

**Research Group**  
**Shifting Tensions between Vocational and General Education**  
**in France and Germany**  
**(VocGenE)**

*State-of-the-Art Report*

• Draft 2009.05.30 – not for citation •

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# 1 Introduction

Agreements made by national education ministers to reform their education and training systems are a major contemporary force for transformation in European skill formation. In particular, skill formation institutions are affected by the Bologna and Copenhagen processes. The Bologna Declaration, originally signed in 1999 by 29 European ministers, aims to establish a Europe-wide higher education area to facilitate individual mobility, qualificational transparency and recognition, coordinated national quality assurance systems, as well as mutual recognition of duration and degrees of study courses. Several years later, in 2002, the Copenhagen Declaration was signed by 31 ministers, aiming to enhance European cooperation in vocational education and training. Goals include a unitary framework of qualifications and competencies, a system of VET credit transfer, common quality criteria and principles as well as improvements in citizens' access to lifelong learning.

The joint relevance of these two specific instances of internationalization and Europeanization is apparent: The European Commission (EC) has launched initiatives to "establish synergies" among the two methods of coordination, such as in the transparency of qualifications (Europass), credit transfer, quality assurance, and the European Qualifications Framework (EQF). In sum, these European declarations aim to establish an enhanced European skill formation area that will strengthen the EU's global competitiveness. Yet the efforts of decisionmakers to achieve the diverse goals codified in the Bologna and Copenhagen declarations imply the transformative change of historically evolved national skill formation systems, understood as the organizational fields of general education and specific vocational training. These goals stand in contrast to limited knowledge about recent changes in specific national contexts, as well as the institutional configurations of the respective educational systems,<sup>1</sup> which are in turn embedded in nationally specific education-economy nexuses. Furthermore, the consequences of institutional change for organizations responsible for skill formation demand enhanced research attention, especially as multiple reform processes are currently underway.

Thus, focusing on shifting tensions between vocational and general education, this project (VOCGENE) specifically compares France and Germany as these countries' skill formation systems respond to the exogenous pressures of international diffusion

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<sup>1</sup> To be more precise, we are mostly concerned with post-secondary higher education and vocational education and training (ISCED 4A, 4B, 5A, 5B), as well as upper secondary vocational education and training (ISCED 3A, 3B) in Germany, where such an educational level acts as a functional equivalent to post-secondary education and training.

and Europe-wide Bologna and Copenhagen processes.<sup>2</sup> Moreover, we aim at a theoretically well specified analysis of the changes we find and those expected in the shifting relationship between higher education (HE) and vocational education and training (VET) in France and Germany. In charting national dynamics of institutional change in skill formation from the early 1990s through to 2008, we focus on the on-going, even heightened, competition for participants between organizations dedicated to the transfer of general and vocational skills.

Defining Europeanization as a particular form of internationalization (Pries 2008) that puts exogenous pressure on national systems, we ask both where the dominant models in skill formation originated and how they are normatively and politically implemented (Olsen 2001). Europeanization can be specified looking at its ideational, normative, and regulative elements, such as common declarations, standardization and the establishment of common reference levels and principles of certification to ensure “mutually recognized qualifications” as well as specific policies at varying levels of governance.

On an abstract and discursive level, internationalization can be seen to carry certain cultural models and ideas like “neo-liberal competitiveness” or “education societies”. Arguably, it is these paradigms that flow easily beyond borders, requiring no direct policy interventions to be emulated. Especially periods of deep reform and political transformation, such as the past several decades, lend themselves to the study of “imitation and persistence” (Jacoby 2000). But if Europeanization can be viewed as a driving force, we must account for variations in European impacts at national (and regional) levels and to explain the varying responses and robustness of domestic institutions against such pressures.

