In and Around

Training - Employment - Work #1-2020

About the school to work transition
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.

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Publication director : Florence LEFRESNE, Céreq Director
About the school to work transition
A nine-letter word, a real headache in all countries?

Education!

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We are proud to present the first issue of *In and Around*, which allows non-French-speaking readers to access a set of Céreq’s articles collected on the same topic, should they come from national studies or European or international projects.

The theme chosen for this first issue - the School-to-Work Transition - underpins a large part of Céreq’s scientific activities since its inception. Written by a former Scientific Director of Céreq, José Rose, professor of sociology, the introductory article presents different transition models showing the various ways education and work can be organized and linked to each other, as well as the different time-scales of the transition process. Each model brings out the responsibilities of the various actors for ensuring the success of integration process into the labour market, which usually also goes hand in hand with the transition to adulthood.

The three following articles are based on the Génération survey conducted by Céreq since 1992, which provides through a longitudinal methodology a large set of data on school to work trajectories. Thus, permanencies and changes that occurred during the last decades can be analyzed in depth. One focuses on the gain from education through a close-up look at the evolution of young people wages over 20 years, stressing a relative decline in the return to higher education, especially for the cohort hit by the 2008 crisis, as a result of a widening gap between the large numbers of graduates and the volume of high-skill jobs available. Another article tackles with the gender issue over the same period, underlining the significant improvement of young women position on the labour market, which leads to a convergence with young men. However, this convergence seems to be driven in part by a deterioration in young men’s situation. The third article deals with the apprenticeship system that has seen its size doubling with an increasing part of higher education. The paper analyzed apprenticeship benefits depending on the level of training of young people and the economic situation.

European and international comparisons as well as cooperation take pride of place in Céreq’s activities. We present here a few projects that have been carried out recently.

The issue of qualification is at the heart of European political agendas. Funded under the Erasmus + program, a comparative analysis of 7 European national qualification frameworks reveals different patterns of sector qualifications awarded outside the traditional educational context. Named SATELIT, another project aimed to consolidate the positioning of Maghreb universities in their economic and territorial ecosystem, which means strengthening potential for innovation and improving the quality of public research. Céreq has focused on the process of «professionalization» of doctoral training in universities.

Finally, the issue displays two documentary platforms as part of a partnership of experts that has been developed at the EU level and led to concrete outcomes, the first one on training and integration into the labour market of low-skilled adults, and the second one on educational resources related to the ecological transition for vocational training establishments.

I wish everyone a pleasant and insightful reading!

*Florence LEFRESNE*
José ROSE
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Discipline: Sociology

Main research areas: Evolution of the Education System and Higher Education - Relationships between Training and Employment - Transition from school to work
At the crossroads of education, training and employment: four typical models of the school-to-work transition

The notion of the school-to-work transition has gradually come to the fore in the public debate in France, as it has in the work of researchers and in public policies¹. And not only in France, even though the issue has undoubtedly taken on particular significance there (Verdier and Vultur, 2019).

The form taken by the relations between education or training, on the one hand, and employment, on the other, does, after all, vary considerably depending on the period and country in question. In an attempt to define them more accurately, we here put forward four typical models² of the relations between education and the world of work that give rise to different approaches to the school-to-work transition.

These models concern, on the one hand, the way of conceiving the social space in which the transition takes place and, on the other, the time scale of the transition process.

A look back at the notion of the school-to-work transition

In France, the notion of the school-to-work transition emerged in the 1970s when young people leaving the education system first began to experience difficulties in entering the labour market. The notion was gradually taken up in the world of academic research, where attempts were made to define it, all of which enquired into the relationship between education and employment, of which it was said that it was “nowhere to be found”³. It was also taken up by the public authorities with the national employment pacts introduced in the early 1980s, an important element of which was the provision of assistance for young people entering the labour market.

² Like Weber’s ideal type, typical models are abstract constructs that cannot be found as such in reality but which enable us to classify and hence to analyse more accurately the actual forms of a phenomenon.
³ Cf. the book edited by L. Tanguy and published in 1986 by Documentation Française under the title «L’introuvable relation formation-emploi». 
As to the question of the relations between education and employment, the responses have varied in both space and time.

**Integration**

The first model is characterised by the integration of school and work. In this case, the transition problem does not really exist, since training is organised within firms and leads directly to hiring. Thus this model gives primacy to employment and to employers.

Historically, it can be traced back to the compagnonnages or societies of journeymen in certain craft trades in France. An in-depth relationship was forged between the master craftsman and his compagnons or journeymen who, through the exercise of their trade and the formative experience that it provided, gradually acquired the skills required to practise their specialised craft.

This model also corresponds to what used to be known as company schools, which were set up in certain heavy industries, such as mining, energy and metalworking, in order to provide vocational training and the transmission of operational skills after compulsory general education. Such schools have come back into favour in recent years, as is evident from the establishment of corporate universities (Académie Accor, Campus Veolia, Thalès university, Université Clarins etc.) or training centres which, following the
completion of a school-based programme of education or training, provide specialist training, thereby enabling employers and/or industry officials to control both training and recruitment.

This model can also be likened to those arrangements that conclude certain initial education or training programmes by granting the individuals concerned employee status and fully integrating training in the occupation or profession in question into the work programme. This applies, for example, to the early years of trainee civil servants’ careers in government departments.

**Separation**

The second model is characterised by the separation of education from the world of work. Each of the two spheres operates according to its own logic and there is no particular relationship between them. In this model, the school-to-work transition constitutes a specific point in time, the timing and quality of which can be analysed and measured.

In a way, the French education model has long been consonant with this situation. And while it has never truly existed in a pure form, it nevertheless continues to influence the
thinking of the actors concerned, who still speak, even in a context that has undergone significant change, of the excessive separation between education and the economy and of the need to bring them closer together.

This model is based on a sequential vision of the life course, in which people first complete their education and then, in a second phase, seek work in order to apply the knowledge acquired in the first phase. In this case, the problem of the linkage between education and employment can be reduced to a simple change of state, in which the individual moves from the status of “learner” (seeker of know-how, skills, knowledge etc.) to that of supplier of his or her labour power (whether physical, technical, intellectual or artistic), the assumption being that the only question to be addressed is that of the match, in terms of both level and field, between the education received and the job to be held.

**Conjugation**

The third model is characterised by conjugation. Here, the education and training system and companies are independent entities, each operating according to its own specific logic. However, they do share a space that is supposed to facilitate the school-to-work transition.

The model is best illustrated by block-release training programmes, and in particular by apprenticeships, whether undertaken within the education system or as an employee of a company. After all, apprenticeships alternate time in the workplace with time in a training centre and the whole idea of such block-release programmes is to link these two periods of time in the best possible or most effective way. The long-established dual system in Germany and Austria is a good illustration of this, since – at least in the ideal model – it both provides training and ensures that trainees acquire practical experience on the job.

Hospital-based training in medicine can also be regarded as an example of the conjugation model, since clinical academics both deliver juniors’ theoretical training and support them in their work on the wards. Trainee doctors combine the practice of medicine with advanced training and their supervisors help them gradually integrate into the profession.

The trend towards the professionalisation of secondary and higher education can also be regarded as an example of this attempt to link education to the world of work through the introduction of an increasing share of technical and vocational teaching delivered by practitioners and through work placements.

**Intermediation**

The fourth and final model is based on intermediation. As in the conjugation model, the two actors concerned are autonomous but this time the space in which they are brought together is no longer shared between them but becomes a separate social space that can best be described as a transitional space whose purpose is to facilitate the school-to-work transition.
Other actors operate in this space, in particular the public authorities and labour market intermediaries who in France include the Pôle emploi (the French national employment agency) and the missions locales pour l’emploi (local employment offices) or even university careers advisory services. And this also encompasses all the programmes intended to contribute to the organisation of the education-to-work transition, whether they be internships, training courses, careers advice and guidance or public policy measures aimed at facilitating the education-to-work transition.

The dynamic between the models

None of these four models has ever existed in a pure form or occupied a position of hegemony. What one encounters in reality, rather, is a combination of these models in proportions that vary depending on period and country as well as on the fields and levels of education’

As far as France is concerned, and to simplify matters, it can be said that the general direction taken by the dynamic of the relations between the education system and the world of work has been as follows. For a long time, the integration model was dominant, with employers themselves providing on-the-job or more formal training for their employees. Subsequently, the expansion of education, and particularly of technical and vocational education and training, changed the context on the supply side. A model characterised by the separation of the education system from the world of work began to occupy a dominant position even though, in some sectors, the integration model remained absolutely dominant while in others it was the conjugation model that prevailed. Finally, between 1980 and 1990, as unemployment began to rise and spread to affect young people leaving education with upper secondary and even tertiary-level qualifications, the separation model reached its limits and features characteristic of the intermediation model began to emerge.

