Approach to the vocational training in higher education in France in 2008

In France, any qualification is accessible as well after initial education, continuing education, including face to face or integrated courses, or within the framework of validation of prior and experiential learning.

The recognized qualifications are listed in the National Qualifications Referential and classified by level and domains of learning.

First, from the description of the whole educational and training system existing now in higher education in response of lifelong learning, we can identify programmes and qualifications corresponding to level 5 and 6 in the European Qualifications Framework (EQF). Afterwards, we will present programmes of these levels more particularly in banking and IT sector, this with a view to distinguish issues regarding these levels as well for recognition on the labour market as for continuation of studies.

I –Overview of higher education regarding various accesses to the learning and to the qualification

In France, the initial higher education comprises many types of structures leading to different levels of studies. Each programme is characterized, in terms of learning contents (programmes and courses referential), of various methods of implementation (face to face course or integrated course), and finally in terms of assessment system defining the criteria to obtain the diploma or the qualification and attesting acquired abilities (exam and referential of qualification).

Globally, higher education in France is organized in four levels of diplomas: high-level technician (DUT or BTS), Bachelor’s, master’s, and doctorate level. These levels of diploma cover three different types of learning: job-focusing training, academic programme, and finally pre-vocational training, or qualification granting programme.

The pre-vocational trainings are based on the hypothesis which has been formulated by the researchers in education sciences and summarized in Tuning project (2000). According to this hypothesis, the academic programmes with one main central course and some additional minor courses would allow to acquire a base of specific competences opening on a large range of jobs, thanks to the acquired abilities of adaptation.

A specificity of the French system consists, on one hand, in the “grandes écoles” (higher education schools) - engineering and management schools - separated for a part of them from the university system, and, on the other hand, vocational training programmes implemented as well in secondary school (BTS and other certificates of high-level technician) as in sectoral bodies (Brevet professionnel, Certificat de qualification professionnel).

This initial education environment is completed by the continuing education which allows the public to adapt, to complete and to develop their abilities (knowledge, know-how, soft skills and behavioral abilities) throughout the life, in order to maintain or start a job, to retrain, to progress in their career.

Finally, the system is enriched by the device of validation of prior and experiential learning, which makes possible to validate entirely or partially a diploma through a detailed analysis of the skills capitalized during one’s life, in formal, informal or non-formal ways, this in relation with the aimed qualification.
I – 1 Initial education

The French higher education integrates in its programmes many possibilities of progress and reorientation.

We can define:

- The short-term education programmes, at the technical school (IUT) resulting in a DUT (university degree of technology), at the university resulting in a DEUST, at the high school or other education institutions resulting in a BTS (certificate of high-level technician), in private institutions, consular institutions (chamber of commerce and industry, guild chamber, or sector-related institutions resulting in a recognized title or a vocational qualification (CQP). These short-term programmes are focused on the domains of technology in industry or services.

- The long-term education programmes at the university resulting in Bachelor’s, Master or Doctorate degrees. The long-term programmes in specialized schools resulting in a title of engineer or equivalent recognized title.

Picture 1 Global organization of the studies (except medicine), the possibilities of continuation and return to the study (in colour, levels 5 and 6)
The higher education programmes are situated in France at levels III, II and I within the classification in terms of levels of study (created in 1969). In this list, the levels are organized from I to V, in an decreasing order: the level I is corresponding to the highest level of qualification. The classification of 1969 allows two uses: the one defines a hierarchy on the basis of learning pathway (generally translated in number of years of study), the other one defines a hierarchy on the basis of correspondence with jobs and positions that the holders of qualification can assume according to the aimed job or position to be occupied, with defined degrees of responsibility and autonomy.

The national qualifications referential (RNCP) lists qualifications concerned with these two uses. This referential comprises approximately 11 000 qualifications related to higher education and takes into account the structure of jobs and qualifications in the contemporary French economics. Fundamentally, at these outlet levels of education, we can find many relations with the qualifications network.

- **The short-term programmes**

The short-term programmes including two years of studies after the high school diploma, are related to the sectors of business, industry or services. These programmes always integrate internships and allow to enter directly into the labour market. The access to these courses is often rigorously selected.

