5) were relatively well distributed across the whole of France, while the distribution for apprenticeship-based programmes was much less homogenous, irrespective of level.

An initial training offer adapted to the economic fabric, encouraging a good training to-work transition

Apprentices are overrepresented in the initial CCE training programmes. According to the Génération survey, 58% of the young people leaving such programmes in 2013 were in apprenticeships, compared with only 18% for all other training programmes.

This overrepresentation is particularly marked at levels 3 and 4, where apprenticeships accounted for 79% and 45% respectively of exits from initial CCE training programmes, compared with 39% and 14% respectively for all other programmes. These figures have to be viewed in the context of the sector’s highly specific economic structure, which is polarised between “a few majors* that dominate in terms of jobs and production capacities, and the more than 90% of companies with fewer than 10 employees with, in the middle, a few heavyweights, regional builders” (industry official). Depending on their size and the design of their production systems, companies make choices as to their future employees’ level of training and the nature of their certification. Thus the vocational bac seems to be less popular among small and very small businesses and artisanal enterprises, which prefer the CAP, which is acknowledged as the proven initial

* The CCE sector is characterised by the presence of three large companies that operate internationally and are known as “majors” (Vinci, Bouygues, Eiffage). They exist alongside a very large majority of small and very small companies and tradespeople.

level of qualification. However, the vocational bac is appreciated and called for by large companies, in which activities are undoubtedly more segmented and where it may be the jumping-off point for employees wishing to continue their training up to BTS level. While few progress from CAP to BTS, trajectories involving a number of different CAPs or progression from the CAP to the BP (which can be achieved only via the apprenticeship route) seem to be the ideal-type training and competence acquisition pathways for small and medium-sized enterprises (SMEs). Moreover, the way in which block-release programmes are structured is another factor that contributes to the differences in certifications by type of company,

BOX 1: THE SECTOR, THE STUDY AND ITS METHODOLOGY

According to INSEE, the CCE sector accounted for 15% of companies and 11% of all jobs in the market sector in 2017. According to DARES, it employed 13% of all apprentices in 2017 and recruited approximately 16% of all new entrants on apprenticeship contracts between 2014 and 2017

In 2019, Céreq carried out a study of the training offer in the CCE sector on behalf of Constructyts, the sector’s vocational training support agency (opérateur de compétences or OPCO)**. The objective was threefold: to describe the qualifications dynamic in the CCE sector; to provide details of the training and labour market trajectories of those obtaining qualifications in the sector; and to investigate the challenges to be met in developing higher education block-release training programmes in the CCE occupations. This study combined a qualitative approach based on interviews with some twenty actors involved in the training-employment relationship in the sector with analysis of various sources of data on initial training programmes.

In the case of the secondary-level training programmes and the BTS, the data were taken from the FAERE (Fichiers anonymisés pour les études et la recherché/Anonymised files for studies and research) database maintained by the Department for Evaluation, Forecasting and Performance (Direction de l’évaluation, de la prospective et de la performance/DEPP) and derived from the SIS (Systèmes d’information scolaire/School information systems) and SIFA (Systèmes d’information de la formation des apprentis/Apprentice training information systems). For higher education programmes, the data come from the SISE (Système d’information sur le suivi de l’étudiant/Student tracking information system) database maintained by SIES (Sous-direction des systèmes d’information et des études statistiques/Sub-department for information systems and statistical studies) and DEPP’s SIFA database.

Analysis of the school-to-work transition for first-time leavers from CCE training programmes (identified from the qualification code for the programmes that train young people for the sector’s target occupations) was carried out using data from the 2016 wave of Céreq’s Génération 2013 survey.

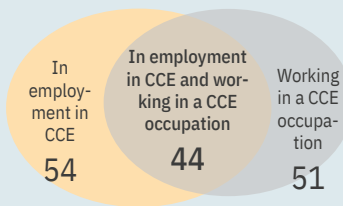
** The vocational training support agency (opérateur de compétences or OPCO) is responsible for funding apprenticeships, improving the information provided for the employees of these companies about and their access to vocational training, helping the various parts of the sector to develop vocational certifications and supporting SMEs in identifying their training needs.

since the number of weeks trainees spend in training centres, which is greater for the vocational bac (20) than for the BP (12), is sometimes regarded as penalising by SMEs. In higher education, progression from the vocational bac to short degrees (bac +2 or even +3) or from short degrees (bac +3) to more advanced degrees (master's or engineering courses) is more common, although 7 engineering students out of every 10 come from the preparatory classes for the elite grandes écoles. As is the case for all young people entering the labour market, those trained in the CCE pathways transition more easily into employment at the end of their training if they have obtained a qualification, firstly, and, secondly, if they have completed an apprenticeship. Young people with secondary-level qualifications obtained in the CCE pathways in 2013 enjoyed better conditions for their school-to-work transition than those leaving secondary education from other pathways. In the spring of 2016, three years after the end of their training, almost seven out of every 10 first-time leavers (68%) were in employment and young people trained in the CCE pathways were more likely to be in employment than the others with equivalent levels of qualification. The unemployment rate for young people with secondary-level qualifications was also significantly lower than that for young people who left the education and training system from other pathways at the same level. This advantage held good throughout the first three years spent in the labour market: almost two thirds of these young people trained in the CCE pathways had a history of stable employment at the three-year mark, compared with just a small majority of the young people with the same level of qualification obtained in other pathways. The total share of time spent in employment for those with and without level 3 and 4 qualifications who

BOX 2: SHARE OF TARGET OCCUPATIONS IN THE SCHOOL-TO-WORK TRANSITION OF YOUNG PEOPLE TRAINED IN CCE

44% of all young people trained in CCE find their first job in the sector

All apprentices trained in CCE in %



All school-based trainees in CCE in %

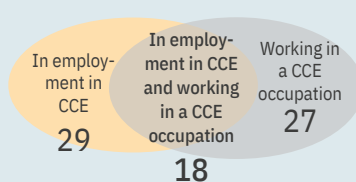


3 years after leaving training, 39% of all young people trained in CCE were in employment in the sector

All apprentices trained in CCE in %



All school-based trainees in CCE in %



Source: 2016 Céreq Génération survey of the 2013 cohort.

left the education/training system from the CCE pathway was greater, and the share of time spent in unemployment was lower (cf. Box 2).

But the picture is marred by drop-outs and leavers heading for other sectors

This favourable training-to-work transition for young people leaving the CCE pathways should not conceal the difficulties that confront the actors in the sector. Firstly, a significant number of those enrolled in the CCE training programmes fail to complete their courses: the share of those leaving without obtaining a qualification is 27%, compared with 13% for the other pathways according to the Génération survey. And young people on apprenticeships account for 60% of those who leave without a qualification (compared with only 17% for the other pathways). Thus the problem of broken apprenticeship contracts lies at the heart of the difficulties facing the CCE sector, where the share of broken contracts is higher than the intersectoral average (33% compared with 26% in 2017, according to 2019 DARES data). However, the sector suffers from an accumulation of factors that automatically increase this share: it is, after all, made up of a majority of small and very small enterprises in which the broken apprenticeship contracts are overrepresented. It also has a higher share of apprentices aged under 18, an age group in which broken apprenticeship contracts are more common. The occupations in the sector also seem to suffer from a lack of attractiveness, since only a minority of the young people trained in the CCE pathway actually go on to work in the sector. Just 44% of these young people find their first job in the sector; this proportion rises to 54% for apprentices and falls to 29% for young people who left from a school-based pathway. Three years into their careers, only 39% are still working in the sector (45% in the case of apprentices, 29% for those recruited from school-based pathways). (cf. Box 3) If access to the target occupations is considered, or in other words if we look at the share of these young people who entered one of the CCE occupations in a company in the sector, only a minority actually do so. Thus only 35% of those who undertook the training found their first job in one of the construction occupations in the CCE sector and this figure falls to 29% when we look at the jobs they held in the spring of 2016.