The Bologna and Copenhagen processes are not just managed from above, via supranational institutions and decisionmaking, because education still is mostly a national responsibility. It has been primarily the governments but also the national universities, the social partners and students as well as European institutions which influenced these processes (Walter 2006). While these processes may be viewed as largely exogenous, Europeanization is not a one-way causal relationship. Indeed,

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<sup>2</sup> Project funds come from the EQUALSOC-Network of Excellence of the EU’s Sixth Framework Programme (until 31 August 2010), designed to develop research expertise across Europe on economic change, quality of life and social cohesion. As part of the EDUC Research Group within EqualSoc, which aims to investigate if, to what extent, and how educational opportunities are unevenly distributed among different social groups in contemporary European societies, the Vocgene project will run until 2010 and links a small intercultural team of researchers: Laurence Coutrot and Annick Kieffer at the Centre Maurice Halbwachs (CNRS & Ecole Normale Supérieure) in Paris; Nadine Bernhard, Lukas Graf, Justin Powell, and Heike Solga at the Social Science Research Center Berlin (WZB); and David Reimer at the Mannheim Centre for European Social Research, MZES).

Europeanization may lead to enhanced dynamics of social change, as it is “linked to harmonizing processes through which national societies become increasingly similar, but it is also manifested in new heterogeneous practices, which increase internal diversity” (Trenz 2008). Both isomorphism and divergence of institutional settings seem to be inherent to these long-standing and on-going processes. If history provides any indication, the consequences of these contemporary changes in the relationship of HE and VET for social inequality are likely to be considerable.

In part, the project was inspired by the classic study that we take as a starting point for our investigation, namely the (1986) book *The Social Foundations of Industrial Power: A Comparison of France and Germany*, by Marc Maurice, François Sellier and Jean-Jacques Silvestre, that compares French and German educational and training systems and work practices. In a review in the *Journal of Economic issues* (1987), Robert Solow argues that this work led to the question about “the consequences of the European Economic Community and its incipient efforts to find a common basis for educational and professional qualification and to promote the transnational mobility of labor”. Since that pathbreaking study appeared, nearly a quarter-century has elapsed. We believe that the time has come to revisit the relations in education and training which serve to maintain national specificities of French and German education/work relations.

The comparative institutional approach to be used in this project builds on organizational and institutional analysis, relying on the approaches of institutionalists such as Kathleen Thelen (Thelen 2004: 12) on cross-national and historical analyses of vocational training, Georg Krücken (2003; 2007) on change in universities, and W. Richard Scott (1995) on institutional and organizational analysis. In this report, we begin to chart the changes in the relationship between the differentially institutionalized organizational fields of general and vocational education, focusing on new organizational forms and the adjustment of educational pathways and participation rates. We compare the historical institutional configurations of the national skill formation systems in France and Germany. In this context, we aim to examine the ideologies, perceptions, and preferences of the different stakeholders about HE and VET.<sup>3</sup> Looking at the employment systems in France and Germany, we especially consider the differing demands of firms concerning skill formation and competencies. Finally, we analyze the various dimensions of change in

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<sup>3</sup> Stakeholders include teachers, trainers and students; academics and academic managers (e.g. university rectors or presidents); policymakers (e.g. educational ministers); unions and professional association representatives; and corporate executives or managers of firms (e.g. human resources experts).

the relationship between HE and VET in this project. This refers to the character of competition and cooperation between HE and VET, the hierarchy of certificates and organizational forms in the two organizational fields, as well as the differentiation of organizational forms (e.g. *insituts universitaires de technologie* in France, or *Fach(hoch)schulen* and *Berufsakademien* in Germany) and new transition systems (e.g. the “pre-vocational transition system” in Germany, see Baethge, Solga & Wieck 2007).