Thus there is an historical pathway along which these models emerged, as well as a tension between the models themselves and between the actors involved. Consequently, the models outlined here represent archetypes of the linkage between education and employment, making it possible to identify how, over time and in space, the various forms of education and work can be organised and linked to each other in different ways. They also enable us to understand how to rank the responsibilities of the various actors and individuals for ensuring the success of this pivotal stage of integration into the world of work, which usually also goes hand in hand with the transition to adulthood.
ABOUT THE SCHOOL TO WORK TRANSITION

WAGES | EDUCATION-TO-WORK TRANSITION
| LEVEL OF EDUCATION | GÉNÉRATION SURVEY 92 | GÉNÉRATION SURVEY 2010

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Reference |
Dupray, Arnaud, & Barret, Christophe (2019). What is the gain from education? A close-up look at the evolution of wages over 20 years at the start of the working life, Training and employment, No 138, 4 p.
Since the 1980s, all OECD countries have seen significant increases in the share of their populations completing their education with a higher education qualification. This drive to raise education levels is intended to help national economies deal with rapid change. While it is still too early to assess the scale of the effects of these changes over the long term, we can legitimately seek to investigate them over the short term, and particularly their impact on the groups first affected, namely young people embarking on their working lives. This is the purpose of the present study, which is based on a synthetic indicator: wages observed after 5 years in the labour market for two cohorts of young French people investigated almost 20 years apart, in 1997 in the case of the older cohort and in 2015 in the case of the younger one. While remaining in education still guarantees access to more highly-paid jobs, this tendency towards extending the time spent in education does not benefit all young people in the same way. The most highly qualified in particular seem to be paying the price of this mass access to higher education.

The wage young people receive on entering the labour market for the first time is one of the criteria of job quality and positioning in the labour market. It is strongly correlated with level of education and enables young people to situate themselves relative to their peers. It provides a short-term measure of the return to their investment in education. Céréq’s Génération surveys offer an opportunity to compare the evolution of wage levels for those leaving the education system in 1992 and 2010 observed over the first five years of their working lives. Taking into account the lengthening of the time spent in education over the period, have wages for the younger cohort increased? Have the wage gaps between the various levels of qualification widened? Has there been a fall in the share of low wage-earners as the proportion of those with lower secondary qualifications only has fallen?
The wage hierarchy still in step with the qualifications hierarchy

The levels of education achieved on exit from the education system have risen significantly in 20 years. Almost 44% of young people now enter the labour market with a higher education qualification in their pockets, compared with only 27% in 1990. The injunction to raise initial education levels, issued by the Minister of Education in 1985, who declared that “80% of each age group will reach the level of the baccalauréat between now and the year 2000”, has become a reality 30 years on. The target for the share of high school pupils obtaining the baccalauréat was attained in 2012, and the expansion of higher education has produced an unprecedentedly high share of graduates. At the same time, higher education courses over the past 15 years have become more vocationally oriented in order to meet the needs of business. The introduction of the vocational bachelor’s degree in 1999, the establishment of the bachelor’s-master’s-doctorate system from 2002 onwards and the expansion of apprenticeships in higher education have both increased the number of tertiary-level qualifications and created new opportunities for otherwise excluded groups to enter higher education [1].

This increase in educational levels had given rise to legitimate expectations among leavers as to their employment prospects and wage levels. However, those expectations came up against an economic situation that was significantly weaker over the period between 2010 and 2015 than during the years between 1992 and 1997. The 1992 cohort of leavers tended to see an improvement in economic activity over the five-year observation period, despite a brief recession in 1993. GDP rose by 7.5% (in volume terms) over the period as a whole, compared with just 4.4% for the 2010 cohort. This deterioration in the economic situation particularly affected young people in the labour market, as is evidenced by the increase of 2 to 3 points in the unemployment rate (ILO definition) among 15-24 year olds, which fluctuated between 23 and 25% from the first quarter of 2013 onwards.

![Graph showing difference in median wages (in constant 2015 euros) between the situations measured in 2015 and those in 1997.]

2630 €/1997 Level of the median wage in 1997 in constant 2015 euros for a given level of qualification.
Source: Céreq, 1992 and 2010 Génération surveys, questioning 5 years after exit from education system.
As for the positive correlation between wage level and level of qualification, it is verified throughout the educational hierarchy. In higher education, it goes hand in hand with a hierarchy between graduates of the elite *grandes écoles* and university graduates with the same level of qualification, with the latter earning significantly less than the former. The formers’ average wage premium in current euros compared with university graduates has actually increased, which indicates that the *grandes écoles* remain more sheltered from the massive influx of new arrivals in higher education due to the selective admissions system based on the *classes préparatoires*, despite the development of parallel admission pathways. Thus over the 18-year period, the number of graduates from the *grandes écoles* increased 1.5 times, whereas the number of post-graduates (with master’s degrees and PhDs) doubled.

**A scissors effect on wages**

Wages in current euros rose considerably in the 18 years between 1997 and 2015 for all levels of qualification. However, in order to assess the real gains or losses in terms of purchasing power, any analysis of this growth has also to take into account the evolution of inflation over the same period. Thus our analysis will henceforth be based on wages in constant euros, on prices in July 2015 and on all individuals in work regardless of their working time.

For all persons leaving education, the median monthly wage* in constant euros rose by 170 euros to reach 1,480 euros in 2015. The rise in the level of final qualifications between the two cohorts explains 56% of this increase. If the qualifications structure had remained constant, the median wage would have increased by about 75 euros. Overall, the median wage for the 2010 cohort increased by 12.8% compared with the 1992 cohort for all employees and by 8% for full-timers only.

### Evolution of wage differentials for a given level of qualification

<table>
<thead>
<tr>
<th>Highest initial qualification obtained</th>
<th>Cohort that left in 1992</th>
<th>Cohort that left in 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower secondary certificate only</td>
<td>2.9</td>
<td>2.3</td>
</tr>
<tr>
<td>CAP-BEP-MC</td>
<td>2.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Général bac</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Vocational/technological bac</td>
<td>2.6</td>
<td>1.9</td>
</tr>
<tr>
<td>DEUG-BTS-DUT</td>
<td>2.0</td>
<td>1.7</td>
</tr>
<tr>
<td>3-year bachelor’s</td>
<td>2.1</td>
<td>1.8</td>
</tr>
<tr>
<td>1-year master’s</td>
<td>2.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Elite engineering and business schools</td>
<td>2.2</td>
<td>2.0</td>
</tr>
<tr>
<td>DEA-DESS, 2-year master’s, PhD</td>
<td>2.3</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.1</strong></td>
<td><strong>2.3</strong></td>
</tr>
</tbody>
</table>

Source: Céreq, 1992 and 2010 *Génération* surveys, questioning 5 years after exit from education system.

*Example: The inter-decile ratio for those in the 1992 cohort with lower secondary qualifications only was 2.9. In other words, the lowest wage for the most highly paid 10% (d9) was 2.9 times greater than the highest wage for the least well paid 10% (d1).*
However, the impact of these developments varies depending on the level of qualification. The most highly qualified actually saw a net decline in the monthly purchasing power linked to their professional activity. Assessed on the basis of all employees regardless of working time, the purchasing power of graduates of the grandes écoles fell by 220 euros. The same applies to the most highly qualified university graduates. Those with master’s and bachelor’s degrees, including the one-year master’s, the old maîtrise, and the master’s in science and technology, lost ground to the tune of 90 and 40 euros respectively. On the other hand, for those with qualifications below bachelor’s levels, that is up to level III in the French qualifications framework, the median wage rose by between 30 and 200 euros. This opposite result between the top of qualifications and the lowest levels have been confirmed by wage equation models in which a number of individual attributes were controlled for.

These contrary changes in purchasing power between the top and bottom of the qualifications hierarchy led to a narrowing of the wage spread between the 1992 and 2010 cohorts. Several phenomena contributed to this situation. For the most highly qualified, the stagnant economic situation in which the younger cohort entered the labour market was hardly conducive to surges in wage levels, while the gap between the very large numbers of graduates and the volume of high-skill jobs available widened, which weakened the “signalling” effect of a higher education qualification. For many higher education graduates, this resulted in an initial professional downgrading – i.e. the fact of being employed in a job whose skill level is below that which their qualification might lead them to expect – which had an adverse effect on their remuneration. The least highly qualified, conversely, benefited from the regular uprating of the national minimum wage which, except for the years 2010 and 2011, has exceeded inflation since the 1990s [2]. All these factors conspired to produce a “scissors effect” on wages.