A training policy sensitive to economic reversals

The CCE sector is very sensitive to the economic situation and since the end of the 2000s has been through a period of marked economic contraction that has adversely affected the training offer. This long-lasting crisis has particularly affected the supply of apprenticeship contracts, and construction is one of the sectors in which the number of apprentice jobs has declined the most (-27% between 2009 and 2014, according to 2017 DARES data). With regard to employment, this recession has also led to an exodus of young people trained in the CCE occupations to other sectors less affected by economic ups and downs and more highly regarded in terms of professional standing. Thus, the question of whether the skills that have been lost in a period of crisis will return to the sector in the event of an economic upturn is a recurrent one. From the companies' point of view, we observe that a long period of economic contraction encourages the development of certain strategies (closing down building sites, use of concealed

employment, recruitment of seconded workers or even employee poaching...) likely to make the actors less willing to provide training, for fear of losing the individuals they have trained, whether it be an established employee or an apprentice. In the case of the subcontracting strategies adopted by certain major companies, which “carve up” the markets once they have been won and “divide up the work”, the question is whether “they are really going to take part in the creation of competencies, with shared learning for example, or delegate or even outsource the creation of competencies to the SMEs?” (actor in the vocational training system). However, “most of the SMEs that are heavily dependent on the majors are not in a strong enough position economically to provide training: lack of transparency on the construction sites and their nature, above all no time to provide training because their advantage is to work at lower cost”. For independent SMEs operating in niche markets, the training process remains “fragile in terms of the interest in the sector as a whole” (industry representative). Moreover, the lifespan of companies is becoming a problematic factor for the creation of competencies in the near future. Finally, the sector also has to confront the question of the impact of the development of micro-enterprises and of sole trader or one-person businesses (auto entrepreneurs/micro-entrepreneurs), which find it more difficult to access the channels through which competencies are created and renewed by means of training.

The attractiveness of occupations and training, securing of trajectories

Faced with these difficulties, the actors in the CCE sector are banking on making the sector more attractive. The aim is to highlight the positive aspects of the sector’s occupations (team working), their diversity, the importance of innovations (tablets) and, above all, the revamping of occupations and/or the appreciable changes in the competencies required to work in the sector. The materials used and the products and services offered are indeed becoming increasingly diversified. The sector’s status is also being raised by its contribution to the energy transition and its efforts to improve energy performance, with strengthened product labelling, process and environmental requirements (HQE standards, C2C, BEPOS standards for positive energy buildings), and by the authenticated presence of artificial intelligence (IA) or the digitalisation of working practices given specific form in “digital modelling” (Building Information Modelling/BIM), which is being achieved through the “hybridisation” of competences and is transforming work activities. Finally, faced with increasing pressure to extract profit from production activities, a number of occupations are shifting from a culture of expertise to one in which the focus is on management of a profit centre, with an increased emphasis on construction site management. Consequently, occupational profiles are increasingly highlighting the addition of administrative, human and commercial dimensions that are reinforcing the existing set of technical competencies.

Emphasis is also being placed on the transformation of CCE training programmes. While the level 3, 4 and 5 programmes in secondary education are said to be readily identifiable, those in higher education, which tend to span different industries and to be focused on support and related functions, have until now had a very low profile. The objective of industry actors is twofold. Firstly, they are seeking to make this landscape of higher education pathways easier to understand by improving communications with the institutions providing training. Secondly, they are focusing on the cross-cutting nature of

training programme contents in order to make it a strong point. Thus, training programme titles such as “technical and managerial”, “technical and environmental” and “technical with a focus on the greening of occupations”, which reflect the combinations of competences in the contents and assessment reference frameworks of the training programme, may constitute an argument in favour of the sector’s attractiveness. Sector actors are also acting to secure training trajectories by renewing the fight against breaches of apprenticeship contracts. The prevention measures being taken with technical support from the CCCA-BTP (the joint body that coordinates some 118 block-release training centres (CFAs)^{***} and collects the apprenticeship levy) and the OPPBTP (professional health and safety organisation for the CCE sector) include, among other things, support in the drafting and signing of the contracts in the presence of 3 parties if possible (young person, company and training centre) in order to explain each party’s rights and obligations and to offer support and solutions should difficulties arise. Measures are also being taken to support the young people on a day-to-day basis, with due account being taken of any obstacles they may face outside of the actual training process (housing, family problems, health concerns etc.). Companies have their role to play and the approach taken by actors in the sector seeks to make employers and apprentice supervisors aware of the fact that an apprentice is a professional in the making and that “an apprenticeship represents an investment of time, and that investment doesn’t produce a return immediately” (manager of an apprentice training centre in the sector). Having adopted an approach that seeks to construct the competencies of the future by relying on initial training, and in particular on apprenticeships, the CCE sector has for some years now faced a very unstable environment. The first challenge is to adapt to the changes initiated since the end of the 2000s by various reforms of the initial vocational training system, of apprenticeships, of the regulatory framework governing certifications and of regional governance. The second challenge is to deal with the consequences of the COVID-19 health crisis, which caused firms to abruptly halt all activity and very severely disrupted initial training. Because of the sector’s extreme sensitivity to the economic situation and the pro-cyclical nature of the block-release training offer, particularly at the initial level of qualification, the supply of competencies in the CCE sector has been significantly weakened in the immediate future as well as in the short and even medium term. In order to overcome these tensions, the various actors involved in the sector are now, more than ever, unanimously agreed that the supply of occupations and competencies has to be the object of long-term planning as part of the environmental, energy and digital transition and must involve both initial and continuing training and a training offer implemented at both regional and national level. ■

^{***} As part of the block release training programmes, the apprentice training centres (CFAs) give apprentices general and technical education and training to supplement the training they receive in the workplace.



FURTHER READING



Read all
Céreq publications
on www.cereq.fr/en

[1] *Les jeunes et le BTP : former ne suffit pas*, J.J. Arrighi, C. Gasquet, Céreq Relief n° 15, 2006.

[2] « Ruptures de contrat d'apprentissage et abandons dans le BTP », R. Aubertin, M. Lecoeur, G. Moreau in *L'apprentissage dans le BTP : une expertise en action*, J-O. Héron, S. Belluco, *Education permanente* Hors-Série (CCCA-BTP), 122018.

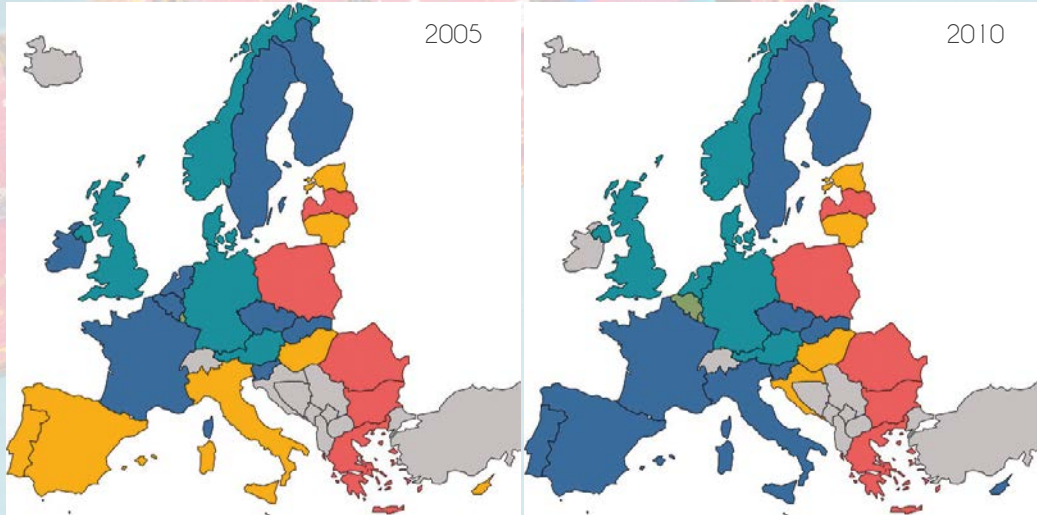
[3] « L'apprentissage favorise-t-il toujours l'insertion professionnelle ? », B. Cart, A. Lene, M-H. Toutin in *20 ans d'insertion professionnelle des jeunes : entre permanences et évolution*, T. Couppié, A. Dupray, D. Ephiplane, V. Mora (coord), Céreq essentiels n°1, 2018.

[4] « Comment l'apprentissage favorise-t-il l'accès à l'emploi des Cap-Bep ? », T. Couppié, C. Gasquet, *Formation Emploi*, n°142, 2018.