As meritocracies, both France and Germany have regularly initiated and implemented a variety of educational reforms that aim to increase schooling quality and equality. Yet the varying institutionalization of HE and VET in France and Germany has led to considerable and persistent differences in the organization of skill formation, representing contrasting learning opportunity structures and visions of equality of educational opportunity upon which those are based (see Duru-Bellat, Kieffer and Reimer 2008 on access to tertiary education in these countries from 1980-2000). Further analyses, especially with regard to VET, are needed to understand the complex structures and pathways made available and their consequences for students in terms of accessing learning opportunities, staying in education, earning valued degrees, and participating in society. Among the most important structural features affecting skill formation on the institutional, organizational, and individual levels is the nexus or the linkage between skill formation and labor markets. Other aspects the research team will investigate during the EqualSoc-funded collaboration are the respective participation rates, the reaction of students to information asymmetries and changes in the costs of particular courses of study as well as the value of certificates, but also youth unemployment. When and where possible at this stage of reforms, we also extrapolate the consequences of contemporary institutional change for educational attainment, stratification, and inequality.

The purpose of this first report is to review the literature and chart changes in the contemporary French and German cases.

## 2 Shifting Tensions between VET and HE in France

### 2.1 Pathways into and within VET and HE

The history of education in France can be viewed as a long term differentiation process. Emphasizing the need to concentrate more on education supply than on demand, Chapoulie (1993) suggests a distinction between two successive “schooling types”. The first type, present till the mid- 20th Century, was based on social origin. Primary and secondary segments in education coexisted, with the former devoted to the training of the masses, the latter to the elites. Thereafter, primary schooling was extended to train middle class children as well. Finally, during general education expansion, new criteria were used to define what schooling types children should attend: the future occupational destination of children is taken into account with specialization of three different streams: academic, technological and vocational. While this progressive (re)construction has been documented to some extent, more attention has been paid to academic education than to less prestigious levels (Briand and Chapoulie 2003). If historians have been more active than sociologists on this topic (Tanguy 2005), sociologists of education have repeatedly emphasized unequal access to education.<sup>4</sup> Sociologists studying skill formation in France have focused on the problem of inequality in the French educational system and its social structural effects (Brauns 1998; Duru-Bellat 1996).

Over the last 30 years, the educational landscape in France has undergone dramatic changes, with undeniable increases in participation and attainment rates (Coutrot and Kieffer 2009): in 1970, 56% of all individuals aged 25-34 had received either little or no formal education; their certification level was at best the *Certificat d'études primaires*, with a minority (12%) having attended vocational classes without having passed the “CAP”, a vocational certificate that provided access to skilled jobs. Not even a decade later, the rate of individuals with no qualification dropped to 32% and by 2003, the proportion had fallen to 11%. At the end of the 1970s, those who have received some extra vocational training (but did not pass the CAP) represented between a fifth and a quarter of an age cohort, but this rate was halved by 2003 – back to its previous level (12%). At the other end of the distribution, the proportion of individuals holding a certificate or a degree had increased enormously. Yet despite this considerable reduction, these two groups with less qualification have not

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<sup>4</sup> See work by authors such as Léon, Girard, Baudelot and Establet, Bourdieu and Passeron, Duru-Bellat, Goux et Maurin, among others.

completely disappeared. They form the bulk of all unemployed, and to a lesser extent, represent most unskilled groups. As such, they are of particular interest for decision makers involved in educational and social policies.

In terms of upper secondary vocational training, the share of CAP-BEP holders increased consistently over the period but more recently has dropped, as the latest vocational degree, the *Baccalauréat professionnel* attracts a larger number of students. Women, who used to be over-represented in the less qualified categories, have caught up at most levels except for the CAP, which used to be, and still is, geared more towards industrial jobs than towards white collar and service sector jobs. Technical education (BTS-DUT) and tertiary academic education grow considerably and a larger share of the cohort attends engineering schools and *Grandes écoles*, considered the best universities (see Figure 2.1 for overview of the educational system from pre-primary to tertiary). The various aspects of educational expansion have been widely documented and while it is not possible to refer to all these studies here, most authors acknowledge a massive increase of educational participation proportional to social origins (Girard 1970); however few authors take into account the forms of internal differentiation that occur within the schooling system.<sup>5</sup> They point out that this rate of increase is somewhat slower among children of working class origin (manual and non-manual) than among other categories and that the former tend to be more frequently oriented towards technological and vocational tracks. Children of less favoured social origins less often participate in longer duration schooling programs.