The decline in the purchasing power of the most highly qualified graduates could also be linked to the increase in the relative share of women among them [6]. Their levels of qualification increased to a greater extent over the period than those of men and their employment rate five years after leaving education was virtually the same as that of their male counterparts, while in the earlier cohort it lagged behind by some 13 percentage points. Furthermore, the share of women working part-time remained higher than that for men. They were also more likely to be employed in the public services where, as is well known, skilled and managerial jobs are on average less well remunerated than in the private sector. However, supplementary analyses that serve to neutralise these composition effects (gender, sector, part-time work, etc.) confirm the preceding observations.

Higher education still financially worthwhile, but less so than before

The ratio of the median wage for graduates of the grandes écoles, who enjoy the highest levels of remuneration, to that of holders of a lower secondary certificate only or the lowest level of vocational qualification, fell from 2.4 to 1.9 in 18 years (for economically active individuals 5 years after leaving education), indicating a flattening of the wage hierarchy.
depending on qualification level. If we confine ourselves to university qualifications, the multiplication factor between the median wage of holders of a post-graduate degree (1 or 2-year master’s and PhD) and that of holders of a general baccalauréat fell from 1.7 to 1.45. This fall reflects a relative decline in the return to higher education, which was further accentuated by a less favourable economic situation for the 2010 cohort. It also reveals an indirect effect of the development of mass higher education, which appears to give the lie to the hopes and expectations for a career and professional development associated with the acquisition of a higher education qualification. However, this is a short-term effect that is likely to be counteracted over the longer term by the increase in inequalities in the general population since the end of the 1990s [3] and by the spectacular increases in the highest salaries during the first decade of the 21st century [4]. Thus five years after leaving education, wage inequalities remained moderate since the careers of the most highly qualified had not yet reached their full potential.

The compressing of the wage hierarchy between the various qualifications is echoed in the declining wage dispersion within a given level and type of education. Between the two cohorts, there was a systematic reduction in the differentials between the lowest wage of the most highly paid 10% and the highest wage of the least well paid 10%. These observations show that wages have become more homogeneous than they were 20 years ago, both between levels of qualification but also for a given level of qualification.

**Fewer low-wage workers**

This point of entry at the top of the wage hierarchy through the relative positioning of the most highly qualified graduates tells us nothing of the developments affecting those at the other end of the hierarchy who are the least well remunerated: low-wage workers. In accordance with the INSEE definition, low-wage workers are those whose net wage, including bonuses, is less than two thirds of the median net wage for the cohort in question as a whole.

In the light of the compression of the wage hierarchy and the increase in remuneration levels among the least well-qualified young people, we might expect the share of low-wage workers to have declined. And indeed, whereas the share of such workers in 1997 was 13.3% of all those in employment, in the younger cohort that share had fallen to 9.4%. This finding echoes the decline in the share of low-wage workers observed in the economically active population as a whole between the second half of the 1990s and 2010-11 [5]. It also arises from the decline in part-time workers between the two cohorts, with their share falling from almost 33% in 1997 to 26% in 2015. The decline mainly affected women. The legislation on the 35-hour week also helps to explain this tendency, since some long-hours part-time jobs were converted into full-time positions. However, in the general population and considering those under 30 years old, slightly less than a quarter of them (economically active individuals in employment) are low-wage workers, due to their particular situation of being only at the beginning of their working lives.
In each cohort, the majority of low-wage workers are concentrated in the lowest qualificational levels: those with only lower secondary certificates and level V qualifications accounted for 68% of young people on low wages in 1997 and still almost 54% in 2015. Nevertheless, the mass expansion of access to the baccalauréat and the rise to prominence of the vocational baccalauréats between the two cohorts led to an increase in the share of holders of that qualification among low-wage workers. In 2015, holders of the general bac and the vocational or technological bac accounted for 11% and 22% of low-wage workers respectively, compared with only 7% and 16% respectively in 1997.

These low-wage workers’ profile has changed little in two decades. The vast majority of them work part-time and on precarious employment contracts. The most notable development is the decline of 10 percentage points in the share of women compared with the situation that prevailed in 2017, when women accounted for almost 77% of the category. On the other hand, the share of workers of foreign origin – through at least one of their parents - increased from one cohort to the other, since they accounted for 20% of the category in 2015.

Overall, wage differentials by level of qualification five years into the working lives of the 2010 cohort were less pronounced than they had been almost two decades previously. The poor economic outlook for business had a negative impact on the evolution of wages, while minimum wage legislation ensured that the lowest wages increased to some extent. Moreover, the arrival in the labour market of a supply of increasingly well-qualified labour had a more direct effect on the wages of young people leaving higher education. Thus the expected short-term gain from higher education no longer seems as great as a young person might have expected at the beginning of the 1990s. However, that gain is to be found in access to employment. The sensitivity of the employment rate to level of qualification (even measured 5 years after leaving education) does indeed seem to have increased considerably: more than half of those with only lower-secondary certificates were without a job in 2015, compared with just 5% of grandes écoles graduates, a gap of 45 percentage points compared with just 28 percentage points almost two decades previously. Thus an increasingly significant aspect of the process of extracting value from educational qualifications lies in first accessing and then retaining a job, with the pay aspect coming into play only on that condition. Consequently, the disparities depending on level of initial education that mark the early years of the working life have to be examined in the light of the observed tightening of the wages of those who are in a job and the growing inequalities of the chances of obtaining one.


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*Main research areas:* Gender-based educational and occupational segregation

Reference:
Over the last two decades across Europe, young women’s position in the labour market has improved. Better qualified and with participation rates on the increase, they have also begun to narrow the pay gap and to gain access to occupations and sectors that used to be largely male preserves. In France, however, this convergence between men and women has been driven in part by a deterioration in men’s situation. And despite everything, inequalities persist, particularly in access to cadre status, i.e. to managerial, executive and professional positions.

For 20 years, the Génération surveys have questioned, at regular intervals, a broad sample of young people who left the initial education and training system in the same year. Thanks to these surveys, Céreq is today in a position to give an account of the enduring features of and principal changes that have taken place in young people’s access to the labour market after two decades that have seen both the entrenchment of mass unemployment and ever increasing numbers of young people going into higher education. While inequalities between men and women at work are a long-standing and recurrent phenomenon, the increasing convergence between men’s and women’s labour market outcomes in the early years of their working lives can be regarded as one of the major changes in this period.

This convergence is based on two major trends that can be observed in men’s and women’s socio-economic behaviours. Firstly, the intensification of women’s labour market participation, which got underway in the mid-1960s, has continued unabated. Thus in 2015, women accounted for 48% of the employed labour force. Secondly, upstream of the labour market and against the background of a general expansion of young people’s education and training, girls first caught up with and then overtook boys in terms of educational attainment, to the point where they are now on the whole more highly qualified.
Young women increasingly highly qualified

Educational levels among young people as a whole have risen: the share of each cohort obtaining the *baccalauréat* rose from 48% in 1991 to 78% in 2015 [1]. For more than forty years, girls have represented a majority of the young people leaving secondary education with the *baccalauréat*; today, they account for 56% of those obtaining the general *baccalauréat* [2], the pathway that best prepares young people for the longer and more demanding higher education courses. And fewer and fewer girls are leaving education with just lower secondary qualifications: in 1990-92, the share was 25%, compared with just 10% in 2014-16. Over the same period, the share of men leaving with just lower secondary qualifications fell from 28% to 15% [1].

Young women have also increased their presence in higher education, particular at the highest levels (master’s degree and PhD). Since the 1990s, the range of higher education courses on offer has widened significantly, and the establishment of the LMD* degree structure has further expanded the choice of qualifications with the introduction of vocational bachelor’s degrees. This expansion has been accompanied by a general increase in the levels of exit from the education system, which is even greater among young women. Over the period between 2014 and 2016, of the young people completing their initial education, 40% of men and 49% of women were higher education graduates, compared with 32% and 33% respectively over the period between 1990 and 1992 [1].

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**Educational segregation** measures the extent of the disparities between the trajectories of girls and boys within the different pathways in the educational system. It is maximal (complete segregation) if boys and girls follow completely separate paths through the system and minimal (50/50 gender balance) if there is an even distribution of boys and girls in each.