These programmes result in the following diplomas:

- the university degree of technology (D.U.T), existing for 24 sectoral profiles in industry or services and can be prepared at 115 Institutes of technology and at the universities. In 2007-2008, we count 662 departments in France preparing for one of D.U.T.

- The certificate of high-level technician (B.T.S) is getting in a special section of high school. 88 programmes are proposed in the sectors of hotel business, industry, health, applied arts, management and agriculture (including 31% in the private education sector).

These two diplomas allow their holders, on one hand, to start a job as high-level technicians and, on the other hand, to continue the study in the following pathways: bachelor’s and “licence professionnelle” degrees, engineering school, IUP…

- **The long-term programmes**

There are in France two big types of institutions to follow long-term higher education study: universities and higher education schools.

- **Universities**

The French universities are public institutions. They receive the holders of the French high school diploma or the foreign diploma allowing the access to higher education studies in the country of origin. They give fundamental/theoretical, technological or vocational knowledge. According to the European structure of learning, the long-term education programmes are organized on three successive levels and result in 3 national diplomas:

- **bachelor’s degree**, after 6 semesters of study
  
  2 streams are possible: the “licence” (Bachelor’s) giving general learning, and the “licence professionnelle”, which is a vocational training diploma (to date, 1620 “ licences professionnelles” are recognized).

- **master’s degree**, after 6 semesters of study following the bachelor’s degree
  
  2 streams are possible: the research master, which allows to continue the study at doctorate level, and the “master professionnel” which prepares for a precise job opportunity and allows an immediate entry into the labour market
• **doctorate degree**, after 6 semesters of study following the master degree

This third level is dedicated to research. The doctorate diploma is obtained after viva of a thesis.

**Higher Education Schools**

The Higher Education Schools are **public or private selective institutions** preparing for specialized vocational activities, for example in the domains of engineering sciences, architecture, business and management, as well as in the translation, the interpreting, the journalism.

Among the Higher Education schools, the "**Grandes écoles**" are particularly French institutions: they are very selective establishments with much less students than at the universities. The "Grandes écoles" form high-level engineers and top-managers, but also specialists in art, letters and human sciences.

The programmes within these higher education schools generally comprise 5 years of study, including two years of initial preparation, either inside the institution, or in specialized establishments preparing for entrance to higher education schools. These schools deliver diplomas of the level bac + 5 equal to Master level.

To complete the presentation of initial education, it is necessary to introduce a very specific method of learning, the apprenticeship, that means integrated courses. Actually, this method of learning represents a particularly interesting case of adaptation of the learning to the job, as far as the apprenticeship is more based on the learning outputs translated into the competence aimed by the programme. Furthermore, this learning method mobilizes at the same time academic actors and education institutions, the whole of actors needed for its implementation (Apprentice training center, companies and guild sectors, state, regional and local authorities).

The apprenticeship consists in preparing a diploma by alternating the periods of theoretical learning in a school or at the university, and the periods of practical training in a company. There are several types of agreements for apprenticeship, as we are in initial education (apprenticeship contract) or in continuing education (contract of professionalization).

The apprentices take general and technical courses at the CFA (Apprentice Training Centers), which complete their training in companies. The apprentices have a status of **young employee of the company**, under the responsibility of master of training. They have an **employment agreement**. They can enter to the public sector. The CFAs are created by agreement with regions or with the State and local governments, chambers of commerce, guild or agriculture associations, companies and public or private training bodies. The stake of the apprenticeship is to offer initial trainings corresponding to the evolution of the labour market.

The practical training of the apprentice is mainly made in the company, the theoretical education is **assured in the C.F.A.**, or in other education body related to the CFA. According to the qualifications, the time of training in the C.F.A varies from 400 to 675 hours minimum a year. The programme thus supposes a narrow articulation between both places where the apprentice acquires vocational skills.

In higher education, the apprenticeship allows to **prepare vocational and technological diplomas at national education level**: B.T.S (certificate of high-level technician), Licence professionnelle or diplomas at level bac+ 3/bac+ 5. Several universities and higher education schools indeed propose the possibility of acquiring an engineering degree or a master by integrated way.

