

# Applying the ISCED-97 to France: some issues and propositions

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## 1 Introduction

The harmonization of national surveys using an international classification raises several kinds of problems in the field of education.

The first relates to the comparison of the national educational systems themselves, i.e. the specificity of the education policy of each country grounded in its history. Only this allows us to understand how the various educational segments have developed and how they have been arranged together as a “system”. The second refers to the indicators of the comparison. In the case of education these are generally qualifications (certificates, diplomas or degrees), the deeper meaning of which is opaque for a foreign neophyte, namely both within the education system itself (standard, orientations of the delivered knowledge, selectivity, access mode, opening to advanced studies, opportunity...) or on the labour market (outcome, value of the diploma...). Since cross-national comparisons of education often rest on the theoretical duration of the studies which lead to a certification, in number of years, on its subsequent educational opportunities, or less often on the orientation of knowledge (general or technological), whatever the criteria used, they are always a simplification, destroying to some extent the native principles of organization, and involve choices which are not neutral. Moreover, certification does not only mean level but also barrier (Goblot, 1925) and in this respect is a very rough indicator of the level of education really reached by a given person.

Another problem relates to the design of the population for which the comparison is carried out. The broader the population (in term of age, sex, social background or geographical origin), the harder it is to set up equivalencies, because the diversity of the forms of education not only over space but also over time. Indeed, the different versions of the ISCED try to take into account the organization of the different educational systems at the moment of their conception, this is the reason why the last version is in general more valid for the younger than for the older individuals.<sup>1</sup> Finally a last set of issues arise from the national surveys themselves, the questions asked, the population they are addressed to, their order, or the method of interview. For example problems of memory or whether the interviewees an-

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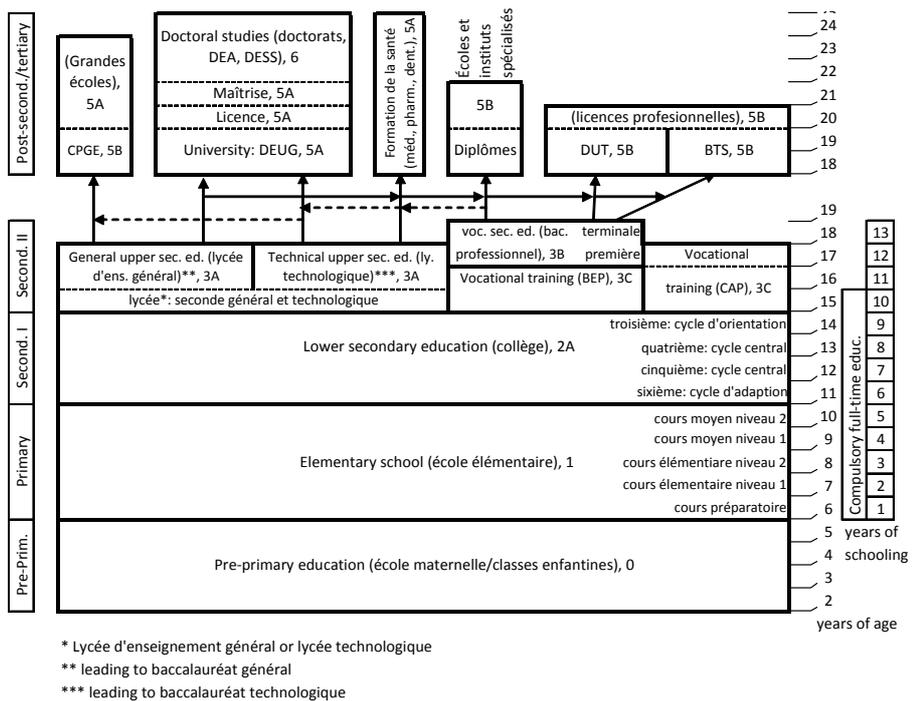
<sup>1</sup> An example is the Certificat d'études primaires (CEP) which exists no more, but was important for people aged 60 in 2004.

swer for themselves only or also for all the individuals who belong to their household, have direct effects on the quality of the answers and more generally on the quality of the survey. These problems already present in national surveys are amplified by the procedure of harmonization.

We will first present a short description of the French educational system and its main evolution, then we will attempt to provide some indications on the issues raised with the ISCED-97 in the case of France. Lastly we will discuss in detail the relevance of the ISCED, the possible implementation, and forward some methodological comments concerning the French Labour Force Survey.

## 2 Short description of the French educational system and its main evolution

**Figure 1. The current French educational system from pre-primary to tertiary education**

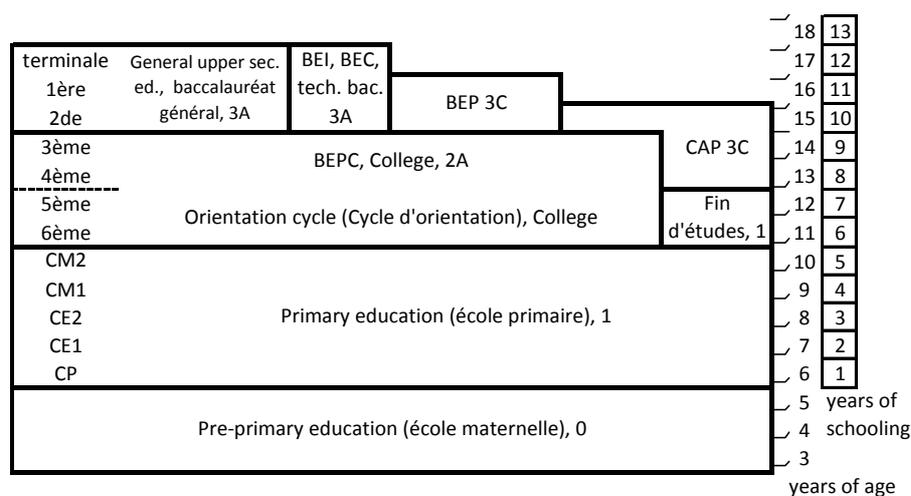


The classification presented below relates to people aged from 25 to 64 years in 2004, born between 1940 and 1979. So, the oldest of them entered primary schools at the age of 6 as the law obliged them, which was in 1946. The youngest

entered primary school in 1985 after attending pre-school. Our presentation will thus cover the main evolution of the educational system since World War II.