The organization of schooling had long consisted in a parallel but competing coexistence between the “primary” segment, managed by local authorities, and the “secondary” segment, ruled by the state and its powerful *Ministère de l'Éducation*.

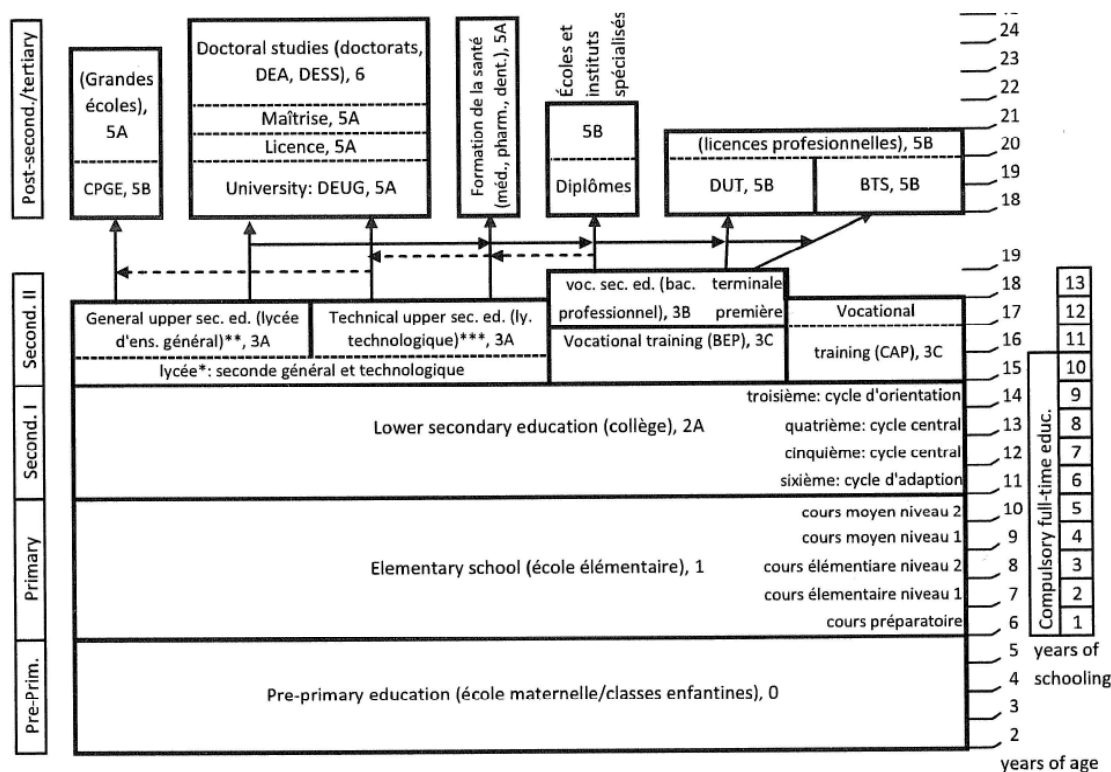
Since the late 1950s, France has witnessed a continuous debate about mass education and how best to provide equal schooling to all children regardless of their social origins while opening to them the doors to a form of secondary education that had been designed for the children of the bourgeoisie. At the end of the 1950s, access to the first year of secondary education (*l'entrée en 6ème*) remained quite unequal (Girard 1970) and this situation was viewed as no longer tolerable: it was obvious that access to the Lycées was not granted according to merit but on a social basis: in 1962, for outstanding pupils, the chances to get access to the Lycées were 79% among upper class children, as opposed to 42% for children of working class origin (Prost

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<sup>5</sup> See also the work of Baudelot, Boudon, Bourdieu, Cherkaoui, Convert, Duru-Bellat, Goux and Maurin, Prost, Merle, Vallet.