This type of learning, allowing to acquire competence as well as vocational experience, is in constant progress in higher education.
There are some statistical data and tendencies (Sources : MEN-DEPP and MESR):

**Students in France in 2007-2008**

- **2,258,000 Students (+ 4,000 between 2006 and 2007)**
  - 1,326,000 at the university (except IUT)
  - 113,000 at IUT (Institute of technology)
  - 77,500 in CPGE (two years programmes preparing for entrance to higher education schools)
  - 235,500 in STS (high-level technicians programmes)
  - 506,500 in other public or private institutions (IUFM, Engineer's schools, Business schools …)

**Evolution of manpower (in thousands)**

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<tbody>
<tr>
<td>Universities (except IUT)</td>
<td>214,7</td>
<td>1277,5</td>
<td>1309,1</td>
<td>1326</td>
<td>+ 3,79 %</td>
</tr>
<tr>
<td>IUT</td>
<td>119,2</td>
<td>112,6</td>
<td>113</td>
<td>- 5,20 %</td>
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</tr>
<tr>
<td>CPGE</td>
<td>21</td>
<td>70,3</td>
<td>74,8</td>
<td>77,5</td>
<td>+ 10,24 %</td>
</tr>
<tr>
<td>STS</td>
<td>8</td>
<td>238,9</td>
<td>230,4</td>
<td>235,5</td>
<td>- 1,42 %</td>
</tr>
<tr>
<td>Other institutions</td>
<td>66</td>
<td>489,2</td>
<td>596,3</td>
<td>506,5</td>
<td>+ 3,53 %</td>
</tr>
<tr>
<td>TOTAL</td>
<td>309,7</td>
<td>2160,3</td>
<td>2283,3</td>
<td>2258,2</td>
<td>+ 4,53 %</td>
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In term of evolution of manpower over the period from 2000 to 2007, we can note that these last years the curricula of level V (STS and DUT) raised the number of students. At the same time we can observe a strong growth of manpower in the CPGE, as well as positive variations both at the university and in the other institutions (business schools, engineer's schools, IUFM), these curricula are resulting in higher levels (levels 6, 7 and 8). At the bachelor's level, we can note a strong increase in term of manpower in “licence professionnelle” curricula (2179 students registered in 2000, year of the creation of these programmes, 24,896 in 2007-2008). This is not a very big number in mass, but it attests the importance of this pathway to pass from level 5 to level 6.
Regarding the outlets and the future job opportunities for these students, the statistics on their careers for 5 years after obtaining of the diploma and on their unemployment rate, show that globally the level of diploma determines the category of occupation (55 % of holders of level 6 and plus are classified in the PCS as « managers and senior officers », 22 % as « intermediate-level positions». Among level 5 holders, approximately 50 % are classified in the PCS as « intermediate-level positions» and 9 % as « managers and senior officers). Moreover, the level of study decreases the risk of the unemployment (5 % and 6 % respectively for level 6 and +, 6 % for level 5).

Manpower at levels 6 and 5

That is in total : 345 365 students

I – 2 Lifelong learning

The continuing corporate learning in France is a multi actors system with shared responsibility. The State, the regional authorities, the social partners and the companies contribute, with their own specificities and aims, to the policy of learning and its financing.

The continuing corporate learning joins today the "lifelong learning" which includes, at all levels of education, all the services which contribute to the professionalization: positioning, evaluation, coaching, general education and vocational training, validation of learning/experience...

Learners in the continuing education

• private sector employees: their training is within the framework of:
  > corporate training program,
  > individual leave for training,
  > recently " the individual right to training " (credit of 20 hours a year allocated for further training and which can be cumulated over six years). The trainings can relate to the adaptation to the work station, the maintenance of the employment or the development of competence.

• employees of administrations, communities and hospitals have an equivalent right with sometimes, moreover, a statutory obligation to follow certain trainings.

• job-seekers, beneficiaries of trainings financed by Assedic, the regions or the State

• young people from 16 to 26 years old (having ended the school system without qualification or with insufficient qualification). In order to take a qualification allowing them to enter into the labour market, they have at their disposal many measures, especially "helped" employment agreement including, if necessary, training periods.
• non employed people (farmers, craftsmen, freelance workers, tradesmen, liberal occupations) can also follow trainings, thanks to the contributions paid to fund-raiser bodies allocated to collect and to distribute the funds dedicated to the vocational training.

The employees as well as the job-seekers have rights to make evaluate their competences, to follow a continuing education programme or to validate their professional experience. These rights result from legislative evolutions, sectoral and collective agreements, regional politics regarding the vocational education and training.