Since the reform promulgated in 1934 by the Minister of the “Front Populaire” Jean Zay, the French educational system is organized in three great levels called “*degrés*”: The first includes the pre-elementary school (*écoles maternelles*) which provides education to children before compulsory schooling age (for children aged from 2 to 5 years old), and the primary (or elementary) school which provides education for children from age 6 upwards for 5 years. Secondary education is subdivided into two cycles, the lower (or first) cycle, which leads in 4 years from 6<sup>th</sup> to 3<sup>rd</sup> form (the French count school grades backward) to the “brevet” (BEPC) and the upper one (second cycle), which leads from 2<sup>nd</sup> form to “*terminale*” to the *baccalauréat* in 3 years. Lastly, higher education has been gradually organized in three cycles. Vocational or technical education is integrated into this structure since World War II.<sup>2</sup>

**Figure 2. The French system of primary and secondary education in the 1960’s and 1970’s**



### 2.1 Pre-elementary and elementary education

Pre-school classes (called at that time “*classes enfantines*”) were developed from the 1930s onward within primary school. Nursery schools (*écoles maternelles*) however were identified in the figures provided by the ministry for national education only at the end of the 1940s (Prost, 1968). Their expansion reflected the new

<sup>2</sup> Before, it depended on the ministry of industry.

birth policy of the French state at that time, marked before by a strong and long-lasting Malthusian tradition. The state then implemented a vigorous policy both in favour of births and facing the economic needs in a country which lacked workers and therefore called massively for the workforce of women and immigrants. Thus, the rate of school attendance for children aged 2 to 5, which fluctuated between 37.5% and 42% until 1960, increased up to 50% in 1964, 60% in 1968 and 78% in 1980. Pre-school attendance for children aged 2 has been stable (around 20% until nowadays), while school attendance has been universal since 2005 for those aged 3 and since 1980–81 for children aged 4 and 5.

Since the end of the 1980s, nursery schools tend to strengthen their links with primary schools with the introduction of a cycle which covers the upper levels of nursery classes and the first year of primary classes, beginning with pre-learning of reading and writing before the systematic teaching of reading and writing strictly speaking in the first primary class.

Primary school, compulsory from age 6 onward, covers 5 years (CP, CE1, CE2, CM1 and CM2). Access to the primary state (public) schools is free. Schools are secular, i.e. not only any religious teaching has been banished there, but also teachers belonging to a religious congregation (see below, law Falloux). Prior to 1963, this school included the so called "*classes de fin d'études primaires*" which led in two years to the "*certificate of primary studies*" (CEP) and opened access to vocational education and training in order to prepare a CAP.

## 2.2 Secondary education

Jean Zay expressed that he was in favour of a two years transition period between primary and secondary education, which would be according to him annexed to the primary schools. Choices made starting from the Berthoin's reform on the contrary set this cycle called "*d'observation et d'orientation*" (classes 6<sup>th</sup> and 5<sup>th</sup>) within the secondary education in the "*collèges*". This reform, promulgated in 1959, postponed the end of compulsory education from age 14 to 16 (effective only for cohorts born from 1959 onwards), accompanying an evolution already spontaneously occurring (Prost, 1968; Duru-Bellat and Kieffer, 2001; Vallet and Selz, 2006). This reform organized the education system in two large pathways, general and vocational: On the one hand the general one leading within classic and modern *lycées* to the *baccalauréat* and the technical *lycées* leading to BT ("*brevets de techniciens*") and, on the other hand, a short programme including the *collèges* of general education (CEG created from the former "*cours complémentaires*" and the "*classes de fins d'études primaires*") and the vocational college (CET) which prepared for the CAP. The examination at the entry of the 6<sup>th</sup> form, which controlled access to the first year of the secondary, was abolished, and it was put a definitive end to the "*classes de fins d'études primaires*". In sum, these measures entailed the openness

of the *collège* and the introduction of a unique *collège*. In 1963, the minister Fouchet unified the *collèges*, while he introduced four different tracks within them: Classic with Latin, Modern, Transition and Practical (for a critical review of this system, see Baudelot and Establet, 1972). The orientations to vocational education have been postponed from the end of the 5th form to the end of lower secondary (3<sup>rd</sup> form). The late law of 1975 (adopted by Haby) established at last the foundation for a comprehensive and unified lower secondary school (*collège unique*) and planned for the abolition of selection at the end of the second year at *collège* (only gradually put into practice, in the second half of the 1980s).

Hence, pupils complete the two cycles of secondary education in two specific institutions, the *collèges* which provide education for the pupils from class 6 to 3 and then the *lycées* from class 2 to “*terminale*”, year of the *baccalauréat*.

Since 1980's the *lycées* provide a general academic, a technological or a vocational curriculum (see below for the vocational and technological tracks). While access to *baccalauréat* was dramatically expanding, it proved less and less socially selective, and in the meantime became more strongly marked with social differences in the kind of *baccalauréat* obtained and also, within the (streamed) general track, the speciality of the *baccalauréat*, with the scientific *baccalauréat* (physics and mathematics) being the most prestigious one followed by biology, literary and economic or social tracks.