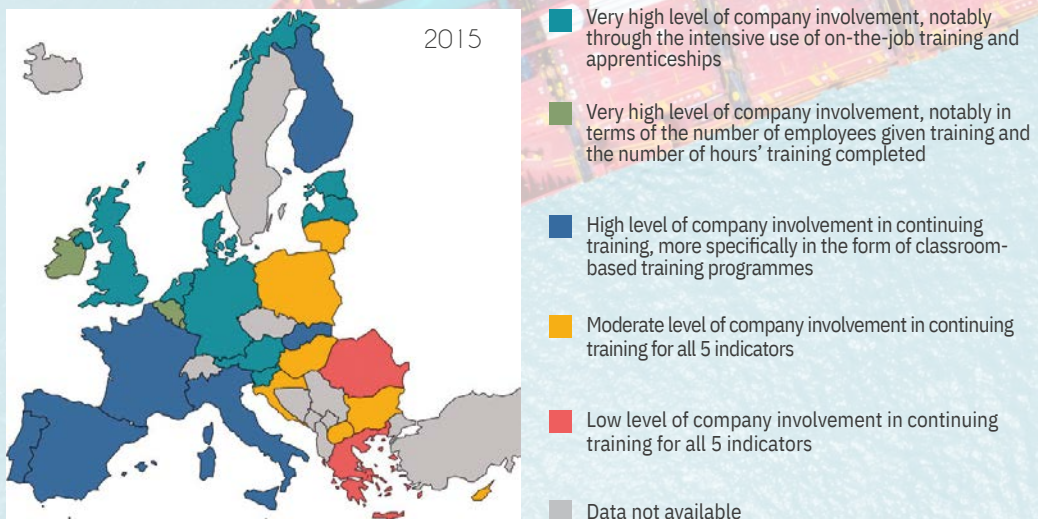
[5] « Quelles sont les causes de la baisse de l'apprentissage dans l'enseignement secondaire ? », E. Pesonel, P. Zamora, *Insee Références*, 2017.

A comparative perspective

Evolution of training practices in Europe in 2005, 2010 and 2015

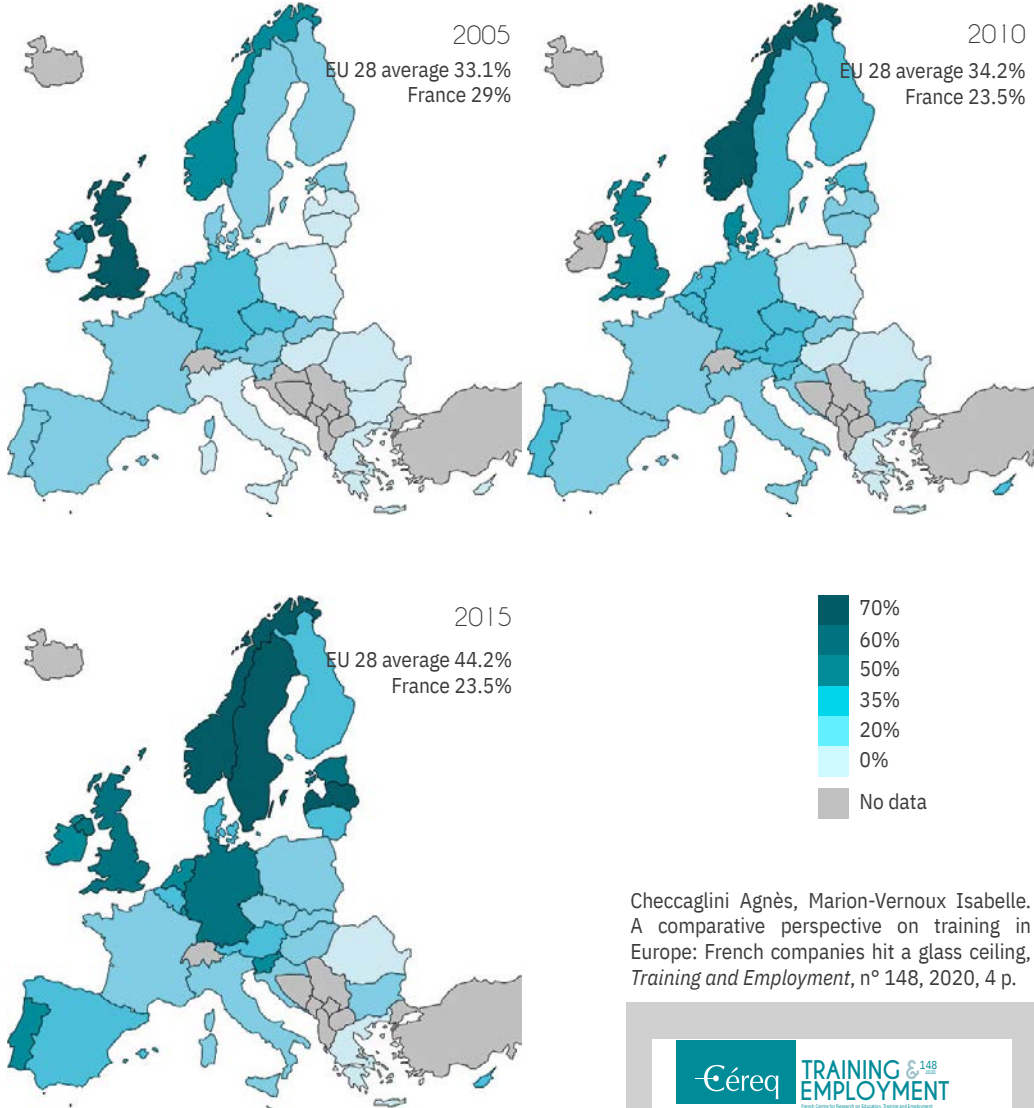


An ascending hierarchical classification was constructed on the basis of five indicators: the share of companies providing training regardless of the mode of training in question, the share of companies providing training other than Continuing Vocational Training courses, the share of employees having access to CVT courses, the number of hours of CVT courses per employee and the share of companies recruiting apprentices. On this basis, five types were characterised depending on the degree of company involvement in continuing vocational training as well as the importance they give to certain modes of training (types represented in turquoise, green and blue). The country-year pairs were then regrouped by year, thereby making it possible to track the evolution specific to each of the countries.



on training in Europe

Increase in on-the-job training in Europe since 2005



Sources: Eurostat data, CVTS3, CVTS4 and CVTS5. Design: Céreq.

Checaglini Agnès, Marion-Vernoux Isabelle. A comparative perspective on training in Europe: French companies hit a glass ceiling, *Training and Employment*, n° 148, 2020, 4 p.



Further reading : www.cereq.fr/en/comparative-perspective-training-europe-french-companies-hit-glass-ceiling

What else?



VOCATIONAL TRAINING SMEs



Aline VALETTE-WURSTHEN, Senior researcher in the Work, employment and professionalisation Department at Céreq

Discipline: Socio-economics, labor economics

Main research areas: National, sectorial and regional training and employment policies, vocational training governance, environmental transition and competences



Original reference: Aline, Valette-Wursthén. *Continuing Vocational Training and SMEs: Specificities, Practices and Potentials*. In Larsen, Christa ; Kipper, Jenny ; Schmid, Alfons ; Ricceri, Marco. *The Importance of SMEs as Innovators of Sustainable Inclusive Employment* - München : Rainer Hampp Verlag, 2020 - pp. 215-230 – Thank you to the publisher and author for letting Céreq reproduce the article.



Continuing vocational training and SMEs: specificities, practices, and potentials

Nowadays we can assume, thanks to substantial literature (Salais and Storper 1993; Bentabet 2008; Régnault 2011), that SMEs are specific and that they should not be regarded as large firm in the making. Several works also show that they are a very diverse and heterogeneous group. The main political discourse asserts that there is a need to break down the locks that are holding back the growth of SMEs linked to the hypothesis that “bigger is better”. But do owners of SMEs really want their companies to grow? Is it perhaps time to stop considering being small naturally to be a handicap for an enterprise?

On one hand, in France, only few data, analysis, and research are available on the topic of SMEs. The New Enterprises Information System (Système d’information sur les nouvelles entreprises/ SINE)¹ survey, regularly produced by the French National Statistical Institute (L’institut National de la Statistique et des Etudes Economiques/INSEE)², is the main device studying the profile of firm creators and analysing the first years of activities of their enterprise. But the topic of SMEs is still not much exploited due to a lack of means (time and human resources/ HR in particular), a lack of visibility, and the absence of a large availability for researchers. On the other hand, despite many actors support and advice SMEs and very small enterprises (VSEs)³, there is a lack of stepping back, capitalizing on, and dissemination of this field knowledge in order to produce information for policy makers.

First, we will introduce the article with some contextual data on the SME landscape in France and explain why researchers in France talk about the “galaxy of VSEs” (Letowski 2019) and the features of such companies. In a second part, we will illustrate specific behaviours, characteristics, and the diversity of VSEs regarding training, based on data on the topic of continuing vocational training (CVT) by the French Centre for Research on Education, Training and Employment (Centre d’études et de recherches sur les qualifications/Céreq) (Dubois and alii 2016).

1 www.insee.fr/en/metadonnees/source/serie/s1271.