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**Situation of each cohort five years after leaving the initial education and training system (%)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Work</th>
<th>NEET</th>
<th>Education / Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992 cohort in 1997</td>
<td>84</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Men</td>
</tr>
<tr>
<td></td>
<td>71</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Women</td>
</tr>
<tr>
<td>2010 cohort in 2015</td>
<td>75</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Men</td>
</tr>
<tr>
<td></td>
<td>74</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Women</td>
</tr>
</tbody>
</table>

*Example: in 1997, 84% of the men in the 1992 cohort were in work.*

*NEET: young people not in employment, education or training.*

*Source: Céreq, Génération 1992 and Génération 2010 surveys, individuals surveyed 5 years after leaving the education system.*

*The Generation survey* studies young people’s transitions from school to work.
**Educational segregation weakened**

Things have also changed in terms of educational pathways, with course choices becoming less gendered. Some male and female bastions remain in place, however. Upper secondary-level vocational courses in industrial specialisms, university science courses and the elite engineering schools are still overwhelmingly male preserves, while young women still account for the majority of students in CAP-BEP* programmes in service-sector specialisms, paramedical and social work courses and in literary courses at both secondary and tertiary level. However, this segregation is tending to weaken under the influence of two mechanisms. Firstly, on most courses, there is a tendency towards an equal ratio of male and female students. Secondly, the courses on which numbers have increased most are the ones that are least segregated (university courses in healthcare and economics and business and social administration and business schools). Conversely, those courses that are more than averagely segregated (CAP-BEP* in industrial specialisms, baccalauréat programmes in literary subjects, university science courses) have lost students [3].

Is the rise in young women’s levels of educational qualification, combined with the weakening of educational segregation, being reflected – as one might suppose – in a reduction or even a reversal of the inequalities at work that have historically been observed in the labour market?

---

### Employment conditions five years after leaving the initial education and training system (%)

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<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>W</td>
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<tr>
<td>Permanent</td>
<td>79</td>
<td>75</td>
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<tr>
<td>Fixed-term + temp agency</td>
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<td>19</td>
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<tr>
<td>Subsidised jobs</td>
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<tr>
<td>Total</td>
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<table>
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<tr>
<td>Part-time</td>
<td>9</td>
<td>31</td>
<td>21</td>
<td>9</td>
<td>20</td>
<td>12</td>
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<td>Manufacturing</td>
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<td>16</td>
<td>-14</td>
<td>22</td>
<td>10</td>
<td>-12</td>
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<tr>
<td>Construction and public works</td>
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<td>1</td>
<td>-9</td>
<td>10</td>
<td>2</td>
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<td>5</td>
<td>52</td>
<td>51</td>
<td>1</td>
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<tr>
<td>Non-market services</td>
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<td>34</td>
<td>18</td>
<td>16</td>
<td>37</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
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<td>100</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td>0</td>
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</tbody>
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<tr>
<th>Remuneration (wage employment)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Average net wages (constant euros)</td>
<td>1 580</td>
<td>1 260</td>
<td>-320</td>
<td>1 710</td>
<td>1 520</td>
<td>-190</td>
</tr>
</tbody>
</table>

Scope: entire cohort for employment rate, individuals in work on the survey date for the other indicators.
Example: for those in the 1992 cohort with lower secondary qualifications only, the difference between the male and female employment rates was 17 percentage points.
For the 2010 cohort of leavers, the gap in 2015 was only 4 percentage points.
Towards convergence in access to employment

Young men and women have not been affected in the same ways by the changes in the labour market resulting from successive crises. From one Génération survey to the next, the conditions under which they access the labour market have tended to converge. Five years after leaving the education and training system, equal shares of men and women were in employment in 2015, whereas in 1997 women lagged behind by 13 percentage points.

This convergence is a direct consequence of the increasing difficulties young men have experienced in finding jobs from cohort to cohort, while the position of young women has improved. This clearly reflects the impact of the decline in industrial employment, which was largely male-dominated and was particularly badly affected by the 2008 crisis. Thus among the young people in work five years after leaving education, the share of those employed in the industrial sector fell by 31% between the two cohorts. Conversely, the 10% increase in the share of services in young people’s employment has particularly benefited the young women in the 2010 cohort.

Moreover, the conditions under which young people enter the labour market have deteriorated for everyone over 20 years. Among the young people in work five years after leaving education, the share of those in permanent jobs (civil servants and those on permanent contracts or the self-employed) fell by 9 percentage points for women and by 7 points for men. Unsurprisingly, those with lower secondary qualifications only have been more adversely affected by the increasing precariousness of employment, which does not spare those with secondary-level qualifications. The differences observed between men and women have widened particularly at the bac+2/3 level.

Reduction of pay inequality

With regard to pay levels five years after leaving initial education, two major phenomena emerge. On the one hand, the persistence of one long-standing and recurrent phenomenon, also observed in today’s labour market, is confirmed: young women earn, on average, less than young men, whether it be in 1997 (-320 constant euros) or in 2015 (-190 constant euros). On the other hand, in the most recent cohort, the level of women’s pay has grown closer to that of men, with the differential amounting to -11% in 2015 compared with -20% in 1997. This convergence is the result of pay rises which, from one cohort to the next, have been much greater for women than for men. For the entire population of young people in employment five years after leaving initial education, the purchasing power of the average salary has risen by 20% for women and by just 8% for men.

This rebalancing of pay levels in favour of young women can be explained by various factors. Firstly, the increase in their levels of education has enabled them to access more highly-paid jobs at the start of their careers. It has also afforded them a degree of protection from the increased selectivity in the labour market in the most recent period. After all, the groups that have been most severely penalised in terms of access to jobs
in the economic crisis have been young people with the shortest educational careers and/or those with qualifications in industrial specialisms, which has led to a significant reduction in the employment rate of the least well qualified five years into their working lives. This resulted in an increase in the share of the most highly qualified in the young people actually in work in 2015, which led in turn to an overall increase in pay levels. Thus increases in levels of qualification and in the share of the most highly qualified among the young people in work explain 100 of the 130 euro increase (75%) in men’s purchasing power and 120 of the 260 euro increase (47%) in women’s purchasing power. Finally, the decline in part-time work, which affects women more than men, has also helped to narrow the gender pay gap.

However, the average pay gaps at each level of qualification, despite the downward trend, are still significant (from -11% to -16%). They are still almost always greater than the average gap for each cohort as a whole (-11%). This paradox is only an outward discrepancy, when one considers that the average pay gap in the population as a whole takes into account the fact that young women are overall more highly qualified than men, and were even more so in 2010 than in 1992. Thus women’s greater educational success helps to conceal a part of the pay inequalities that persist at all levels of qualification.

**The convergence of occupational trajectories**

For several decades now, the jobs held by young people have become gradually feminised, a process driven by the dual trend towards the development of the service sector, on the one hand, and the increase in the skill levels of jobs in France, on the
other [4]. As with the decline in educational segregation, this dual trend has gone hand in hand with a decline in occupational segregation between the 1992 and 2010 cohorts. Thus after five years in the labour market, the share of highly feminised or extremely male-dominated jobs (i.e. those in which the share of men or women holding them is greater than 75%) declined very significantly between 1997 and 2015, by 4 percentage points in both cases, in favour of occupations with a more mixed composition (between 25% and 75% of jobs held by women), whose share increased by 8 percentage points.

This development can be explained by two concomitant phenomena. On the one hand, the share of jobs in the service sector – traditionally mixed or held mainly by women – has increased considerably, while the share of jobs in industry and agriculture, often held mainly by men, has fallen. Thus the share of occupations with a relatively mixed composition (sales executives and professionals, senior administrative staff, shelf stackers and waiters, for example) in the jobs held by labour market entrants has increased. Conversely, certain highly segregated occupations are in decline in labour market segments open to young people; these include a number of manual occupations (skilled or unskilled) in which young men are very much in the majority and certain highly feminised occupations (check-out operators and secretaries). On the other hand, there is an observable trend towards convergence in access to certain occupations: some historically male bastions are opening up to women (security jobs, IT managers and professionals), while other, historically feminised occupations are opening up to men (supermarket checkouts etc.).

Gendered divisions are also emerging in the socio-occupational hierarchy of jobs held. Thus in 2015, 6 young women out of every 10 who left secondary-level programmes in 2010 – the “heiresses” of a system characterised by a high degree of educational segregation – held jobs in the “clerical support, services or sales workers” category, compared with less than a quarter of the young men with the same levels of education. At the same time, more than half of the young men were employed in jobs in the “manual worker” category, compared with less than one fifth of the young women. Among the most highly qualified, it is at the bac+2 and bac+3 levels that women have made the most progress. Only 50% of them had obtained jobs with cadre status or in the “professions intermédiaires” (more or less the Technicians and Associate Professionals category) in 1997, with a gap of 15 percentage points between them and men; by 2015, they had almost closed the gap, with 60% of them in such jobs, compared with 63% of their male counterparts.