The first cycle of secondary is totally free of charge (even books are provided) in the public sector since the Berthoin's reform. Free education has been widened to the *lycées*, with the supply of books, from the beginning of the 1990s onwards.

Let us finally cite the classes for disabled children (*SEGPA*) either in specific institutions or within the *collèges* depending on the level of disability.

### 2.3 Vocational and technical education and training

Technical and vocational education had been organized very late in France. However, the law Astier (1919) already strove to oblige the *communes* to organize vocational courses for all young workers below 18 years of age. Few were indeed opened. In order to encourage employers to invest in their employees' training, a training tax was introduced in 1925. The shortage of skilled workforce remained a recurrent problem throughout the 20th century.

Until the *Libération* (end of WWII), there existed indeed only some vocational institutions: the *Ecoles Nationales Professionnelles* (ENP) which, in four years, trained the elite of skilled workers (and delivered the CAP, the BEI or BEC), the *Ecoles Pratiques du Commerce et de l'Industrie* (EPCI) providing in three years a practically oriented training (rather know-how), the Trade Schools (*écoles de métier*), the Vocational Schools of Paris-City and the technical sections within the *collèges* or the

*lycées*. During WWII, the Vichy regime, very eager to restore the power of the trade and craft guilds (abolished under the French Revolution by the Le Chapelier Law) and to train (and educate) youth within this framework, introduced a state monopoly on the delivery of vocational certifications and created the *Centres de Formations Professionnelles* which trained for the CAP. These latter acquired the status of *Centres d'apprentissage* after the Libération, then of *Collège d'Enseignement Technique* (CET) with the Fouchet reform (1965). Pupils entered them after the end of the *classes de fin d'études primaires*, then gradually, from the end of the 5th form to the end of the *collège*. Besides, the *collèges techniques* preparing for the Brevets (BEI, BEC, etc.) turned into *lycées techniques* under the Berthoin reform and BEI, BEC etc. were merged into the technical *baccalauréat* (currently called technological bac).

Participation in education until age 16 became universal during the 1960s; thus pupils received a complete general schooling up to the final year of *collège*. At this time, streaming was developed at the end of the second year of *collège*, towards the new pre-vocational courses, and at the end of the fourth year, with the new vocational qualifications (BEP – *brevets d'études professionnelles*), created in 1966, at the same time as the BTS (*brevet de technicien supérieur*, see below) with the purpose to replace the CAP. The issue was addressed at this time to deliver broad technological skills and to reduce training to practical ones as CAP did. The theoretical vocational knowledge had been reinforced in order to enable the future workers and employees to face technological progress.<sup>3</sup>

The policy implemented from the mid-1980s onwards made the *baccalauréat* the educational norm (the challenged claim was at that time "80% of a generation holding the bac"). The vocational *baccalauréat* (*baccalauréat professionnel*) was created in 1985 in order to allow holders of a BEP to complete their training in two years with a certificate recognized as a *baccalauréat*. The increase in *baccalauréat* holders' rates over the next decade is primarily due to this type of *baccalauréat*.<sup>4</sup>

At the same time, school based vocational education was reorganized: the state undertook a restoration of apprenticeships, with very modest results though. In 1961, an agreement between state, employers and trade-unions stipulated that

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<sup>3</sup> There was 20% of *baccalauréat* holders within a generation (calculated, that is the rate of holders of a baccalaureate according to their age within the total population of the same ages) in 1970, 25,9% in 1980, 43,5% in 1990, 62,8% in 2000 and 61,8% in 2004 (source MEN, *Repères et références statistiques*, 2005, p. 225).

<sup>4</sup> Source: MEN, *Repères et références statistiques*, 2005, p. 227. Let's say that the success rates at the CAP, which was very weak for the candidates coming from apprenticeships, are now close to those coming from vocational schools (respectively 74,6 and 76,2%, and 79,2% for pupils from private institutions). That is explained both by improvements of learning within the CFA, and by the characteristics of the full-time pupils channelled to a CAP because of their weak school results.

apprenticeships should be completed within a CFA (*centre de formation des apprentis*). Apprenticeships however developed little; figures are stable until nowadays at the level of CAP (but this type of training is now the most important at that level, 53% of all CAP certificates awarded in 2004 having been attained through apprenticeships). Obstacles are indeed numerous: Firms initially do not want to spend money on training (apart from the construction sector), and the education policies, while lengthening general education, gradually divert young people away from an apprenticeship considered as too narrow and badly fitted to technological developments. Actually, apprenticeships prepare for the same diplomas as school does (CAP, BEP, vocational *baccalauréat*, then BTS and also engineers diploma), but with far higher failure rates.<sup>5</sup> However, the new opportunities opened by the introduction of apprenticeships at the tertiary level have generated a regular growth of this form of education at the levels of the *baccalauréat*, BTS and the last years of engineer certificates.

## 2.4 Higher education

Higher education is divided into three main tracks (different without being impermeable): The universities, the so-called *Grandes Ecoles* (with their preparatory classes), and technological education (which trains technicians and some engineers).

Prior the mid-20th century, the French university was divided into faculties, historically related to either professions (medicine and pharmacy, law) or the conferment of university degrees (humanities, sciences). After a first selection was carried out at the end of the first year, there were the *licence*, comprising 4 certificates in two years, and two types of *doctorates* for those intending to take up an academic career: The *university doctorate* leading to the first positions in the university and the *state doctorate* (now called *habilitation*) which controls access to the positions of professor. The *doctorate* was not required by the research institution (CNRS etc.) prior to 1984 for the recruitment of their researchers.