2 www.insee.fr/en.

3 In this article, SMEs are defined as firms that employ less than 205 employees. VSEs constitute a subgroup of the SME population; they employ less than ten employees.

Contextual Data on French SMEs and VSEs

Eurostat figures of 2015 show that enterprises employing fewer than 250 persons (SMEs) represented 99% of all enterprises in the European Union (EU) (Eurostat 2018). The vast majority of those are Very Small Enterprises (VSEs) with less than nine employees. In 2017, they represented 93% of the total of the 24.5 million SMEs in the EU (Statista 2019). In terms of number of employees, SMEs employed 66.3% of total EU employees in 2015 (Eurostat 2018).

In France, “in 2017, 2.3 million companies” are active in the private sector (other than agriculture and expected self-entrepreneur status), but only 5,646 companies (0.25%) have 250 or more employees. Companies with 10 to 249 employees represent 6%, whereas firms with less than 10 employees represents 94% of the total. Among the 2.1 million of VSEs, 57% do not have any employee. Next to this population, the total estimated number of self-entrepreneurs⁴ is around 1,000,000. All in all, the landscape of French SMEs is very similar to the one in the EU. French enterprises (companies and sole proprietorships) with one to nine employees account for 19% of salaried employment in the private sector (excluding agriculture), which made it 3.3 million employees on 31 December 2018. Such enterprises employ an average of three employees, but 38% of these have only one employee. Also, more than three quarters of employees in VSEs work in the tertiary sector; the remaining employees work in the construction and energy sectors, where craft enterprises are concentrated. So, when added employees working in VSEs and self-entrepreneurs, it amounts to nearly four million workers (INSEE 2019).

The proportion of part-time employees in VSEs (27.5%) is higher than that of companies with ten or more employees (17.6%). It ranged from 10.8% of employees in construction to 52% of employees in the “private education, health and social action” activities of the tertiary sector. In 2018, nearly 450,000 employees in VSEs (13.2%) are on fixed-term contracts. The use of fixed-term contracts is more widespread in VSEs than in larger firms. By way of comparison, in companies with ten to 19 employees, 9.9% of employees were on fixed-term contracts on 31 December 2018 (INSEE 2019).

After setting the scene from a statistic perspective, we will now enter what Letowski (2019) calls the “galaxy of VSEs”. The next part will focus on the smallest of SMEs (less than ten employees); still, a large part of our findings could also be extended to the next bigger group of companies (with less than 50 employees).

“The Galaxy of VSEs”: Key Role of VSE Leaders

In line with the work on SMEs and VSEs by Céreq (Bentabet 2008), which highlights the diversity of socio-productive configurations in which small businesses evolve and the central role of the leader profile, Letowski (2019) speaks about the “galaxy of VSEs”. The author points out that we need to understand the behaviours of SMEs in the context of

⁴ The status of self-entrepreneur (micro-entrepreneur), created in 2009, simplifies business registration formalities and reduces and simplifies social contributions. A “micro-entrepreneur” is a sole proprietorship that falls under the tax regime for micro-enterprises and the micro-social regime for the payment of social security contributions. This simplified regime has been created to facilitate the procedures for setting up and managing businesses, while allowing people to benefit from dedicated social protection and other advantages (simplified administrative formalities; simplified method of calculating; paying social security contributions and income tax; social protection such as health coverage and retirement among others; and a right to vocational training).

goals defined by their leaders and their specific strategic orientation. In the field of VSEs, leaders differ immensely according to their preferred type of investment (human, social, cultural, and financial capital among others), which makes the landscape of VSEs so diverse. For Letowski (2019), there are three key characteristics of the small businesses leader profile that help understand the decisions they make for their enterprises: firstly, the leader's motivations and life plan, secondly, their training and previous working life, and thirdly, their environment.

The SINE survey mentioned by Letowski (2019) allows us to investigate what motivates business creators. The most common item mentioned by interviewees is the “search for independence” (60%): “being their own boss”, “decide on their own”, “seek accomplishment in that position”, and “create their own job” all seem to be important incentives for people to found their own company. An increasing income is not one of the main motivations; it is only cited by one out of five people. Furthermore, it should be noted that independence refers to the awareness of obstacles and constraints and to having a structured project for the business started from the outset. Entrepreneurship is only cited by 30% of the people interviewed, mainly those who have a substantial growth perspective. For the majority of creators, the most important issues are the successful installation and the sustainability of their business, not its growth. According to themselves, business creators make enormous personal investments (mainly investment of time) in order to reach those goals for their businesses; at the same time, they strongly express their satisfaction with their experience as a leader (Letowski 2019).

The second key characteristic in “the galaxy of VSEs” (Letowski 2019) concerns the training pathway and the previous working life of the creator. Cultural and relational capital are the fundament of business creation. SINE figures show a large diversity of the level of education among creators: roughly half of them (54%) have the equivalent of “baccalauréat” (bac) or less (level 4 or less of the European Qualifications Framework/EQF), whereas the other half (46%) got a higher education diploma, including 20% who have diploma equivalent to EQF level 7 or 8. As for the previous working life, around 30% of creators are former business leaders, 36% are coming directly from an employee's position and 26% from unemployment. In the French context, there is a trend to value business creation as a successful career development, even though this type of entrepreneurship represents a minority share in firm creator profiles. Whatever the previous status - craftsman, skilled worker, or manager -, relational network is always present, used and important (Letowski 2019).

The third and last characteristic concerns the economic environment. The ability to participate and compete in the market and the state of the economic climate are important factors in the development and sustaining of a business. VSEs faced more difficulties after the economic crisis in 2008 than larger firms, mainly due to difficulties in accessing bank funding and improving their visibility in the market (Letowski 2019).

As Letowski concludes in his article (2019), the VSEs landscape is complex and goes beyond the characteristic of company size. This heterogeneity can be imagined as two opposite conceptions of firms and entrepreneurs that could be placed at the extremities of an axis, centred on the behaviour of the entrepreneur. One end of the axis reflects managers whose primary objective is to create their own job in the form of a self-

employed activity and therefore a company adapted to this objective; the other end of the axis reflects entrepreneurial managers of an SME whose objective is the growth they would like to see on a permanent basis. Managers of VSEs are mostly located close to the “creator of their own job”, but with many variations: some will employ a small number of people; others will have positioned themselves “naturally” on market niches through their know-how. A common feature they all share is the entangling between their private person and their company (Letowski 2019).

The analytical approach that focuses on the business leader can also be found in the book by Bentabet and Gadille (2019). In this book, VSEs and SMEs are understood as diverse social worlds. As Bentabet, Gadille, and Trouvé (2019) define them, social worlds are a whole with an internal coherence. In the tradition of Céreq approach based on the term of “socio-productive configuration”, researchers furthermore tend to make a strong link between strategic orientation and human resources management (HRM) practices in SMEs.

We still need to acquire more knowledge on VSEs and SMEs. Currently, we lack academic research on the subject in general and specifically qualitative analysis as well as regular, monitored and coherent statistics. We need a real understanding of VSEs and SMEs; therefore, we need a reading grid in order to analyse collected data, to anticipate the role such companies play in the economy and society, to refine appropriate support policies, and finally to advise policymakers on policies targeting this kind of company companies.

Concerning training behaviours of French VSEs and SMEs, several studies conducted by Céreq (that we will refer to later) provide us original knowledge and help us analysing the specificities of French VSEs and SMEs.

Training Behaviours of SMEs and VSEs

Thanks to several surveys conducted by Céreq, such as the French version of the fifth European Continuing Vocational Training Survey (CVTS-5) or the French Dispositif d’Enquêtes sur les Formations et Itinéraires des Salariés (Defis) survey⁵, we can update our knowledge about training access for SMEs employees. The latest exploitations of data on employees’ access to training by Céreq highlight inequalities usually observed according to the size of the companies. While 48% of all French employees followed a training scheme in 2015, the proportion ranged from 25% of employees working in small companies to 63% of employees working in large ones (Dubois and al. 2016). It is on basis of this observation that public authorities and social partners are calling for an increased training effort in VSEs and SMEs.

Investment of SMEs in Continuing Training: Irregular, Defined by Compulsory Training Schemes and Low due to a Lack of Time and Need

While companies with more than 50 employees make constant training efforts, the behaviours of smaller enterprises are rather irregular. Only 45% of companies with ten to 20 employees train them every year. For the remaining 55%, the need for training is not systematic and irregular (Dubois and alii, 2016).

⁵ www.cereq.fr/en/data-access/lifeloong-learning-and-vocational-training-surveys-Defis-cvts-base-reflet, www.cereq.fr/en/training-employees-trajectory-surveys.