Finally, access to cadre status has also changed significantly. The share of young women holding jobs with cadre status five years after entering the labour market is now equal to that of men. Nevertheless, given their level of education, young female graduates should in fact have cadre status more frequently than they actually do. Thus a higher share of young women with qualifications requiring 4 or more years’ higher education obtain cadre status than in the past (63% in 2015, compared with 56% in 1997), but their share is still lower than that of men with the same levels of qualification (73 % in 2015).
Thus the past 20 years have seen a gradual convergence of men’s and women’s educational and occupational trajectories, leading to a perceptible reduction in the inequalities observed in the past. As far as education is concerned, women now surpass men at the highest levels of education, with the exception of the elite engineering schools, which remain a male preserve, and, to a lesser extent, at PhD level. Furthermore, a real trend towards a more equal gender balance in the choice of educational pathway is emerging, even though male and female bastions remain. Similarly, at the start of their working lives, men and women face increasingly similar conditions in terms of access to jobs and conditions of employment as well as less segregation in their choice of occupation.

It remains the case that, in part at least, this relative convergence is taking place “from the bottom up”, in that it owes as much, if not more, to a deterioration in the young men’s labour market situation than to an improvement in that of young women. It should also be noted that the differences between men and women have narrowed but have not disappeared; from this point of view, the progress achieved in the labour market still falls short of the changes observed in education.
ABOUT THE SCHOOL TO WORK TRANSITION

TRANSITION FROM SCHOOL TO WORK
GENERATION SURVEYS
APPRENTICESHIP
NUMBERS
TRAINING LEVEL

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Discipline: Labour and Employment Economics
Main research areas: Apprenticeship - Vocational training - Transition from school to work, evaluation of public policies

Benoît CART, Senior Researcher at Céreq’s Associated Centre in Lille (Hauts-de-France region)

Discipline: Labour Economics
Main research areas: Analysis of the employment-training relationship - Analysis of employment and training policies

Alexandre LÉNÉ, Lecturer in Economics
Discipline: Labour Economics and Human Resources
Main research areas: Apprenticeship - Training - Mobility

Reference:
Initial vocational training for young people in France is structured around two pathways: the school-based pathway, with training provided in vocational high schools, and the apprenticeship pathway, when young people enter into a dual vocational training contract that requires them to spend alternating periods of time in the workplace and in apprentice training centres. For a long time, the apprenticeship pathway attracted only a minority of young people. Over the last thirty years, however, numerous reforms, including the establishment of apprenticeship schemes in higher education, have led to a doubling of the number of apprentices. Céreq’s Génération surveys enable us to examine these apprentices’ training-to-work transition over a 20-year period and to confirm the advantages of apprenticeships depending on the level of training and the economic situation.s.

Historically, apprenticeships in France fulfilled a particular role, namely to provide training for skilled craft workers, for certain manual workers in manufacturing industry and the construction sector and for employees in small shops and services. Thus they were aimed at young people whose family histories were based on the reproduction of a certain set of skills and on close involvement in certain occupations. It also offered opportunities to other young people, many of them struggling in the traditional education system, for whom an apprenticeship represented a second chance to gain a qualification. This was the approach to apprenticeships that prevailed in the late 1980s and which led young people to work towards a level 3 vocational qualification (CAP/BEP) in these traditional occupations.

Subsequently, the policy of decentralisation, initiated by acts of the French parliament, devolved full responsibility for the organisation and development of apprenticeship policy to the regions, and the so-called Seguin Reform of 1987 opened up initial dual vocational training to all levels of the education system. As a result, the apprenticeship system was gradually transformed and opened up to new social categories. Finally, as part of a policy designed to combat youth unemployment, a voluntarist policy in support of apprenticeships was put in place at both central state and regional level.
Apprenticeships reconstituted: increased numbers and more varied profiles

From the 1990s onwards, as the reforms took effect, the apprenticeship system was transformed. Firstly, the number of apprentices doubled, from 220,000 in 1991-1992 to almost 450,000 in 2018-2019. This increase in numbers was driven mainly by the expansion of apprenticeships into higher education: the number of apprentices in higher education rose by a factor of more than 30 between 1992 and 2010 and by a factor of 60 between 1992 and 2018. As a result, the share of apprentices in higher education in the total number of apprentices rose from 1% in 1992 to 27% in 2010 and then to 40% in 2018 [1].

This expansion of the apprenticeship system has been accompanied by a diversification of apprentices’ socio-cultural profiles [2]. Coming from an increasingly wide range of educational backgrounds, these young people use the apprenticeship system for a wide variety of purposes, reflecting the new forms of dual training programmes that companies have adopted. Some are seeking to acquire specific competences, practical skills gleaned from working and experience of the world of work in order to supplement a generalist, cross-cutting course of training with knowledge obtained in the workplace. Others are seizing opportunities to obtain the funding required to continue their education, which enables them to obtain a higher education qualification. Yet others are embarking on a pre-recruitment process that increases the security of the education-to-work transition, both for themselves and for the companies involved.

Alongside these “reconstituted apprenticeships” and the expansion into higher education, the apprenticeship system also continues to provide training opportunities

DATA AND METHODS USED

The Génération surveys provide a basis for examining the education-to-work transitions of young people leaving the education system and for producing various indicators of transition (employment rate, unemployment rate, share of permanent jobs, etc.) depending on level of education, pathway, specialism and so on.

A data harmonisation exercise carried out on the 1992, 1998, 2004 and 2010 Génération surveys provides an opportunity to examine the evolution over a 20-year period of the education-to-work transition during the first five years of the working lives of young people leaving education and training. Certain methodological choices have to be made in any attempt to assess how apprenticeships in particular effect the training-to-work transition. For each of the levels of training considered, only those specialisms for which a choice can be made between the school-based and apprenticeship pathways are included in the analysis. We also took into account the specific elements that characterise apprenticeship-based training: workplace experience accumulated during training and the building of a relationship with the training firm, giving rise to the possibility of being hired on completion of training. Thus the comparison was carried out for four separate populations:

• young people leaving school-based training programmes having acquired workplace experience during the training period (a regular job, a holiday job or odd jobs);
• young people leaving school-based training programmes without any workplace experience during their training;
• young people completing apprenticeships who were hired by the training company at the end of their contracts;
• apprentices not hired by their training company.
for young people at level 3 (CAP-BEP) in its traditional fields: skilled manual trades in manufacturing and construction, craft occupations, small firms etc. Even though their share has declined (from 90% in 1990 to 50% in 2010 and then 37% in 2018), these young people still form the central core of the apprenticeship system. And while the view of apprenticeships as a form of rehabilitation for those who have struggled in the traditional school system seems out of date, it remains the case that the educational trajectories of apprentices on level 3 or even level 4 (vocational bacalauréat) programmes are more discontinuous than those of their counterparts on school-based programmes; they are also less likely to come from first or second-generation immigrant families [3].

However, the various reforms of and changes to the apprenticeship system have not fundamentally altered the place of the dual training system, which retains its position as a complementary pathway to the school-based vocational training pathway. With the exception of the CAP, apprentices are very much in the minority at each level of the education and training system. For example, of every five young people studying for the vocational bacalauréat, only one is an apprentice.

The speed with which the least well-qualified apprentices obtain their first jobs is due primarily to the effect of contact with companies

Céreq’s Génération surveys, which have been carried out since the beginning of the 1990s, provide a tool that is particularly well suited to discussing the supposed beneficial effects of apprenticeship on the training-to-work transition, against this background of permanent change and fluctuating economic circumstances.
Thus they provide more specific information on both the cyclical and structural aspects of the benefits of apprenticeships for the training-to-work transition over time, differentiated by level of training.

Completion of an apprenticeship gives young people two advantages when it comes to finding a job. The first is linked to the workplace experience acquired during training. An inherent element of apprentices’ contracts, such experience can also be incorporated into the trajectories of young people on the school-based pathway in the form of holiday jobs or the casual jobs they might do while training. It appears to play a decisive role, since the school-based apprentices who had acquired workplace experience during their training obtained their first significant jobs more quickly than those without such experience (after 8 months compared with 13 for holders of the CAP or BEP).

However, apprentices may enjoy an additional advantage even over their school-based counterparts with workplace experience. This is the “contact” effect, that is to say the opportunity to be hired directly by the company in which they have completed their apprenticeships. Consequently, the time they take to obtain their first significant jobs is automatically reduced compared with their school-based counterparts. For the other apprentices, who do not benefit from this “pre-recruitment” by their training company, the time taken to obtain their first significant job is overall the same as for those school-based trainees who state that they acquired workplace experience during their training.