The reform introduced by Fouchet in 1965 organized the university in three cycles, still effective today. The first prepares for the DEUG (*diplôme d'études universitaires générales*; diploma of general higher education) or to the DEUST (*diplôme d'études universitaires scientifiques et technologiques*; diploma of scientific and technical higher education) in two years, then the second leads to the *licence* in

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<sup>5</sup> 62% of holders of a vocational baccalauréat preparing for a BTS through apprenticeship leave education without the diploma. This rate falls down to 22% among holders of a technological baccalauréat and only 8% among the general baccalauréat holders. The rate of success for apprentices at the BTS is 66%, as opposed to 74% for the full-time vocational school candidates.

one year and the *maîtrise* in another year. The third cycle finally includes a first year (DEA, *diplôme d'études approfondis*), giving access to doctoral studies.

Three hierarchical types of *Grandes Ecoles* are commonly distinguished. The states' and companies' top executives (technical, military and administrative) are recruited either from the *Ecole Polytechnique* and its applied follow-up schools (e.g. the *Ecole des Mines*, and the *Ecole des Ponts et Chaussées* in particular or *HEC, Ecole des Hautes Etudes Commerciales*), while the *Ecole Normale Supérieure* is more dedicated to an academic function (training researchers and future professors) and the elite of teachers in upper secondary school (*professeurs agrégés*, in particular for CPGE classes). A second very selective type of schools also provides education for highly skilled engineers (*Ecole Centrale, Ecole Supérieure de Commerce, Supélec*, for example). Lastly, a third group of schools includes the ENSI (*Ecoles nationales Supérieures d'ingénieurs*) and the ENSAM (*Ecole Nationale Supérieure d'arts et métiers*) which delivers the title of specialized engineers for executive positions in the industry (school of electricity, chemistry, etc). These three types of schools recruit on the basis of a very selective process. Students intending to take up this track have all obtained a "mention" at the *baccalauréat* (i.e. the grade obtained<sup>6</sup>), mostly at the most prestigious one, the scientific *baccalauréat*, and have been selected among the best pupils of the *lycées* to enter a CPGE (*Classes Préparatoires aux Grandes Ecoles*; preparatory class of the *Grandes Ecoles*), within the best French *lycées* (and not within universities). They are prepared (by the best teachers, the *professeurs agrégés*) to compete in an entrance examination in two years. Almost all students of the first group of *Grandes Ecoles* have attended a CPGE, compared to a half for the two other groups, some "small" engineers' schools even recruiting their students at the level of the *baccalauréat*.

The "sections de techniciens supérieurs" (STS) belong to the third type of higher education, which provide the intermediate occupations for industry and trade. There are on the one hand the classes of "techniciens supérieurs", created in 1959, which deliver a BTS after two years of technical training either (mostly) within the technological *lycées* or a CFA under the form of apprenticeship (about 30,000 as compared to 230,000 in full-time school). They recruit first of all holders of a technological *baccalauréat*, then of a scientific *baccalauréat*, and more rarely of the vocational one. The IUT (*Instituts universitaires de technologie*), created in 1965, are university institutions which deliver the DUT (*diplôme universitaire de technologie*) in two years. This track recruits more particularly holders of a scientific or a technological *baccalauréat*. Let's note that the policy of "vocationnalisation" of universities have led to the recent creation of the *licence professionnelle* (vocational licence) for students holding a DUT or a BTS, and proceed under the form of an apprenticeship.

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<sup>6</sup> The "mention" relates to the mean of the grades obtained at an exam ("assez bien" when the mean is between 12 and 14 (on a scale from 0 to 20, with 10 being a pass, "bien" when it stands between 14 and 16, and "très bien" when it is above 16).

This system is being revised with the intention to harmonize university education at the European level. This reform aims at evolving a system based on the licence (in three years), the master (in four years) and the doctorate. Thus, more and more holders of a BTS and especially of a DUT continue their education to obtain a vocational *licence*.

### 3 Some remarks on the French education system

Certifications play a double role in France: Within the education system, they operate the selection for access to a higher level, and on the labour market, they assess (certify) the acquisition of the required skills to hold a job, as they are defined by the collective agreements. For these two reasons, they are and remain very selective. The opening of an educational level (with the suppression of the examination controlling their access, as did the examination of entry in 6th for example) is thus marked in the long term by the decrease (or even disappearance) of the certification's selectivity rewarding it (see for example the fate of the BEPC at the end of the *collège* with the growth of the *baccalauréat* and the decreasing selectivity of the general *baccalauréat* in the recent years). Vocational certifications however, because they open access to a given level of skill (even if holding them is in France only a necessary but never sufficient condition), remain particularly selective. In addition to that, the degree of selectivity of a diploma depends also on the moment when selection intervenes, in particular on the selectivity of the track which controls its access. Thus, the elites' track comprise barriers at their entry (the recruitment examination), and what counts after that is not only to obtain the diploma (or the title, which is a certitude), but the *rank* within the class (year) at the exit. This relationship between "internal" selectivity (access) and "external" selectivity (outcome) of a track is a major element for understanding the functioning of a system. Classifications based on certifications, as it is the case of the native nomenclature in France, or of the ISCED, account only imperfectly for the educational level reached (see the size of the category "without diplomas" for France).