1992: 93). As a result, 55% of working class children did not reach the first year of lower secondary schooling, as opposed to 34% of “craftsmen and shop keepers” sons, 23% of clerks, 16% of mid-range executives and 6% of higher executives (Girard and Sauvy 1965).

Figure 2.1 The Educational System in France



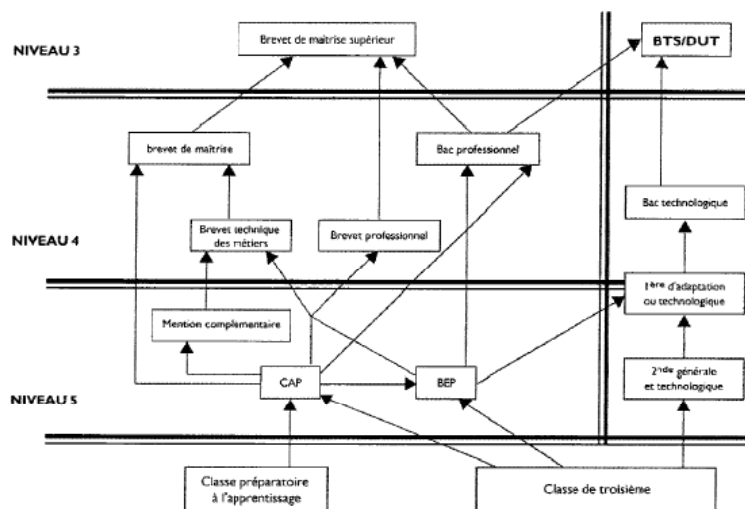
Source: Kieffer 2008.

This is why, at the same time that compulsory schooling age was increased to 16, the decision was made to split the primary segment from the secondary and to merge all secondary classes in a single system. Major questions of the reforms were about how to integrate the different intellectual and cultural expectations of the various groups, e.g., working class parents wanted their offspring to have access to a more practical education whereas bourgeois parents favored a more classical/academic teaching.

As compulsory schooling was extended to age 16 and as more and more pupils attended lower secondary schooling, a debate emerged about what the proper age for orientation towards vocational training should be. It was then moved from the end of the 5th form to the end of the 3rd form. Therefore, pupils oriented towards

vocational training had two more years of general training, but this reduced by one year the period of time left for vocational training. Two vocational certificates were simultaneously created in 1966 both at secondary (BEP, *Brevet d'études professionnelles*) and at tertiary level (BTS, *Brevet de technicien supérieur*). The BEP was conceived as a certification less specialized but of a higher level than the CAP. The creation of BEP results from this idea that, in order to be able to adjust to technological change, young people's technological competence should be higher than at CAP level. As a result, the CAP became a narrowly specialized certification, focused on a precise trade. Thus, distinctions should be made between vocational and tertiary certification. Following the creation of the BEP, the CAP did not disappear. Until the end of the 1960s, it was used to recruit young people coming out of primary schooling (certified or not), it later began to enroll pupils who have been through 2 or 3 years of lower secondary schooling. More recently, most people entering the CAP classes have attended the lower segment of the secondary (see Figure 2.2).

**Figure 2.2 Pathways in the Educational System in France (Niveau III-V)**



Reform after reform, year after year, a vocational educational ladder was established, parallel to the general one, with the same hierarchical organization: as in the general system, each step is clearly marked as being inferior or superior to another one: CAP, BEP, vocational or technological baccalaureate in the secondary segment, BTS and DUT in the tertiary. In principle, each level in the vocational system has its corresponding level in the general system. Pathways with access to HE for the originally less successful graduates of general education do exist. While in theory youth are allowed to switch from vocational education into the general system, in

practice this rarely happens. The implementation of the vocational baccalaureate became an opportunity for the young people who were doing best at BEP level.