Indeed, training spending of VSEs and SMEs is irregular, too, and shows a stronger link to economic activity and market developments than the one of larger firms. In other words, small enterprises have a more instrumental view of training than the big ones. They would train first and foremost when they feel they need it. Their training effort is stronger when they are involved in dynamics of improvement, development or general reorientation. The data provided by Céreq show that 84% of SMEs become “training companies”⁶ as soon as their leaders want to change the field of company activity or aim for a new market positioning. Only 56% of SMEs become “training companies” because sustaining activity is their leaders’ main objective. Many SMEs also declare that the impact of training on the economic performance of their company is important to them, which is why their evaluation is similar (22% of training companies with ten to 49 employees compared to 19% of those with 500 or more employees) (Béraud 2015).

One reason for the irregularity of the training effort of SMEs could also be the cycle of training renewal that is dictated by regulations companies have to comply with. Training obligations place a much greater burden on the budget of the smallest businesses compared to the larger ones: Nearly 20% of the companies with ten to 49 employees spend almost all or all of their training budget on compulsory training schemes⁷ (Béraud 2016) (Figure 1).

When SMEs and VSEs report on the obstacles to their training investment, the cost of training seems only secondary. When explaining why they do not train or why they limit their training effort, small companies primarily cite the following two reasons: the lack of need and the lack of time. The lack of need for continuing education is the most frequently quoted reason: 75% of firms do not consider themselves in need for continuing education and 54% express that they prefer to recruit new employees with the qualifications and skills required. Half of the companies indeed prefer to give priority to initial training. Time is a resource that is often in short supply: 62% of companies assume that the workload of continuing training would be too heavy and that there is not enough time for staff to be trained. Far behind the absence of need, financial costs of training are mentioned as an obstacle by only two companies out of five (Marion 2017) (Figure 2).

In SMEs with ten to 19 employees, other factors influence training access rates, such as the fact that the company belongs to a company group⁸, the share of qualified jobs within the firm, or the level of the manager’s degree (Figure 3) (Marion 2017). Indeed, within SMEs from 10 to 19 employees belonging to a group, training access of employees reaches 34% when it is only 23% in those of the same size which not (Marion 2017).

6 The concept “training companies” entails all firms that have completed at least one training scheme, regardless of its form, during the interrogation year (Béraud 2015).

7 A training course is said to be compulsory when it is required by law to be carried out by the employer. These texts have two sources: on the one hand, the legal constraints stemming from the Labour Code, which govern health and safety obligations and all employers, and, on the other hand, all the legal conditions specific to the way in which activities are carried out (specific permits, mobilization of tools, dangerous environment, etc.). Compulsory training can be divided in two main areas: health and safety training and other regulatory authorisations and certifications (main ones are authorisations to drive machinery; compulsory training for drivers; different levels of electrical authorisations) (Béraud 2016).

8 In this article, a group of companies or „group“ means a group of companies with distinct legal personalities, but with direct and indirect links that are mainly financial (for example shareholdings or control) but also frequently organisational (management and strategies) economic (pooling of resources), or commercial (sales and purchases of goods or services).

A Three Groups Typology Combining SMEs Training Practices and Business Strategy

Deepening researches concerning training strategy of French SMEs, recent work by Céreq highlights that there is a large heterogeneity among SMEs. Defis survey exploitation makes it possible to distinguish more precisely three business configurations among companies with three to 49 employees. In each of these three configurations, training practices are adjusted to particular development strategies (Béraud and Noack 2019). The first configuration includes the so-called “managerial and training companies”, whose training practices are closest to those of large companies. The second and third configurations include firms of the studied group (firms with three to 49 employees) with little training. The second pattern concerns the so-called “traditional companies”, where training is limited to legal and regulatory aspects. The third pattern, called “Entrepreneurs”, brings together those whose more specific skills needs are not well covered by the training offered; as a substitute, these companies develop more apprenticeships in the workplace (Béraud and Noack 2019).

“Managerial and training companies”: This configuration includes 37% of small businesses and is characterised by a very specific profile of managers. The vast majority of them have higher education qualifications and their main objective is to grow their company’s business. In order to achieve this goal, they attach great importance to all strategic elements, such as price competitiveness, innovation, and originality of products or services. Consequently, these companies are characterised by a training policy that is just as developed and institutionalised as that of large companies, which is reflected, for example, by the existence of a person dedicated to training (Béraud and Noack 2019).

With an average of nine employees, they are slightly larger than companies of other configurations. More than one in three is part of a company group, a network of brands or a franchise. Many of these “managerial and training companies” are part of specialized

FIGURE 1: WEIGHT OF REGULATORY TRAINING ACCORDING TO THE SIZE OF THE COMPANY

	Share of companies which fund compulsory and regulatory training schemes	Share of companies which spend almost all or all of their training budget on compulsory training schemes
10 to 49 employees	61%	18%
50 to 249 employees	87%	13%
250 to 499 employees	95%	9%
500 employees and more	96%	7%
All companies (average)	63%	16%

Source: Béraud (2016) Defis

services, such as accounting, pharmacies, opticians, or legal activities. Some of them can be described as “small professional enterprises” attached to liberal professions (such as architectural firms, real estate agencies, and chartered accountants). The construction sector is under-represented in this business type, and the proportion of blue-collar workers is lower than in the others. The market for companies of this type is primarily local; still, a quarter of them expands their production nationally and more than one in ten even internationally. The favourable economic prospects that many of them report proves the success of their dynamism. More than eight in ten companies of this configuration are training companies and they largely continue to train, with important schemes, new employees after their recruitment. Their positioning on innovative strategies and specialized services contributes to making the development of their employees’ skills a central issue. Moreover, like large companies, these companies often work with all types of employment training partners (such as training organisations, Chambers of Commerce, employers’ organisations, consultants among others) in order to support and develop their training policy (Béraud and Noack 2019).

“Traditional small companies”: Companies of this type declare limited training needs. These companies are the oldest, often resulting from a family transmission or takeover. Their managers have few qualifications and mainly aim at maintaining rather than further developing their business. Accordingly, such companies declare only few trainings needs and recruit little. For example, only one employee in four had access to training in 2014, mainly for regulatory reasons. Characterised by a mainly blue-collar workforce (45%), these companies are present in all sectors where small structures are concentrated, particularly in traditional catering, construction, and car repair. They are distinguished by a strong territorial anchoring and few of them extend their production beyond the local market. A quarter of them report poor overall conditions and only 10% have a workforce that has increased over the last three years. It is important to note that these companies, which do not have an asserted strategy other than a trivialized cost-competitiveness form, are the ones that most frequently declare that they have

FIGURE 2: REASONS FOR LIMITED TRAINING EFFORTS (FIRMS WITH TEN TO 49 EMPLOYEES)

Staff qualifications and skills match the needs of the company	75%
Workload is too heavy, and staff are short of time	62%
The company's preferred strategy is to recruit people with the required qualifications and skills	54%
The company has given priority to initial training rather than continuing vocational training	50%
The costs of continuing vocational training courses or internships are too high	41%
It is difficult to assess the company's continuing vocational training needs	31%
Significant training efforts have been made previously	28%
There are no courses or internships on the market adapted to the needs of the company	18%
Other reasons	16%

Source: Marion (2017) 

no specific skills needs. 41% of these companies train mainly to meet regulatory requirements, for example updating an electrical or a machine operator's certificate. In these small, traditional companies, training adjusts to a production situation that seeks to maintain itself and changes only to meet regulatory requirements (Béraud and Noack 2019).

“Entrepreneurs”: Companies of this type look for distinctive skills. Like those in traditional businesses, the managers of small entrepreneurial structures have few qualifications. However, 80% of them have started their own business. Most of them (68%) declare that they want to develop the company's activity on the basis of an original project or a customised production or service. Created by their current manager and based on strategic guidelines of differentiation or specialisation, these companies can thus be described as “entrepreneurial”. However, they have some points in common with the “traditional” ones: They are present in the same sectors of activity, and their employees occupy relatively low-skilled positions. But they differ by the fact that they were established more recently and are positioned in a larger market (23% operate on the national market and 10% on the international market); they also have better economic dynamics, as proven by an increase in the workforce, good economic health, and prospects that are more frequently positive than for “traditional companies”. While they place a strong emphasis on compulsory training, these companies also seem to seek to develop skills through and at the workplace rather than in an organised framework. Their managers, like those in “managerial and traditional companies”, to a majority of 57% believe that skills are mainly acquired on the job. Indeed, more than the others, these companies make use of apprenticeships (34%), and oftentimes have appointed an employee as a trainer or tutor (41%, whereas it is only the case for 23% of the “traditional companies”). Furthermore, even when those companies are not identified as “training companies”, they nevertheless report more frequently than others that they have trained employees on the job (38%). “Entrepreneurs” recruit frequently (72% have hired one or more people in the last three years) and most of them provide training after recruitment. For these recruitments, which must meet specific skills needs, managers rely mainly on personal networks (47%). They also frequently request the help of outside organisations to advise them in implementing their training policy. Despite limited recourse to training, these companies often develop specific know-how through work activities. It is perhaps mostly in this configuration that, in addition to the frequent use of apprenticeship contracts, informal and unconventional training methods can be found (Béraud and Noack 2019).