The successive reforms of the education system have created a very vocational track beginning at the end of lower secondary up to tertiary education, every segment of which is linked to a specific general educational level.<sup>7</sup> The progressive postponing of the moment of selection towards vocational education, from the end of the classes de *fin d'études primaires* to the end of *the collège*, have generated a decline of the CAP (while at the same time strengthen its links with apprenticeships, as less and less pupils take the CAP in the mode of full-time schooling). Let's

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<sup>7</sup> For example, CAP and BEP to the full completion of lower secondary, BTS to *baccalauréat*, etc.

underline that this process does occur in France in a negative way:<sup>8</sup> the “best” pupils are invited to continue their studies in the general track, while all those showing less educational performance are diverted towards vocational courses. The choices and interests of the pupils are little considered. It remains to sum up that a pupil who enters CAP or, better, BEP, has the opportunity to later obtain a vocational, or perhaps, but more rarely, a technological *baccalauréat* (thanks to a transitory class), then afterwards a BTS, or even a vocational licence indeed.

It is common to stress the central role of the state in the organization and the functioning of the French education system. It is necessary however to underline the importance of the private sector in France as well. The split between public schools and private schools did not exist before the law Falloux of secularisation of the school (1886), which prohibited members of clergy to teach in state-funded schools, secularised the teaching workforce and prohibits teaching religion in state schools. The religious groups (mainly catholic) therefore developed their own fee-paying establishments. Only Alsace and Lorraine, which were German at that time, kept a specific status. In 1959, the law Debré imposed contracts of association to private schools: The state takes charge of schools’ costs and of teachers’ salaries under condition of signing a contract, directly with each school, by which this latter engages to respect the official programmes and schedules.

The share of the private sector is stable since the 1930s. 13.6% of primary school pupils have received their education through the private sector, 21% of the pupils of the *collèges*, 29% of the CAP, but only 19% of the BEP, 21% for the vocational *baccalauréat*, 20% for the *lycées*, that is an average of 20% for the whole secondary education level. The private *lycées* received about one pupil out of 7 in CPGE. 29.7% of the pupils who prepare a BTS belong to the private sector. In sum, nearly a third of all pupils spent at least one year in a private school. This sector is not really present at the tertiary level. However, approximately a quarter of pupils of the *écoles d’ingénieurs attend* private institutions, but their recruitment is less selective than the state institutions’, the most prestigious *Grandes Ecoles consequently being state institutions.*,.

The split between the system of *Grandes Ecoles* and universities and the hierarchy between them are specificities to which harmonised classifications pay little attention. The diploma held by the elite is not the doctorate, but a diploma of a *Grande Ecole*. This involves another division, that between the world of engineers and the world of researchers (except for the *Ecole Normale Supérieure*, ENS), worlds apart, unaware of one another, rarely meeting each other. This explains the reluctance of

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<sup>8</sup> *A contrario*, this lesser value of technical courses loses relevance at the higher level of education: While at upper secondary level more values are put to the technological *baccalauréat* than to the vocational one, but far less than to the general one, within tertiary education, the BTS and DUT are well appraised, and more, schools of engineers or *Grandes Ecoles* are very prestigious.

companies to recruit doctors to whom they prefer engineers even for their research laboratories. Some schools of engineers, conscious of this problem, signed conventions with the universities in order to open common graduate schools. The recent trend however is more often to sign conventions directly with the ministry in order to open their own graduate schools, what is more likely to maintain the split with universities.

Lastly, more generally, classifications based on levels of education don't take the dimensions of social or school segregation into account. These can be captured with other indicators such as the different localization of the establishments, the school type, the performances of pupils etc. (Piketty and Valdemaire, 2006).

### 3.1 The most current classifications used in France

Besides the statistics published by the ministry of education, which provides figures on education for pupils and students, the most frequent figures on education indicate the highest certification they held, namely the highest successfully completed certificate (as they are declared by the individuals themselves in the big national surveys). Rare are those showing the level of education in terms of knowledge and skills achieved.

Prior to 2001, the following classification had been coded from two questions of the French Labour Force Surveys: The highest general education certificate held, and the highest technical or vocational education achieved. Hence, for every main type of education (primary or secondary education, technical or vocational secondary training, tertiary education, technical or vocational tertiary), the survey asks for the last year spent at school, then the highest certificate obtained in each type (general or vocational) and finally the speciality and the date. These questions allow a more detailed differentiation between the level achieved and the highest diploma obtained. However, statistical descriptions of the educational level of the labour force remain identical, yet privileging the highest certifications, as the following table shows.<sup>9</sup>

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<sup>9</sup> This table shows the less detailed but the most used classification, used in particular for newspaper, magazines etc.

**Table 1. Unemployment rates by educational certificates**

Qualification	Rate of unemployment
Without diploma or CEP	14,7
BEPC, CAP, BEP	9,0
Baccalauréat	8,7
Baccalauréat + 2 years	6,0
Higher diploma	7,6

Source: INSEE, Labour Force Survey 2004.

#### 4 Some problems

The French *Institut National de Statistique et d'études économiques* (INSEE) has incorporated the variable CITE-97 (ISCED-97 in French) in the current series of the Labour Force Surveys, and codes it in its own way. The following table shows the distributions according to the different categories of education and compares them with CITE-97 and with the most frequently used native indicators for France. We have also put the mapping with the ISCED-97 as provided by EUROSTAT Labour Force Surveys in this table, in order to compare the figures with the version designed by INSEE and finally by us.

These classifications differ little in their main structure. They partly respect the main divisions of the education system (primary, lower secondary, upper secondary and tertiary education). The differences lie in the boundary between primary education and secondary education, the vocational qualifications (which are found on different levels of general education, which moved over time), and finally in higher education and the importance attached to the doctorate. Let us look more closely at these three points.