The providers in the vocational education and training
We count in France more than 40 000 training bodies. Among the public institutions, the most important are the Greta (this is a group of local public training bodies federating their human and material resources, in order to organize training actions for adults), the AFPA (this National association for vocational training of adults is the first qualification-granting institution in the field of vocational training for adults, job-seekers and employees in France and in Europe) and the continuing education departments at the universities. Associations and training bodies such as chambers of commerce or guild associations play also an important role. The private training bodies are numerous in France, because every physical or moral person can provide a continuing education activity.

I - 3 Accreditation of prior and experiential learning (APEL)
The law of social modernization created a new right for each individual: validate his/her experiential abilities in order to obtain a qualification. From now, it is possible to each person with three years of experience directly related to a qualification, to obtain the recognition of his/her vocational and/or individual experience and to have the total accreditation of this qualification.

The law of social modernization introduces five main changes in comparison with the previous laws:
• It is possible to obtain the total qualification through the validation of experience; the accreditation of experiential learning thus becomes an entire method for access to the qualification
• All the forms of qualification are concerned: state recognized diplomas, sectoral titles recorded at the National Qualifications Register
• All the types of experience can be taken into account, including volunteer or not paid activities
• The minimal required duration of experience directly related to the qualification is 3 years
• The candidates can be exempted of the diplomas or titles normally required to apply for a diploma

The accreditation of prior and experiential learning (APEL) is thus:
• A means to obtain total or partial qualification, on the basis of one’s experience,
• A means to integrate a curriculum without having the diploma usually required (for example, to enter to Bachelor’s study without the DEUG diploma), because of the preservation of validity of the law created in 1985 on the accreditation of experiential learning in order to access a certificate-granting programme

To apply for an accreditation of a qualification (via APEL), two conditions are necessary: the experience must be directly related to the qualification contents and this for the minimal duration of three years.

All the diplomas, titles and certificates/qualification recorded in the national qualifications register will be accessible via the accreditation of prior and experiential learning, excluding certain qualifications for some
regulated jobs, where the exceptions are accepted, for example in the domains of health and security (article 7 of the decree 2002-615 of 26th April 2002). The procedure of APEL is more or less complicated for implementation, according to the initial conception of diplomas and titles.

Whatever the way (initial/continuing education or accreditation of prior and experiential learning), the educational system allows each person respecting the required conditions and having the needed experience, to obtain a registered qualification and the necessary recognition on the labour market to start a job or to undertake a professional mobility.


II – Levels 5 and 6 in Banking and IT sector

II – The variety of qualifications at levels 5 and 6 in these two sectors

In both sectors identified for the study, from the analysis of the qualifications recorded in the national qualifications register (RNCP: www.cncp.gouv.fr) as well as the qualifications presented by the National office of information on the education and the occupations (ONISEP: www.onisep.fr), then those listed in the banking training center (CFPB: www.cfpb.fr) and on the Website of the IT companies association (SYNTEC www.passinformatique.com).

Regarding the level 5, we distinguish:

- the certificates of high-level technicians (BTS, including 38% in Banking and 35% in IT sector in private education)
- the university degree of technology (DUT)
- the university diplomas in science and technologies (DEUST)
- other qualifications (recognized titles, certificates, other specific qualifications)

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<tr>
<th>Banking</th>
<th>IT sector</th>
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<tbody>
<tr>
<td>BTS Banking « individuals market »</td>
<td>BTS Management of Data processing (two options: development of applications, networks administration)</td>
</tr>
<tr>
<td>BTS Banking « professionals market »</td>
<td>BTS Data processing and network in industry and technical services</td>
</tr>
<tr>
<td>DEUST banking, financial institutions and organizations of provided scheme (foresight)</td>
<td>DUT IT</td>
</tr>
<tr>
<td>Other qualifications: Banking professional certificate, diplomas delivered by the banking training center (CFPB)</td>
<td>5 DEUST recorded in the National Qualifications Register</td>
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Regarding level 6 for these two sectors, we can identify:

- Bachelor’s degrees
- the “Licences professionnelles” (LP): about 60 LP in data processing and about fifteen LP in banking - are recorded in the National Qualifications Register
- Recognized titles (for example, in the CFPB, the CDPC « adviser for professionals, the CDPC "patrimonial adviser " are identified at level II).