In each of the above-described configurations of small businesses, the profile of the leader plays an important role. We will now elaborate on this aspect a little more.

The Entrepreneur: Driving Force Behind the Training in Small Businesses

When we cross lessons derived from studies based on Defis survey (see above) and the analysis by Letowski (2019), it shows that the entrepreneur's relationship to training explains to a significant extent the intensity of use of training in their company. Managers who have experienced initial education for themselves are more inclined to promote

continuing training for their employees. The impact is tangible: While 42% of companies with ten to 19 employees and executives without a degree are “training companies”, the rate rises to 83% for companies with executives holding a Bac+3 or higher degree (Marion 2017, Letowksi 2019)(Figure 3).

There are two other factors that can have a positive impact on the use of training in a company: first companies directors are members of different networks; and second, they are open to new forms of training. In order to raise the awareness of managers about training possibilities, “coaches” are necessary: Data show that the share of “training companies” and employee access to training depend largely on the support the manager receives to develop training courses. Excepted certified public accountants that are not training specialists, whatever type of organisation is requested to help with the training, the impact on the rate of employee access to training has proven to be significant. For example, the rate of employee access to training can be increased by 15 percentage points after a company with fewer than 20 employees has received support by a training course consultant for the implementation of a training policy (Marion 2017).

In France, the funding and provision of continuing training is organised by the OPCA⁹, which is explicitly mandated by the social partners and public authorities to compensate for the lack of internal resources dedicated to training in the smallest companies. These support services are only used by 33% of the companies with ten to 19 employees. When companies aim at obtaining a quality label or at encouraging employee mobility, companies prefer consultants to help them, sometimes in conjunction with OPCAs (as some OPCAs offer their member companies a list of consultants from the human resources/HR support register). The use of a consultant is also more frequent when the company director or HR manager participates in a network or association of entrepreneurs or human resources development (HRD). One third of small enterprises also turn to training organisations, more specifically with the aim of achieving a specific training action (Marion 2017).

9 The Organisme Paritaire Collecteur Agréé (OPCA) is responsible for collecting, pooling, and redistributing the financial obligations paid by companies for vocational training. The OPCA ensures the financing and the administrative management of the training actions implemented by companies.

FIGURE 3: SHARE OF TRAINING COMPANIES ACCORDING TO THE MANAGER’S LEVEL OF EDUCATION

No degree	(equivalent to EQF 1)	42%
CAP/BEP	(equivalent to EQF 3)	52%
Baccalauréat	(equivalent to EQF 4)	57%
Bac+2	(equivalent to EQF 5)	69%
Bac+3 and more	(equivalent to EQF 6 and more)	83%

Source: Marion (2017)

Conclusion

This article explained how SMEs and VSEs are specific regarding their training behaviours. One of their distinguishing characteristics is the significant role of their leader (their profile; the strategy they chose for the company). Several works conducted by the team of Céreq, based on European and French surveys, allowed us to confirm the diversity that exists among SMEs and VSEs. Still, more data and analysis of as well as research on those special types of companies are necessary in order to understand them better.

Three configurations of companies with three to 49 employees, where training practices adjust to particular development strategies, emerged, namely, the “managerial and training companies”, the “traditional small companies”, and the “entrepreneurs”.

However, the classification of a company within a particular configuration may evolve. A new positioning on the market, the development of a new product, a change in management are all factors that influence a company’s training practices. The heterogeneity of small business development strategies and the related extend of training practices are a challenging issue for public policies aimed at improving employees’ access to training. Such policies can be an important support for those companies that engage in the development of specific, sometimes original activities and seek to develop distinctive skills for their employees. All in all, support by skills operators remains an important issue. The recognition of on-the-job training, introduced by the recent French reform on vocational training¹⁰, could also be addressed in this context by encouraging the formalisation and development of such training practices.

In order to conclude we could take up some recommendations made by Céreq for the French case (Marion 2017) assuming that they certainly can be adapted to other national contexts.

We need to:

- promote the access to information on training and continuing training to business leaders;
- train and inform accountants;
- and promote cooperation between the different types of support staff (Chambers of Commerce, consultants, and training organisations among others) in order to better integrate the development of vocational training in the strategy of companies. ■

¹⁰ The French Government Act 2018-771 of the 5 September 2018 for the freedom to choose one’s professional future, indicates that the training action, defined as "a pedagogical pathway leading to the achievement of a professional objective", can be carried out in a work situation.

 **FURTHER
READING** Read all
Céreq publications
on www.cereq.fr/en

Bentabet, Elyes (2008) : Très petites, petites et moyennes entreprises : entre tradition et innovation : Une recension des travaux du Céreq (1985-2007). Marseille : Céreq.

Bentabet, Elyes/ Gadille, Martine (2019) : *Les mondes sociaux des TPE-PME : Modèles et logiques d'actions*. Toulouse : Octarès.

Bentabet, Elyes/ Gadille, Martine / Trouvé, Philippe (2019) : Les mondes sociaux : un concept migrateur entre deux paradigmes. In : Bentabet, Elyes/ Gadille, Martine (Dir.) : *Les mondes sociaux des TPE-PME : Modèles et logiques d'actions*. Toulouse : Octarès, pp. 7-34.

Béraud, Delphine (2015) : Les PME s'intéressent de plus en plus aux effets de la formation. Marseille : Céreq, *Bref* n°330.

Béraud, Delphine (2016) : Les formations obligatoires en entreprise : des formations comme les autres ? Marseille : Céreq, *Bref* n°350.

Béraud, Delphine /Noack, Edmond (2019): Training in small companies: a reflection of their strategic positioning. Marseille, Céreq, *Training and Employment*, n°142.

Dubois, Jean-Marie/ Marion-Vernoux, Isabelle/ Noack, Edmond (2016) : Le dispositif d'enquête Defis, un nouveau regard sur la formation en entreprise. Marseille, Céreq, *Bref* n°344.

Eurostat (2018): Statistics on Small and Medium-Sized Enterprises. URL: https://ec.europa.eu/eurostat/statistics-explained/index.php/Statistics_on_small_and_medium-sized_enterprises#General_overview [26 May 2020].

Insee (2019) : *Les entreprises en France : édition 2019*. Paris, Insee.

Letowski, André (2019) : L'approche de la galaxie des TPE. In : Bentabet, Elyes/ Gadille, Martine (Dir.) : *Les mondes sociaux des TPE-PME : Modèles et logiques d'actions*. Toulouse : Octarès, pp. 49-68.

Régnauld, Gérard (2011) : *Les mondes sociaux des petites et très petites entreprises*. Paris : L'Harmattan.

Salais, Robert /Storper, Michael (1993) : *Les mondes de production*. Paris : Editions de l'École des Hautes Etudes en Sciences Sociales.

Statista (2019): "Number of Small and Medium-Sized Enterprises (SMEs) in the European Union in 2018, by Size". URL: <https://www.statista.com/statistics/878412/number-of-smes-in-europe-by-size> [26 May 2020].

International outputs



Benchmarks for the improvement of the quality of professional training

WHO ?

A partnership agreement was concluded between the AFD (French Agency for Development) and Céreq with a view to establishing a space for mutual collaboration on the quality of vocational training. This partnership was intended to enable the AFD to provide its operators committed in international development projects with advice and support in this area. The UNESCO's International Institute for Educational Planning (IIEP), was also associated to the initiative.

WHEN ?

The project lasted from January 2018 to June 2019

WHAT ?

In the past decade or so, many developing countries have been interested in overhauling their quality assurance processes to improve the efficiency and effectiveness of their training systems. Expectations are high regarding this emerging process in vocational training systems and its potential leverage effect on the performance of national education systems as a whole. To help partner countries improve their practices is a major commitment of AFD as a decision helper. In this perspective, AFD carried out a study to explore the issues in greater depth and identify courses of action.