**Table 2. Comparison between the national education classification and the ISCED-97 in the EU-LFS 2004; population aged 25–64**

		French native categories			ISCED-97 (EU-LFS)		ISCED-97 (version INSEE EEC04)		ISCED-97 (version AK)		
		simplified		detailed							
None	none					0	1.3	0	1.3	0	1.3
primary level	CEP	none or CEP	27.8	CEP	7.9	1	12.3	1	13.8	1	13.8
	without certification			No qualification	19.9					2C	14.7
lower secondary	with degree (BEPC)	BECP only	6.9	BECP only	6.9	2	19.5	2	19.6	2A	4.9
	Vocational certification only	CAP-BEP, BEI, BEC	29.2	CAP-BEP without BEPC	17.7					3C_Mc (or 2B)	17.7
	Vocational certification and BEPC			CAP-BEP with BECP	9.4	3C	27.6	3C_M	27.1	3C_Mb	9.4
upper secondary	Intermediate vocational certification	BEI BEC BT BP	2.2	BEI BEC BT BP	2.2			3C_L	2.2	3C_L	2.2
	vocational baccalaureat			bac pro	1.7	3AB	14.9	3B	1.7	3B	1.7
	technological baccalaureat	bac, bac pro, bac techn.	12.1	bac techn.	3.5			3A	10.4	3A	10.4
	general baccalaureat			general baccalaureat	6.9						
intermediate	equiv. bac+1			capacité en droit	0.1	4	0.1	4	0.1	4	0.1
	lower level vocational	bac+2	11.1	BTS DUT	9.5	5B	9.9	5B	9.5	B	9.5
	lower level general			DEUG, DEUST CPGE	1.6			5A (interm.)	1.6	5A (interm.)	1.6
higher education				licence maîtrise (bac+3 or 4)	5.7	5A	14.1	5A (medium)	6.5	5A (medium)	7
	upper level	higher education degrees	12.7	Grandes Ecoles écoles d'ingénieur, doctorat	7			5A (long)	5.6	5A (long)	5.1
						6	0.5	6	0.6	6	0.6

Source: Insee Enquête Emploi en continu 2004 (excluding students, including immigrants), provider Centre Quetelet, own calculations.

#### 4.1 The boundary between primary education and the first cycle of the secondary

The French categorization initially rests on qualifications. Thus, the category “without diplomas” and especially, since the death of the CEP, the heading “without diploma or CEP”, aggregates people having achieved primary education only (very rare for people under 50) and those who attended secondary education, either fully, or partially. From this point of view, the ISCED classification is more precise because it distinctly differentiates the primary from the secondary level. We propose nevertheless to classify in 2C all people who did not complete schooling at the lower secondary level (without BEPC) and those who attended at least two years a training for a CAP and dropped out or failed the examination.

#### 4.2 The relationship between vocational qualifications and general education

This problem relates especially to the CAP. In its most detailed version, the nomenclature of INSEE distinguishes the CAP after a successful completion of a BEPC (end of the first cycle of secondary schooling) from the others (after the end of primary studies, or after two or three years of schooling in lower secondary). In the first case, it is combined with the BEP (access to which is restricted to those having successfully completed 3ème and BEPC). This is classified without doubt as ISCED 3C. In the second case, does one classify them as 3C or rather as 2B? Certainly the amount of general education, higher in France than in other European countries for this type of education, justifies 3C (West, 2003). The distinction between these two school origins for CAP recalls that of general knowledge’s mastering, but also covers an evolution in social recruitments over time: for the older cohorts, the CAP symbolised the qualification of the working class’ elite and was still selective. For those having average ages, social and school selectivity of the CAP fell down, due to the introduction of the new BEP. Among younger cohorts, CAP has mainly withdrawn into apprenticeships, into some trades (which are socially selective) and into the less valued specialities. Moreover, vocational baccalaureate was created for the best pupils holding a BEP, thus the BEP cannot be considered as a certification preparing exclusively for directly labour market entry any more. It is also a way to complete a *baccalauréat*.

In addition to this, the ISCED nomenclature as applied by EUROSTAT gathers indistinctly the different types of *baccalauréat*. It is important to clearly distinguish the vocational *baccalauréat* (3B) from both others (technological and general, 3A) in the usual version or from the technological and the general one in a more detailed one: if the school origin of the pupils differs, so does their destination. If in theory, access to higher education is allowed for holders of vocational *baccalauréat*, actu-

ally almost all directly enter the labour market, and only a small part reach the BTS, where their failure rate is very high.

### 4.3 Categorization of tertiary education

French classifications distinguish two to three levels of higher education. The so-called level “*bac+2*” usually gathers BTS and DUT diplomas and the first two academic years (DEUG, DEUST). As the two former train for positions of technicians, they are more often differentiated as such in a more detailed version. The latter distinguishes also the *Grandes Ecoles* from the university pathway. The former are indeed elitists, selective and very prestigious. The ISCED classification distinguishes well the BTS and DUT (5B) from the *Grandes Ecoles* (5A), but it gathers the university *bac+2* with all the other diplomas, including *Grandes Ecoles’* one, in 5A. Yet people whose highest diploma is a DEUG failed to obtain a licence, which is the first higher education university degree in France, and this degree is not recognized on the labour market, as opposed to other university degrees a fortiori BTS or DUT. Moreover, the ISCED-97 has dedicated a specific category to doctorates; but in France their holders are characterized neither by better academic performance, nor by their origin or their destination compared to those trained through the prestigious *Grandes Ecoles*. Let’s indeed wonder about the relevance of a specific category for training for research. Finally, we are now facing a dramatic expansion of tertiary education. A selection will occur within the different levels, so we need an appropriate classification to highlight this process.