Furthermore, young people completing apprenticeships enter different labour markets depending on their level of training and do not therefore all enjoy the same advantages, as various findings from Céreq’s Génération surveys show. As far as the time taken to obtain the first significant job is concerned, apprenticeships are most effective for the initial qualificational levels (CAP–BEP, baccalauréat). In the case of the 2010 cohort, the difference between apprentices and school-based trainees was approximately 4 months for those leaving the system with CAP–BEP, baccalauréat qualifications; for those leaving higher education with bachelor’s or master’s degrees and for graduates of the elite engineering and business schools, the difference was just one month. The higher the level of training is, the smaller the differences between apprentices and those leaving from the school-based pathway are. For these more highly qualified apprentices, direct hiring by their training company does not seem to be of such decisive importance for a successful start to their working lives. On the contrary, indeed, leaving the training company on completion of an apprenticeship contract may be an auspicious choice in terms of career plans, development of competences or simply salary prospects.

*First significant job: First job obtained after leaving the education system that lasts at least 6 months, regardless of the type of employment contract (fixed-term, open-ended, temporary agency etc.).

SMIC: the minimum wage that all employees over 18 in France have to be paid. The hourly rate in 2019 is 10.03 EUR gross, which equates to 1,521.22 EUR per month (for a 35-hour week).
A lasting advantage, but one sensitive to the economic situation

The advantage apprentices enjoy when they first enter the labour market persists during the early years of their working lives: five years in, more apprentices have a job than their counterparts with exactly the same level of qualification and specialisation who went down the school-based route.

However, the benefits of an apprenticeship prove to be sensitive to the economic situation, as an analysis of labour market entry conditions over time shows. The deterioration in the economic situation endured by the 1992 cohort of leavers and, to an even greater extent, by the 2010 cohort mainly affected the least well qualified leavers, whether they had taken the school-based or apprenticeship route. During these periods, the difference between these two populations in the time taken to find a first job tended to narrow [4]. However, the apprentices seem to benefit more from periods of recovery than their school-based peers (2004 cohort of leavers and even more so the 1998 cohort).

Thus these findings highlight the procyclical nature of apprenticeships. In a favourable economic situation, a virtuous cycle is established, in which the number of jobs supplied by firms – and hence the opportunities for young people to embark on an apprenticeship – increases; the offers of a job on completion of an apprenticeship become more frequent; the competition for jobs among the most highly qualified is less intense. As a result, unemployment rates fall significantly and the differences in the indicators for the training-to-work transition between apprentices and their peers who took the school-based route tend to widen, particularly for the lower levels of qualification.

Estimated time taken to obtain first significant job by level of training for those in 2010 cohort leaving with the CAP/BEP (in months)

Source: Céreq, Génération survey 2010, made comparable with the 1992, 1998 and 2004 Génération surveys. Surveyed after 5 years. A significant job is one that lasts at least 6 months.
Conversely, in difficult economic circumstances, all these mechanisms go into reverse and disrupt the apprentices’ situation at the three key moments of their transition into work. Firstly, they experience greater difficulties in finding a training company [5]. Secondly, on completion of their training, the company is less likely to offer to convert their apprenticeship contract into a “stable” and therefore permanent employment contract; thus between the 2004 and 2010 cohorts, the share of apprenticeships retained by their training company fell for all categories, from 16 to 4% for those with only lower-secondary certificates, from 37 to 12% for those with the CAP-BEP and from 53 to 20% for holders of the baccalauréat. Finally, those apprentices not retained by their training company face intensified competition from other jobseekers in their search for a new employer.

For apprentices graduating from higher education, the advantages are primarily qualitative

For apprentices graduating from higher education establishments and entering a labour market less subject to the uncertainties of the economic cycle, the advantage procured by an apprenticeship is of a different kind [6]. It tends rather to improve the quality of the jobs they obtain.

Thus pay progression, as calculated between the wage for the first significant job and that paid for the job held five years after leaving the training system, is greater for former apprentices in higher education; the gap between them and those who took the school-based route widens as the level of training rises.

Finally, an examination of job stability, either on leaving the training system or five years into the working life, shows that the share of stable jobs rises with seniority in the labour market and is correlated with the level of training. The analysis also shows that a higher share of former apprentices leaving with the baccalauréat or higher qualifications is employed on open-ended (i.e. permanent) contracts than their peers who took the academic route, another advantage of the apprenticeship route and one that persists over time.

To conclude, several lessons can be drawn from our analysis. While workplace experience acquired before the end of initial training helps to cut the time taken to find a first job for all young people, apprentices enjoy an additional advantage derived from the effect of “contact” with the company that offered them a training place [7]. Secondly, the advantages of an apprenticeship prove to be procyclical, particularly for apprentices with the lowest levels of qualification. Finally, the advantages of apprenticeships appear to vary depending on the level of qualification. They are reflected in quicker access to employment for the lowest levels, in increased job stability for the intermediate levels and in a wage premium for the highest levels [8].
This assessment of the effects of apprenticeships on the training-to-work transitions takes on a particular significance in this autumn of 2019. On the one hand, the reform of initial vocational training is gradually coming into force and is impacting both the school-based training pathway and the dual vocational training option. On the other hand, the reforms initiated by the Act of 5th September 2018, on the “Freedom to Choose One’s Future Career”, are profoundly changing the apprenticeship system, as a new training philosophy, new methods of funding and new modes of governance are introduced. In particular, this new organisation is giving firms and their representative institutions a dominant place in the functioning of this “new apprenticeship”.


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<tr>
<td>TERTIARY</td>
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- **Baccalauréat général** - General bac
- **Baccalauréat Technologique** - Technological bac

- **Licence** - Bachelor’s degree
- **Université** - University

- **Master** - Master’s degree
- **Licence professionnelle** - Bachelor's degree in professional program
- **DUT Université IUT** - University technological institute

- **Doctorat** - Phd
- **Baccalauréat professionnel** - Professional bac
- **Lycée professionnel** - Professional lyceum

**ISCED** - International Standard Classification of Education
# The French education system

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<th>Level</th>
<th>Description</th>
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<td>Vocational degree</td>
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2 years technical diploma  
University institute of technology  

| | 5 | BTS | 2-year technical degree |
| | 3 | STS | Higher technician section |

| | 3 | Brevet professionnel (2 ans)  
CFA | Professional certificate (2-years)  
Apprentice training centre |

| | 3 | CAP  
Lycée professionnel  
CFA | Certificate of vocational aptitude  
Vocational school  
Apprentice training centre |
What else?

INTERNATIONAL COMPARISON
CERTIFICATION
EDUCATION POLICY
QUALIFICATION

Matteo SGARZI, International Relations Manager at Céreq

Discipline: International Relations
Main research areas: Education and training systems analysis and evaluation - International projects coordination

Horacy DEBOWSKY, research assistant and Ph.D candidate at Warsaw School of Economics and formally senior expert at the Educational Research Institute in Poland

Discipline: Economics
Main research areas: VET curricula development, implementation of national qualifications framework and lifelong learning policies

Reference |
A comparative analysis of 7 European NQFs reveals different patterns of inclusion of non-formal sector qualifications awarded outside the traditional educational context. However, all countries have in common the quest to achieve a good compromise between providing incentives for inclusion and maintaining overall framework coherence.

At the 2000 Lisbon Summit, the EU Council endorsed enhanced European cooperation in the field of education and vocational training. One of the principal outcomes of this seminal decision was the introduction of the European Qualification Framework (EQF), which enabled countries to position their national qualifications within overarching European descriptor levels. Starting in 2008, member states were encouraged to develop national frameworks (NQFs), comprehensive ‘maps’ of national qualifications and the relationships between them, directly referenced with the EQF. This increased transparency across systems and borders was intended to help to promote the mainstreaming and comparability of qualifications at the European level.

Nowadays, 35 European countries have formally adopted their NQFs (Cedefop 2017). It can be assumed that the first phase of EQF-NQF deployment across the continent has been achieved. The current challenge is to develop full use of the framework, making it a tool for labour market transparency and dialogue between stakeholders.

The recently revised EQF strategy\(^1\) encourages the development of comprehensive frameworks including qualifications of all types and levels, even if awarded outside the formal qualification system. In this way, NQFs will connect all the existing segments of national education systems. Nevertheless, such openness could lead to a loss of consistency, the proliferation of similar qualifications, loose accreditation processes and less clarity for users. How can NQFs be further populated with qualifications without losing overall coherence? NQF-In project allowed to examine in an unprecedented level of detail the forms of inclusion of qualifications in seven different European NQFs (Box 1).


including non-formal sector qualifications in National Qualification Frameworks: a challenging process
«Non-formal sector qualifications»: what are we talking about?