The overall objective of the AFD - Céreq partnership was to develop a common analysis on the management of quality in vocational training, a topical issue for countries both in the North and the South. In this phase, aims were the following :

- Create a shared framework for discussion on the subject of quality in vocational training between AFD and Céreq associating French expert partners (Ministry of Education, cabinets, social partners, regions, non-profit organisations), the Dakar agency of IIEP-UNESCO, and partners from South countries;
- Initiate a Franco-African collaboration space in the field of research, expertise and advice in training and employment with local public authorities;
- Produce operational recommendations for project managers and local actors to support their actions on reinforcing quality of VET systems;
- Raise awareness of all stakeholders and widely disseminate the project outputs.

The project four phases

1. Identification of knowledge resources. The underlying idea was to use the studies and diagnoses produced by Céreq over the last 10 years (2007-2017).

The consultation of the available Céreq literature thus made it possible to identify a series of issues considered relevant and “invariant” internationally. These issues were cross-referenced with AFD ‘s experience based on field projects as well as the trends and prospects observed in the countries.

On the basis of this cross-referencing, four essential themes for ensuring the quality of vocational training systems were selected:

- Building the governance of the training system through contractualisation;
- The function of labour market observatories for territories and professional branches;
- Supporting local social dialogue through possible forms of contractualisation between actors;
- Introduce a professionalisation approach in the definition of training and assessment standards.

2. An analysis of practices in France (before the reform of 5 September 2018) around the above four themes was produced by Céreq.

3. Cross-referencing Céreq analysis with AFD ‘s experience in partner countries (Morocco, Tunisia, Senegal, Togo, Cameroon, Congo, Djibouti, Côte d’Ivoire among others) led to the production of operational recommendations structured around three main sections: prerequisites; success factors; associated risks.

4. Raising awareness. This work was shared during workshops with expert partners, of the International Institute for Educational Planning IIEP - Pôle de Dakar, and representatives of the countries of intervention (Senegal in particular).

The partnership with AFD was though as a long-term collaboration perspective desired by both partners. A new partnership agreement has been signed between the AFD and Céreq in October 2020, for the realization of a new comparative study project including observations in Argentina, France, Morocco and Senegal. The project, coordinated by Céreq, is intended to focus on the development and recognition of informal learning in VET. It will deliver its results at the end of 2021.

More information :
French Report
www.cereq.fr/reperes-pour-lamelioration-de-la-qualite-en-formation-professionnelle

International outputs



Erasmus+

Developing, assessing and validating transversal key competences in VET

WHO ?

The project is implemented in partnership with the Warsaw School of Economics (Poland), the Austrian Institute for Research on Vocational Training (Austria), Fafo Institute for Labour and Social Research (Norway), National Institute for Certified Educational Measurements (Slovakia) and the National Centre for Education (Latvia); and funded as part of the Erasmus+ Programme, Key Action 2, strategic partnerships.

WHEN ?

The project lasted from October 2017 to November 2020

WHAT ?

The project aims to provide evidence-based support to national governments and agencies, EU agencies and key stakeholders involved in designing policies on developing, assessing and validating cross-cutting key competences.

Among the eight key competences identified by the 2006 European Recommendation on Key Competences for LLL, which are regarded as «necessary for personal fulfilment, active citizenship, social cohesion and employability», four have a transversal dimension and constitute the core of the project. They also appear as being the most arduous to assess.

1. Learning to learn: competences associated with independent learning;
2. Social and civic competences: competences linked to the construction of citizenship;
3. Sense of initiative and entrepreneurship: competences enabling individuals to move from ideas to acts;
4. Cultural awareness and expression: competences linked to the various fields of the arts and their appreciation.

Since these soft skills cut across the various education disciplines, the first stage of the research consisted of identifying how they are developed and assessed in each of the national education system particularly in the field of vocational education and training. Adopting a qualitative approach, face-to-face collective interviews with practitioners, experts and researchers involved in the development and assessment of these competences (at national, regional or field level) have been conducted.

Based on the analysis of national practices, the TRACK-VET project offers an original insight into the development and access to these skills in the European countries involved. Josiane Paddeu, Patrick Veneau and Catherine Galli wrote the French report. It reveals the coexistence of different practices and distinguishes between the national formal education system (common core of basic competences and other more specific experiments) and non-formal training schemes steered by social partners (CLEA scheme).

Ultimately, the TRACK-VET project will set up a European typology of practices for the inclusion and assessment of key competences in the reference framework and issue recommendations for European policy makers and national stakeholders. ■

📄 The French report (in english)

📄 www.track-vet.eu/



2021 Agenda

23>28
February
Online
from
Porto
Alegre,
Brazil

Porto Alegre ISA Forum Sessions

Challenges of the 21st Century: Democracy, Environment, Inequalities, Intersectionality... This IV ISA Forum of Sociology will be the first ISA virtual Forum, with over 800 sessions, more than 3,000 papers and the participation of sociologists from 125 countries.

www.isa-sociology.org/en/conferences/forum/porto-alegre-2021

9>12
June
University
of Trento,
Italy

8th Ethnography and Qualitative Research Conference

Established in 2006, the Ethnography and Qualitative Research Conference has become a recognised scientific meeting for social researchers interested in ethnographic inquiry in Italy and abroad.

www.etnografiaricercaqualitativa.it/

12>16
July
Tunis,
Tunisia

International Congress of French-Speaking Sociologists

<https://congres2021.aislf.org/pages/index.php>

A selection of events on training & employment

15>21 July Online **Nomads Foundation Conference**

Nomads Foundation will present the methodological framework for the construction of Shared Forward Looking Visions of Jobs and Skills.

<https://nomadsfoundation.com/>

23>24 September Timisoara, Romania **European-wide network for furthering labour market monitoring at regional and local level, Annual Meeting**

Transformations of Local and Regional Labour Markets across Europe in Pandemic and Post-Pandemic times. Challenges for Regional and Local Labour Market Observatories.

<http://regionallabourmarketmonitoring.net/>

27>29 October Mucem Marseilles, France **10th Rencontres Jeunes & Sociétés**

«Probable/Improbable: Transclass, Transgender, Transnational...».

<https://rjs2021.sciencesconf.org>

All the events on www.cereq.fr/en 

Bibliography

More
references

www.cereq.fr

French Centre of Research on Education, Training and Employment (Centre d'études et de recherche sur les qualification/Céreq): www.cereq.fr/en

French Centre of Research on Education, Training and Employment (Centre d'études et de recherche sur les qualification/Céreq) - Training and Employees Trajectory Survey: <https://cereq.fr/en/training-employees-trajectory-surveys>

French Centre of Research on Education, Training and Employment (Centre d'études et de recherche sur les qualification/Céreq): Lifelong Learning and Vocation Training Surveys (Dispositif d'Enquêtes sur les Formations et Itinéraires des salariés/Defis, Continuing Vocational Training Survey/ CVTS, base Reflet): <https://www.cereq.fr/en/data-access/lifelong-learning-and-vocational-training-survey-Defis-cvts-base-reflet>

French National Institute of Statistics and Economic Studies (L'institut national de la statistique et des Études économiques/INSEE): www.insee.fr


French National Institute of Statistics and Economic Studies (L'institut national de la statistique et des Études économiques/INSEE) - New Enterprises Information Systems (Système d'information sur les nouvelles entreprises/SINE): www.insee.fr/en/metadonnees/source/serie/s1271

Introduction

Beraud D., Noack E. (2018). La formation dans les petites entreprises, reflet de leurs orientations stratégiques, *Céreq Bref* n°369, 4 p.

Boutinet JP. (2019). Dans le champ de la formation professionnelle, quel partage de responsabilités pour aujourd'hui ?, *L'Harmattan*, « Savoirs », 2019/2 n° 50, pp. 129-153.

Couppié T., Giret JF., Lopez A. (2009). *Obtenir un emploi dans son domaine de formation : un enjeu très relatif dans l'insertion des jeunes*, Insee Références Formation et Emplois pp.43-56.



Websites or online documents

Dubar C., La sociologie du travail face à la qualification et à la compétence. In: *Sociologie du travail*, 38 année n°2, Avril-juin 1996. pp. 179-193.

Genard JL. (1999). *La grammaire de la responsabilité*, Paris, Les éditions du Cerf, Humanités, 209 p.

Giret JF., Lopez A., Rose J., sous la direction de (2005). *Des formations pour quels emplois ?*, La Découverte, Recherches.