## 5 Some suggestions

### *Level 2: Specifying the general or vocational education really completed*

This level includes all people who have attended lower secondary education, but badly accounts for the later failures, either at upper secondary, or at vocational examinations. The INSEE Labour Force Survey allows us to associate the certifications obtained and the levels of studies reached within general, vocational, technical or tertiary education. It is possible therefore to distinguish a category 2A including BEPC holders, from those which undertook a CAP or a BEP, or attended the *lycée* prior the *baccalauréat* without having completed successfully any of these examinations (i.e. drop-outs from upper secondary). We thus propose category 2C for those cases.

### *Level 3: Improving the account for the different pathways*

For the same reasons, we propose to divide category 3C in 3C\_Mc and 3C\_Mb according to the level of general education the holders of a CAP have completed before.

Alike INSEE, we propose to classify 3C\_L the holders of a BT (*brevet de technicien*) or a BP (*brevet professionnel*).<sup>10</sup> These diplomas come closer to the technological *baccalauréat*. Finally we propose to distinguish systematically the vocational *baccalauréat* (3B) from the others (3A).

#### *Level 5: Diversifying the levels and the pathways*

BTS and DUT must be clearly separated from the other university tracks. We propose to classify the new vocational licences in the same category, 5B. Because of the expansion of tertiary education, we suggest alike INSEE to distinguish its different levels and to create a category for the very selective *Grandes Ecoles* and schools of engineers. DEUG should be classified as a short track 5A (intermediate), the middle levels (licence and maîtrise) as 5A (medium) and finally the *Grandes Ecoles* as 5A (long).

### **5.1 Education Variables in the French Labour Force Survey**

There are two groups of educational variables in this Survey. The qualification variables collect information on the highest certification obtained in general (DIPGEN), vocational (DIPTEC) or in tertiary (DIPSUP) education. They are synthesized in variable DIP (see Annex). The second group describes the highest level of study attended in general (NGEN), vocational (NTEC) or tertiary (NSUP) education, this being summarized in the variable NIVET. These various sources of information were used to build up the classification suggested above. Whatever the version of ISCED chosen, at least variables DIP, DIPSUP and NIVET are required. Nivet allows making the distinction between levels 1 and 2 of ISCED, DIPSUP is necessary to build level 4; NIVET and DIPTEC have been used to refine on levels 2 and 3.

### **5.2 Some further methodological issues**

The French Labour Force Surveys have important advantages: they belong to the European LFS; they are annual; they relate to a very large number of individuals (177 230 individuals aged 25–64 years belonging to the labour force). For the same reasons however they suffer of some important inaccuracies affecting the measurement of individuals' level of education: Duration of interviews is very short, and the target person does not answers himself but the one being present at the moment of interview. The interviewees are not always able to give detailed information on the level of education and the qualifications especially when they answer

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<sup>10</sup> The BT (outdated) trained skilled workers or technicians in 3 years, alike the *baccalauréat technologique*, but lead more directly to the labour market. BP is a vocational certificate which leads skilled workers holding a CAP to the title of master in craft industry. The latter is discussed to be classified as ISCED 4C rather than 3C, as entry into such a programme requires an ISCED level 3 qualification.

for other household members. However, it is well known that individuals tend to allocate themselves a qualification corresponding to the position they occupy, even if they could not hold it (cf. Baudelot, 1989).

Any classification applied to individuals of a broad age bracket, for example 25–64, must account for the change in organization of the education system. Let's finally recall that surveys relate to resident population, a part of which, of foreign origin, did not study in the country (see Table 2).

**Table 3. Revised ISCED and educational attainment of various population groups**

		ISCED_AK	Whole population aged 25–64	Born in France	active	30–49	50–64
None		0	1.3	0.5	0.7	1	2
Primary level	CEP	1	13.8	12.7	9.8	7.5	27.8
	None	2BC	14.7	14	14.5	16.8	11.7
Lower secondary	BEPC only	2A	4.9	4.8	4.7	4.8	5.2
	CAP-BEP without BEPC	3c_MC	17.7	18.4	17.7	17.8	20.6
	CAP-BEP with BEPC	3c_MB	9.4	9.9	10.5	12.4	4.7
Upper secondary	BEI BEC BT BP	3c_L	2.2	2.2	2	1.6	2.9
	Bac pro	3B	1.7	1.8	2	1.5	0.3
	BTn General baccalaureat	3A	10.4	10.5	10.9	11.3	7.6
Intermediate	Capacité en droit	4	0.1	0.2	0.2	0.2	0.2
	BTS DUT	5B	9.5	10	11	10.9	4.8
Higher education	DEUG, DEUST, CPGE	5A_S	1.6	1.6	1.6	1.4	1.7
	Licence maîtrise (bac + 3 or 4)	5A_M	7	6.9	7.7	6.8	5.2
	Grandes Ecoles, Ecoles d'ingénieur, doctorant	5A_GE	5.1	5.1	5.9	5.4	3.3
		6	0.6	0.6	0.7	0.7	0.6

Source: Insee Enquête Emploi en continu 2004, provider Centre Quetelet, own calculations.

To sum up, the current ISCED-97 version is far better than the last one (ISCED-76). However, it doesn't capture the French educational arrangements and national specificities as well as the CASMIN classification does. Another question raised is how different countries will understand the classification, when we know that the rank in the international competition is one of the most important issues for the governments?