How can an understanding of what lies behind the terms “non-formal” and “formal qualifications” be shared? These terms are commonly used however it’s hard to find unambiguous definitions of these terms. “Formal qualifications” are usually defined as those qualifications that are awarded within the formal school system, whereas “non-formal qualifications” are those awarded by private training providers. The term “formal qualification” might also signal that it refers to qualifications that are included in the NQF, as opposed to non-formal qualifications, which are excluded. But this is at odds with the EU recommendation to extend the coverage of NQFs.

NQF-In empirical work led to a more accurate definition based on the legal status of the qualification (state-regulated or not). In addition, state-regulated qualifications can be divided in two sub-groups: those awarded in the education system and those awarded outside the education system. Thus three generic types of qualifications can be identified across the country reports:

**Type A qualifications** are regulated qualifications awarded in the formal, state-supervised education system, whether by public or private providers. The key characteristic of this type of qualification is that its functioning is governed by education legislation.

**Type B qualifications** are state-regulated qualifications awarded outside the education system; they are regulated by legislation or directly by ministries or government agencies but are not qualifications awarded in the formal education (school) system.

**Type C qualifications** are non-state-regulated qualifications whose functioning is not regulated by legislation. These qualifications are usually awarded by private providers such as chambers of commerce, joint councils at industry or occupation level, charities, etc.

**PRESENTATION OF THE PROJECT**

This article draws on the outcomes of the Erasmus+ Project entitled *Developing organisational and financial models for inclusion of non-formal sector qualifications in National Qualifications Frameworks (NQFs).*

The main aim of the NQF-In project is to provide support to national governments, EU agencies and key stakeholders in developing policies for including non-formal sector qualifications. Seven European countries were studied. Three of them - Ireland, Scotland and France - are first-generation framework countries; Poland, Hungary and Croatia, on the other hand, have only recently adopted their NQFs or are at an advanced stage of implementation. The Czech Republic claims not to have a proper NQF but VET qualifications are regulated by a national register.

NQF-In partners were asked to classify their own countries’ qualifications according to the proposed typology. From a comparative perspective, it is interesting to note that qualifications covering similar topics may relate to different types of qualification depending on the country (see craft certificates and real estate sales certificates examples below). In most cases, similar qualifications are all classified coherently in the same category.

The guideline on "inclusion of a qualification in the NQF" relates to different formal procedures leading to the assignment of an NQF level to a qualification and its entry in a register of qualifications.

According to the available inventories, most NQFs are composed only of type A qualifications. In the 7 NQFs analysed, types B and C are present but the way they are included differs considerably. Some NQFs, e.g. in Ireland and Scotland, are populated mostly by type A and type C qualifications. Some other NQFs include Type A and Type C plus a significant number of type B qualifications, as is the case in France and Poland.

If we look more closely at the French case, it is clear that a gradual shift has taken place from a fully state-owned formal system to a more hybrid one. Nowadays, not all Type A qualification are registered (general education diplomas are excluded) and a high share of qualifications are Type B, such as the many vocational certificates accredited by the Ministry of Labour and developed upon the recommendation of consultative committees at the occupation level. Many private and sectoral qualifications are included too; in accordance with our typology, these can be classified under type C.

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2 Global Inventory of Regional and National Qualifications Frameworks (UNESCO, ETF, Cedefop, 2017).
Conditions and determinants for inclusion of non-formal sector qualifications

Now the building blocks of NQFs have been clarified, it is time to review the factors determining the addition of non-formal sector qualifications to the frameworks. Evidence from the national reports shows that different policy levers can influence framework developments, leading to differentiated outcomes. On the one hand, the inclusion process may move rapidly, leading to a proliferation of qualifications; on the other hand, inclusion may be limited by more stringent regulations that seek to maintain the NQF’s overall coherence.

- The way the different countries incorporate qualifications into their frameworks is crucial. Two generic ways can be distinguished: inclusion by entitlement and inclusion by request. Inclusion by entitlement means that a qualification is included almost automatically in the registry (or framework) at the moment of its creation. This is usually the case with type A qualifications and some type B qualifications. By contrast, including non-formal sector qualifications in NQFs, especially type C qualifications, is usually possible only upon application by the qualification owner (inclusion by request). In all countries, general rules are laid down for the process of inclusion by request. However, looking at the NQF-In national cases, three different governance approaches can be identified.

Centralised approach. One central institution is responsible for accepting applications, for analysing them and for making the decision on inclusion. This is the case in Ireland, where Quality and Qualifications Ireland (QQI) is the state agency responsible for including qualifications in the NQF database. Similarly, the French registry was supervised by the National Committee for Vocational Certification (CNCP) until 2018 and, from January 2019, by its successor body, France competences. The CNCP analysed requests for including qualifications in the French registry and made recommendations to the Ministry of Labour, which then made the final decision.

Intermediate approach: different intermediary bodies in different areas of expertise are responsible for analysing proposals; submitting organisations make applications to one of these bodies. Poland is an example of this process. All requests to include market qualifications are subsequently submitted to the central institution operating the NQF registry. The central institution assesses the formal aspects of the application and then electronically transmits a completed file to the relevant ministry. The ministry reviews the submitted application and makes a decision.

Coordinated approach: the submitting organisation might approach some institutions as part of a process called ‘third party credit rating’. This is the case in Scotland, where providers may select a credit rating body based on their preferences. The credit rating body assesses the submitted application and if the decision is positive, the relevant information is passed to the Scottish Credit and Qualifications Framework Partnership (SCQFP), which manages the Scottish Register.
A centralised approach should guarantee stronger coherence than a coordinated approach, since the same registration regulations apply to a wide variety of qualifications of different levels and types. In a coordinated approach, third party rating bodies could apply different rules and regulations, leaving more room for a diversity of approaches towards qualifications.

- **Ownership** has been identified within the NQF-In project as one of the crucial elements in the design of an NQF. Ownership of a qualification refers to whether a qualification included in the NQF is “open” to other awarding bodies. In other words, can other institutions apply to be awarding bodies for a qualification that is already registered in the NQF or not? With regards to ownership, two generic solutions can be identified: *private ownership* and *public ownership*.

  In a **private ownership** context, an awarding body that submits a qualification to the registry (or framework) is the owner of the qualification. No other institutions can award this qualification without the consent of the original awarding body.

  In a **public ownership** context, registered qualifications enter the public domain, meaning that they can be delivered by all awarding bodies that request to do so and fulfil the requirements, without any limitation on property rights.

  **A private** NQF might have a tendency towards proliferation. This is due to the fact that the only way for new awarding bodies to enter the framework is to register new (even similar) qualifications because qualifications already registered are protected by intellectual property rights. On the other hand, **public NQFs** might discourage private institutions to submit their qualifications as they should transfer their ownership rights and know-how to the State. In addition, the State shall prohibit entering similar qualifications in the framework for safeguarding framework coherence.

  For the above reason the ownership feature is tightly related to the level of proliferation of qualification, i.e. whether the NQF allows to encompass similar qualifications or not. Public ownership might protect NQF from being too fragmented gaining in clarity and making easier for learners and employers to navigate inside. However, it shall also disincentive private providers to register qualifications (particularly the non-formal ones).

  Qualifications frameworks in France, Ireland, Scotland can be classified as private ownership frameworks whereas Poland, Hungary, Czech Republic and Croatia might be classified as public ones.

- **Once again**, two approaches to the payment of fees for submitting qualifications to the NQF can be identified. In the **public financing model**, the state finances the whole process of including non-formal education qualifications. This is the case of France. Qualification registry (RNCP) operations are part of the public service and, as such, are free of charge. Applications and inclusions do, however, incur costs relating to the processing of the submission file. It is primarily the Ministry of Labour that bears these costs.
In the **private financing model**, submitting bodies pay for applying and for inclusion in the framework. This is the case in Scotland, Ireland, Poland and Hungary. In the last three countries, fees are set by a centralised authority, whereas in Scotland the fee determination is set by the credit rating bodies, which gives qualification providers some degree of freedom to choose which CRB to work with. Although the main rationale for introducing fees is to cover the administrative costs, the amounts vary considerably between countries; they are much higher in Ireland and Scotland.