Lichtenberger Y. (1999). Compétence, organisation du travail et confrontation sociale. In: *Formation Emploi*. N.67, 1999. Numéro spécial : activités de travail et dynamique des compétences. pp. 93-107.

Loufrani-Fedida S., Oiry E. et Saint-Germes E. (2015). Vers un rapprochement de l'employabilité et de la gestion des compétences : grille de lecture théorique et illustrations empiriques , ESKA | « Revue de gestion des ressources humaines », 2015/3 N° 97 | pages 17 à 38.

Luttringer JM (2019). « L'extension du droit de la responsabilité contractuelle dans le domaine de la formation professionnelle continue », L'Harmattan | « Savoirs », 2019/2 N° 50 | 55 à 66.

Melnik-Olive E. et Stephanus C. (2019). « La formation en entreprise accompagne les promotions mais fait défaut aux plus fragiles », *Céreq Bref* n°374, mars, 4 p.

Oiry E. (2005). « Qualification et compétence deux sœurs jumelles ? », *Revue française de gestion* 2005/5 no 158, pages 13 à 34.

Oiry E., d'Iribarne P. (2001). « La notion de compétence : continuités et changements par rapport à la notion de qualification », *Sociologie du Travail*, n°1.

Salognon M. (2008), L'exclusion professionnelle : quelle implication des entreprises?. Horizons stratégiques, La documentation française; Centre d'Analyse Stratégique, 2008, pp.52-71.

Zizzo C. (2019). « Quelles entreprises pratiquent la gestion des compétences ? », France Stratégie la Note d'analyse n°77.

A multidisciplinary team

+ 50 researchers

A multidisciplinary group of experts. Céreq brings together researchers with a wide range of profiles to facilitate a variety of approaches and methods.

- > Sociologists
- > Economists
- > Statisticians
- > Legal experts
- > Anthropologists
- > Political scientists
- > Econometricians

A network of 12 associated centres

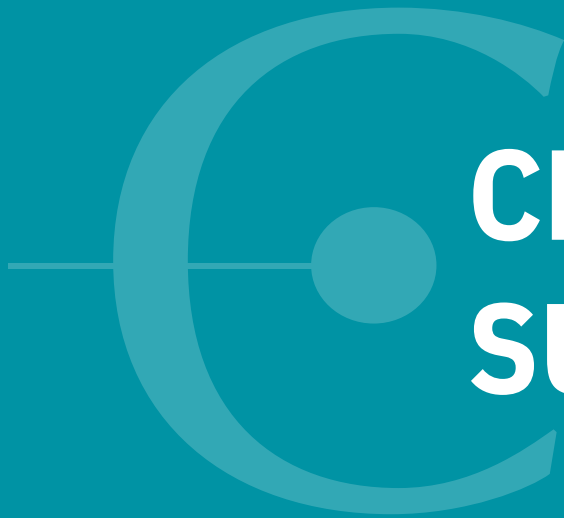
Located in academic or CNRS research laboratories

- Art-Dev, Montpellier
- Beta, Strasbourg
- Centre Emile Durkheim, Bordeaux
- Clerma, Clermont-Ferrand
- Certop, Toulouse
- Creg, Grenoble
- Crem, Rennes
- Clersé, Lille
- Eso, Caen
- Iredu, Dijon
- DCS, Nantes
- Lest, Aix-en-Provence

Open to the wider world

Collaboration with international organisations: ILO, CEDEFOP, UNESCO, OECD, etc. Research activity and collaborative projects funded by several sponsors: European Commission, French Development Agency, World Bank, etc.

An extensive network of contacts in many countries: Algeria, Austria, Bulgaria, Canada, Czech Republic, Croatia, Germany, Greece, Hungary, Ireland, Italy, Japan, Luxembourg, Morocco, Mozambique, Norway, Poland, Senegal, Slovenia, Slovakia, South Korea, Spain, Switzerland, Tunisia, etc.



CÉREQ
SURVEYS

The Génération surveys gather data on the multitude of factors that might influence the school-to-work transition.

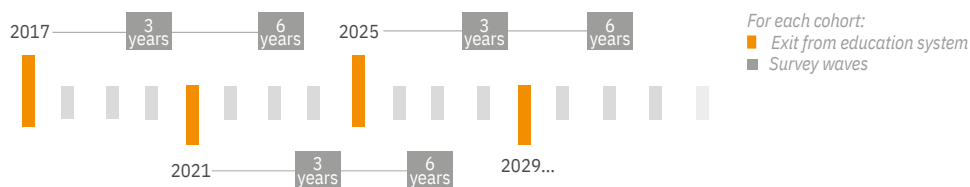
It concerns young people:

- > who left the French education system for the first time or who have already interrupted their education for a maximum period of 16 months,
- > who left during or at the end of a school year,
- > with or without qualifications,
- > and who are living in France or abroad.

Each cohort questioned twice

3 years and then 6 years
after leaving the education system.

Reconstructing trajectories



Génération

The survey also collects data on:

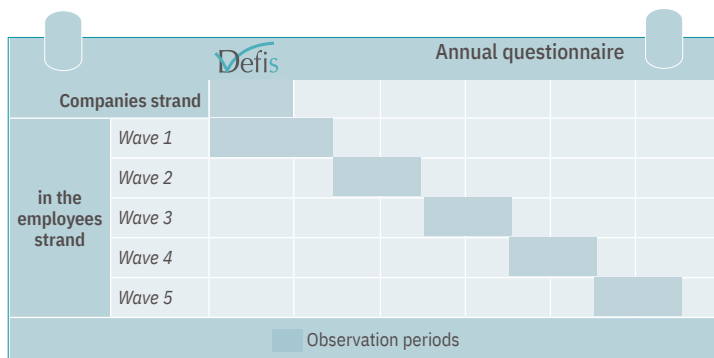
- > Apprenticeship
- > Return to education/training
- > Socio-cultural background
- > Gender
- > Family environment
- > Individual characteristics
- > Qualifications obtained
- > Residential mobility



Illuminating vocational training and employees trajectories



Tracking year after year >



Tracked over 5 years
16,000 employees surveyed

Contextualised
4,500 companies surveyed



surveys gather data on :



... in the employees strand

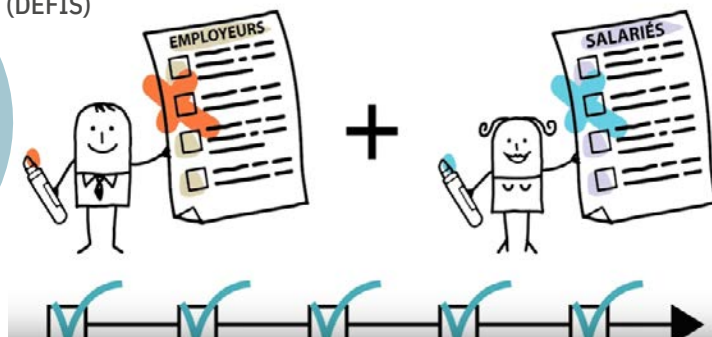
- > Employment and unemployment trajectories
- > Changes in work
- > Training measures completed
- > Training plans and needs, constraints
- > Learning at work
- > Information on training



... in the companies strand

- > Work organisation
- > Management tools
- > HR policy
- > Training practices
- > Industrial relations
- > For small companies: Director's profile

Dispositif d'Enquêtes sur les Formations et Itinéraires des Salariés (DEFIS)



Information and videos:
www.cereq.fr/en/en-images



In **and** Around

Publication Director :
Florence LEFRESNE

Scientific Director :
Céline GASQUET

Coordination :
Alisson BOKO
Anaïs CHATAGNON
Arnaud DUPRAY
Clémence GIRARD-COUSSY
Nathalie LEMENAGER
Matteo SGARZI

Graphics and design :
Zineb MOUACI

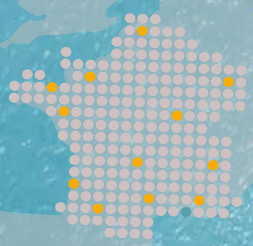
Printed by :
Impremium, France

Translation :
Andrew WILSON

ISBN : Processing / ISSN en cours
Dépôt légal : 1^{er} semestre 2021
Copyrights :
Shutterstock, Sutthichart Phichitwong
Infographics: Céreq
Christèle GAUTHIER



10, place de la Joliette CS 21321
13567 Marseille Cedex 02 France
Tel. : (+33) 04 91 13 28 28
www.cereq.fr



Écéreq

*Public body under the supervision of the ministry
of Education and the minister of Employment*

Since 1971

illuminating the links between training,
employment and work.

+ info and all studies
on www.cereq.fr