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## Annex

### Variables of the French Labour Force Survey 2004

#### CITE97

##### Niveau d'études le plus élevé (postes UNESCO)

Non renseigné  
 0 Pas d'études  
 1 Primaire  
 3CM Diplômes niveau CAP ou BEP  
 3CL Autres diplômes professionnels niveau bac  
 3B Bac pro, bac pro agricole  
 3A Bac général, bac technologique  
 4 Capacité en droit, DAEU  
 5B Dut, BTS  
 5AS CPGE, 1er cycle universitaire disciplinaire  
 5AM Université 2nd cycle, écoles niveau licence-maitrise  
 5AL Université troisième cycle, grandes écoles  
 6 Doctorats sauf santé  
 Variable calculée à partir de DIP

#### DIP

##### Diplôme le plus élevé obtenu (16 postes)

Diplôme non déclaré  
 10 Troisième cycle universitaire  
 12 Ecoles niveau licence et au-delà  
 21 Licence  
 22 Maîtrise  
 30 Premier cycle universitaire  
 31 DUT, BTS  
 32 Autre diplôme (niveau bac+2)  
 33 Paramédical et social (niveau bac+2)  
 41 Bac général  
 42 Bac technologique  
 43 Bac professionnel

44 Brevet de technicien, brevet professionnel  
 50 CAP, BEP  
 60 Brevet des collèges  
 70 Certificat d'études primaires  
 71 Sans diplôme  
 Variable calculée à partir des réponses aux questions F1 à F8

#### DIPGEN

##### Diplôme le plus élevé obtenu dans l'enseignement général

Diplôme non déclaré  
 00 Aucun diplôme  
 02 CEP  
 15 Brevet des collèges  
 17 Baccalauréat général  
 Variable calculée à partir des réponses aux questions F5 et F6.

#### DIPSUP

##### Diplôme le plus élevé obtenu dans l'enseignement supérieur

Diplôme non renseigné  
 00 Aucun  
 40 Capacité en droit, DAEU, ESEU  
 41 DEUG  
 42 BTS  
 43 DUT, DEUST, (niveau bac+2)  
 44 Diplômes paramédicaux et sociaux (niveau bac+2)  
 46 Autres diplômes niveau technicien supérieur (niveau bac+2)  
 51 Licence, licence professionnelle, licence IUP  
 53 Maîtrise, MST, MIAGE, maîtrise IUP  
 55 Autres diplômes supérieurs (niveau bac+3 et plus)

61 DEA, magistères  
 62 DESS  
 63 Ecoles d'ingénieur  
 64 Ecoles de commerce  
 71 Doctorats (sauf santé)  
 72 Doctorats de santé  
 Variable calculée à partir des réponses aux questions F1 à F8

#### **DIPTEC**

##### **Diplôme le plus élevé obtenu dans l'enseignement technique**

Diplôme non renseigné  
 00 Aucun diplôme secondaire technique  
 21 Certificat d'éducation professionnelle  
 23 CAP en apprentissage  
 24 BEP en apprentissage  
 25 CAP scolaire  
 27 BEP scolaire  
 28 Brevet d'apprentissage agricole, brevet de compagnon  
 29 Autres diplômes niveau CAP-BEP  
 32 Bac technologique  
 33 Brevet de technicien  
 34 Baccalauréat professionnel  
 35 Brevet professionnel, brevet de maîtrise  
 36 Autres diplômes techniques ou prof. niveau bac  
 Variable calculée à partir de réponses aux questions F1 à F7

#### **NGEN**

##### **Niveau d'étude atteint dans l'enseignement général**

Non renseigné  
 00 Pas d'études  
 02 Etudes primaires, IME, IMPRO  
 11 Sixième, cinquième  
 12 Quatrième  
 14 Troisième

16 Seconde et première générales  
 17 Terminale générale  
 Codification des réponses aux questions F1 à F6

#### **NIVET**

##### **Niveau d'étude le plus élevé**

Non renseigné  
 21 Troisième cycle universitaire, grande école  
 22 Deuxième cycle universitaire  
 31 Premier cycle universitaire  
 32 DUT, BTS  
 33 Paramédical et social niveau bac+2  
 41 Terminale générale  
 42 Terminale technologique  
 43 Terminale bac pro  
 51 Seconde ou première  
 52 Terminale CAP, BEP  
 61 Troisième seule, CAP-BEP avant l'année terminale  
 71 Sixième, cinquième, quatrième; enseignement spécialisé  
 72 Classes primaires  
 73 Autres cas  
 Codification des réponses aux questions F1 à F8

#### **NSUP**

##### **Niveau d'étude atteint dans l'enseignement supérieur**

Non renseigné  
 00 Pas d'études supérieures  
 40 Capacité en droit, DAEU, mise à niveau post-bac  
 41 CPGE, préparation deug, propédeutique  
 42 Préparation BTS  
 43 Préparation DUT, DEUST, DNTS, post-DUT/BTS  
 44 Prépa. diplômes paramédicaux-sociaux niveau bac+2

46 Prépa. d'un autre diplôme de technicien supérieur  
51 Préparation de licence  
53 Préparation de maîtrise  
55 Préparation autres diplômes niveau licence et plus  
61 Préparation DEA  
62 Préparation DESS  
63 Ecoles d'ingénieur  
64 Ecoles de commerce  
71 Préparation doctorats sauf santé  
72 Préparation doctorats de santé  
Codification à partir des réponses aux question F8

Codification des réponses aux questions F1 à F7

#### **NTEC**

#### **Niveau d'étude atteint dans l'enseignement technique**

Non renseigné  
00 Pas d'études secondaires techniques  
20 Enseignement spécialisé, CPPN, CPA, pré-professionnel  
22 Année non terminale CAP, BEP  
23 Année terminale CAP en apprentissage  
24 Année terminale BEP en apprentissage  
25 Année terminale CAP scolaire  
27 Année terminale BEP scolaire  
29 Année terminale autres diplômes niveau CAP  
30 Secondes et premières BT, première bac pro  
31 Secondes et premières technologiques  
32 Terminales technologiques  
33 Terminales BT  
34 Terminales bac pro  
36 Année ter. Brevet de maîtrise, brevet professionnel  
37 Année terminale, autres diplômes niveau bac