The payment of high fees (as in Ireland and Scotland) can obviously give rise to a reluctance to register qualifications in the NQF, particularly among the smallest providers. Nevertheless, cumbersome and bureaucratic registration procedures, even where no fees are charged, can generate disincentives too.

### NQFs Between incentives and coherence

NQFs referenced to EQF are potentially important policy instruments for promoting labour mobility and lifelong learning at the national as well as the European level. However, in order to gain visibility in the stakeholders’ community, NQFs have to be open to the various types of qualifications (A, B, C types) awarded in different educational and training sectors. Being open is not enough: the system should be designed in such a way as to provide incentives for submitting qualifications by awarding bodies and at the same time should protect its internal consistency against too much proliferation.

Tighter, publicly managed qualifications frameworks with inclusion fees (as in Poland) are at risk of being less populated with qualifications and strong measure should be taken to push awarding bodies to submit their qualifications to the system.

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**Comparative summary table of NQF inclusion procedures**

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*A Czech National Qualifications Framework with a single set of descriptors describing all types of qualifications does not exist yet. We refer here only to National Registers of Qualifications (NSK) aimed at regulating the VET sector.*
At the other end of the spectrum, private ownership models without inclusion fees are at risk of being overfull. France could serve as an illustration, although the state exerts careful control over the inclusion of private qualifications in the NQF (proliferation in France is actually caused more by public providers, which are allowed to deliver similar qualifications). In Ireland and Scotland, high inclusion fees might deter smaller institutions from submitting their qualifications. This problem seems to be more of an issue in Ireland, which recently transformed its system from a publicly to a privately financed one. Policymakers have to make choices on the basis of their national priorities and the local reality the NQF is intended to regulate. In countries where the qualification framework is well established and widely shared among stakeholders, it might be prudent to work to prevent excessive proliferation. However, where the framework is still in its implementation phase, it would be wise to introduce measures to incentivise the registration of qualifications.

FURTHER READING


Read all the Céreq publications on www.cereq.fr/en
Coordinated by the University of Aix-Marseille, the SATELIT project is structured along the "south-north" axis and is based on a partnership between six Maghreb universities (Rabat, Fez, Bejaia, Constantine, Sousse, Sfax) and six European (Cadiz, Murcia, Aix-Marseille, Toulon, Turin, Genoa). Céreq's joined the partnership implementing a specific study on the links between training and employment in the southern countries and more particularly PhD students transition from doctoral studies to employment.

The project lasted three years, from October 2016 to September 2019.

The SATELIT project aims to consolidate the positioning of Maghreb universities in their economic and territorial ecosystem. This means strengthening potential for innovation, transferring technologies to the productive sector and improving the quality and management of public research results.

Céreq's study idea was to postulate that the integration of PhDs in private sector would promote the transfer of knowledge from the academic world to companies and therefore drive innovation.

The Céreq has focused on studying the process of "professionalization" of doctoral training in universities in the South.

Field research highlights interesting points. Firstly, it is undeniable that, although the geographical areas observed have a consolidated economic environment, very few companies are able to hire doctors for lack of R&D activity. This absence of fertile ground for research makes the majority of companies insensitive to the activation of structured collaborations with universities. The access of PhD students to companies, for internship or for getting research data, is very limited. On the other way around, the intervention of companies in doctoral training, is sporadic. Funding initiatives have emerged under certain specific conditions but without assuring continuity. Finally, the motivations of young people to complete doctoral training are focused on integration into the academic sector. It is undeniable that the doctorate is only slightly recognized on the private labor market. Integration into companies is still synonymous of assured downgrading.

In Morocco and Tunisia, for most young people, the enrolment in doctoral studies is a consequence of a forced pursuit of studies induced by labor market integration difficulties. As a result, young people have difficult thesis completion conditions and high drop-out rates.

The situation in Algeria is different. On the one hand, we realize that there is a real regulation between the entry in thesis and the number of vacant positions in research and teaching. The emergence of waiting line effects is developing in some particular disciplines and the enrollment in private sector should be more considered among the options for job insertion.
Up-skilling low skilled people through VET

Labour markets are dynamic institutions that are gradually but permanently changing their demand for skills. The main challenges labour markets in Europe currently face are those of an ageing workforce and expected changes to skills and work profiles due to automation and digitalization. While the skill demand is changing, skills are becoming more and more important in labour markets.

Disadvantaged and low-skilled people are likely to find themselves in a rather vulnerable situation since the current technological change makes an increasing part of their work susceptible to substitution by technology. Those people need to enhance their skills for keeping up with the developments and they need some support in order to do so. REPLAY-VET is an ERASMUS+ strategic partnership that aims to identify requalification strategies for low-skilled people in order to more adequately cover changing job positions.

The Occupational Kit is designed to provide VET institutions, employment services and policy makers with how-to-guides and best practice examples responding to needs and challenges regarding the employment and training opportunities of the low-skilled people. The kit gives access to inspiring solutions structured by sectors and key themes.

Greening Vocational Education and Learning

The aim of the GreenSkills4VET-Partnership is to develop exemplary learning units dealing with issues concerning the three dimensions of sustainable development (economic, environmental and social). The sectors chosen to serve as examples are Logistics and Health Care. Trainees and Trainers can gain knowledge and skills needed to generate green competences in their workplaces.

Main project output is the set-up of a multilanguage resource platform aimed to provide knowledge and skills for trainees and trainers about sustainability and the way to generate green competences on the workplace.

Several learning units are provided as Open Educational Resources (OERs) that enables an open distribution and use: Creative Commons licenses; the active role of learners in the (participatory) learning process; the freedom for teachers to use, adopt and share materials according to their specific needs.
Agenda 2020

11>12 January
Paris, France
Education and E-Learning, Business Economics, & Social Sciences (EEBE)
The International Conference of the Institute for Social and Economics Research (ISER) will be hosted at the Comfort Hôtel Cachan Paris Sud (2 Rue Mirabeau, 94230 Cachan).
https://ise-research.com/eebe-01-20/

03>05 March
Paris, France
2020 International Conference on Education Development and Studies
The 2020 International Conference on Education Development and Studies (ICEDS 2020) will be held in Paris.
http://www.iceds.org/

> 19 March
Florence, Italy
9th Edition of the International Conference New Perspectives in Science Education
The conference will take place on 19 and 20 March, at Grand Hotel Mediterraneo in Florence.
https://conference.pixel-online.net/NPSE/

> 19 March
Paris, France
"Do firms facilitate the construction of competences?"
The 6th Céreq biennial conference will take place on Thursday, 19 March 2020 at the Pierre and Marie Curie University in Paris.
The question of the title of the conference, which is at the heart of debates and public policies, will be addressed by taking advantage of the results provided by recent studies in the field.
(Lectures in French).
A selection of events on Training & Employment topics

All the events on www.cereq.fr/en
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<tr>
<td>&gt; 2 July</td>
<td>Manchester, United Kingdom</td>
<td>Assessment in Higher Education AHE Conference 2020 Conference Venue: Macdonald Manchester Hotel &amp; Spa, London Road, Piccadilly, Manchester. <a href="https://ahenetwork.org/">https://ahenetwork.org/</a></td>
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"Do firms facilitate the construction of competences?"

La Biennale 2020
Céreq
Paris > Jussieu
19 mars 2020


https://zenodo.org/record/1319718#.XFF2cFxKjUdi


Imdorf, Christian, Koomen, Maarten, Murdoch, Jake, & Guégnard, Christine (2017). Do vocational pathways improve higher education access for women and men from less privileged social backgrounds? A comparison of vocational tracks to higher education in France and Switzerland, Rassegna Italiana di Sociologia, N° 2, pp. 283-314.


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- Beta, Strasbourg
- Centre Emilie Durkheim, Bordeaux
- Clerma, Clermont-Ferrand
- Certop, Toulouse
- Creg, Grenoble
- Crem, Rennes
- Clersé, Lilles
- Eso, Caen
- Iredu, Dijon
- DCS, Nantes
- Lest, Aix-en-Provence
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.

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.
Each cohort questioned twice
3 years and then 6 years after leaving the education system

**Génération**
Reconstructing trajectories

**From school to work**
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.

The Génération surveys also collect data on:

- Inequalities
- Gender
- Learning
- Return to education/training
- Socio-cultural background

- Qualifications obtained
- Individual characteristics
- Family environment
- Residential mobility
A CÉREQ LONGITUDINAL SURVEY
Illuminating vocational training and employee trajectories

Tracking year after year

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...in the employees strand

Observation periods

Contextualised

4,500 companies surveyed

Tracked over 5 years

16,000 employees surveyed

The Defis surveys gather data on

... in the companies strand

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

... in the employees strand

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

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