For more detailed description of the referentials and the national education programmes regarding these diplomas, please see at: www.cndp.fr, www.enseignementsup-recherche.gouv.fr.
II –2 The variety of actors in the process of qualification

There are many actors in education and qualification process, we can distinguish:
- Universities and institutes of technology (Licences professionnelles, DUT, DEUST)
- High schools (delivering the BTS)
- Private higher education institutions (BTS, recognized titles, other titles)
- Chambers of commerce
- Vocational Training Centers
- Guild associations

The principles and mechanisms of the procedure differ depending on the nature of title: diploma or qualification (recognized title, CQP).

In case of diploma, the concerned institutions (universities, ministries) take the initiative in creating the education programme, from the analyses on the evolution of the relationship between learning and employment, this in dialogue with their partners in the economic environment and on the territory where they are situated.

It is then necessary to prepare and send an application for accreditation to the Ministry concerned. In this application, a detailed needs analysis must be presented: economic context, analysis of the evolution of jobs and qualifications, analyze of the competence related to these new qualifications, description of the target public and the pre-required skills/learning, description of the learning pathways and the contents, description of the learning methods (face to face, integrated course, open and distance learning), description of the aimed abilities and the assessment methods, letters of support from companies and/or the guild organizations expressing the need of this new qualification, analysis of the existing offer and the forecast related to the integration on labour market.

This application is furthermore studied by the accreditation authorities with taking into account the opinions of the academic as well as the economic and social partners in the domain. After the favorable decision of a committee, the accreditation for the university to deliver a such diploma is only temporarily granted. To renew this accreditation, a file presenting the implementation methods and the results of integration must be produced, in order to show the interest of this programme and this qualification towards the aims of vocational integration.

Regarding the other titles, private training bodies or guild organizations take the initiative, and a procedure of recognition is then required. The qualifications delivered by sectors are created on their own initiative.

Qualifications delivered by public or private education institutions under the control of ministries without advisory authorities and participation of the social partners

- Qualifications delivered under the control of ministries without advisory authorities and participation of the social partners:
  - Titles related to the ministry of Defence
  - Titles related to the ministries of Culture, of Equipment, of Transport etc....

- Consular qualifications:
  - Titles delivered by the Chambers of Commerce and Industry
  - Titles of the Guild chambers

- Qualifications delivered by public, private or associative bodies:
  - Titles delivered by institutions network
  - Titles delivered by institutions in their proper name
Since January 2002, the referential is listing all the qualifications recognized by the State and the social partners. Actually, the qualifications they become recognized through the procedure(s) of development / validation but also by the social partners. In certain forms are mentioned the previous titles of qualifications. For more information on titles and diplomas existing before 2002, please refer to:

- La liste d’homologation (the recognition list) (heading Homologation on the Website: www.cncp.gouv.fr) for the previous recognized titles: titles of the ministry of Employment, the ministry of Defence, the Ministry of Sport… titles delivered by chambers of commerce and industry, by guild chambers, by public and private bodies or associations...
- the data base REFLET of CEREQ (REFLET: www.cereq.fr/Reflet.htm) for the diplomas delivered by the ministry of Education, the ministry of Agriculture …

III – Conclusion: some points of debate concerning levels 5 and 6

The levels 5 and 6 raise several points of debate, both regarding the continuation of studies and the recognition on the labour market during the job integration.

We can define the following points:
- “BTS” and “DUT” diplomas present many differences regarding learning contents, definition of learning outputs, European credits (ECVET, ECTS), which must be analyzed in order to create a positioning of these diplomas at level 5 towards two issues (continuation of studies and vocational integration).
- The issue of “tubes”, that is a practice in certain education institutions to define the “licences professionnelles” as the third year of DUT diploma, or the third year after level 5.
- The poor role of the "licences professionnelles" as a way of vocational integration for the students of level L2 non-specialized.
- The articulation between the diplomas in technology of level 5 and the continuation of studies in non-specialized Bachelor’s degree.
- Correspondences and articulations between qualifications and diplomas, the respective positions of academic world and of sectoral bodies.
- The role of sectoral bodies regarding the definition and the design of some qualification-granting trainings, as well as the system of recognition of these qualifications.

These issues can be more completely explored through concrete case studies in banking and IT sector.