## 2.2 Vocational Education and Training

The CAP (*Certificat d'aptitude professionnelle*) has held a major historical role both in education and in collective agreements as a marker of skilled jobs: the line between skilled and unskilled jobs rests upon the CAP.<sup>6</sup> Those jobs in which the possession of such a secondary vocational certificate is required are considered as skilled in the wage grid and in bargaining agreements. Because the CAP has continuously been criticized for its fragmentation (over 200 sections with numerous sub-programs leads to opacity for possible students) and its (relative) devaluation due to general education expansion as well as the creation of new rival certifications, a wide public debate has ensued as to whether the CAP should be terminated. Some advocates think it should be abolished, but it still has its defenders (Maillard, 2005).

CAP can be prepared through two different tracks – schooling or apprenticeship – where the proportions of time granted to general and vocationally-oriented topics vary. Each track corresponds to different training institutions. The school-based *lycées d'enseignement professionnel* are mostly operated under the supervision of the national Ministry of Education (rare exceptions: CAP in Agriculture, Health and Social Affairs; Youth and Sports Departments). In contrast, *centres de formation d'apprentis* (CFA), are mostly run by Chambers of Industry and Commerce and Craft and under the supervision of the relevant department, but with strong involvement of corporate representatives and local actors. Here, students work part time as apprentices in a firm to which they are bound by a labor contract. The general education aspects of this program are also very demanding and the CFAs are in charge of this school-based portion of training.

To date, the preparation for CAP lasts two years after the completion of a BEPC (3rd form). A limited fraction of students (7%) aged 16 and over may attend the CAP training once they have finished their 4th form, after they have completed special preparation. The access to classes preparing for CAP has low selectivity; it attracts mainly students of less privileged social background and/or students with previous low schooling achievement. However, the CAP certification remains highly selective as a result of steady demand for general and vocational skills. As a result, a large number of students enter the labor market without any visible, formal certification. This considerably damages their further working life expectations: high exposure to

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<sup>6</sup> For the history of CAP, see, e.g., Léon, Prost, Tanguy, Troger, Brucy et Troger, Brucy.

durable and repetitive unemployment, low chances to escape low-skilled jobs, higher chances to be under-employed in low paid and unstable positions.

In 2005, the number of students enrolled in a CAP program was 96,603 through the schooling stream and 177,000 through apprenticeship (Defresne 2007). Taking a CAP has become a very frequent path to prepare first for the BEP and then for the vocational baccalaureate. Recently, approximately 40% of all students who took a BEP also earned a CAP. Thus, the CAP has become a sort of safety net for students who take the BEP, contributing to the downgrading of its value as a sign of skills among the working class (Maillard 2007).

The *Brevet d'études professionnelles* (BEP), as a point of entry into the labor market, used to be a certificate similar to the CAP, although with somewhat higher standards and of slightly higher value. Now, it is mostly used as a stepping stone to the "Bac pro" or professional baccalaureate.

The vocational baccalaureate was created in 1985 and can be viewed as the result of converging interests between (a) representatives of the French Ministry of Education and representatives of vocational teachers unions who saw it as a way to improve the prestige of secondary vocational education and (b) representatives of corporate management who were seeking higher skilled workers to work on the line as factory employees. The vocational baccalaureate was meant to offer an intermediate level certification between the CAP and the technological baccalaureate. . Primarily conceived to provide access to skilled jobs for blue-collar workers (*techniciens d'atelier*) the vocational baccalaureate was later extended to white collar jobs.

Two different paths of different length and prestige were thus created : a BEP-vocational baccalaureate track and a technological baccalaureate-BTS-DUT track. Vocational and technological certificates of upper secondary schooling once opened the door to positions of technicians and mid-range non-manual positions. These various certificates were regrouped under the "technological baccalaureate" label at the end of the 1960s. Part of a scheme to raise the overall educational level of the population, the vocational baccalaureate was created to train highly skilled workers. However, as opposed to general and technological baccalaureates, it was not conceived as a stepping stone into tertiary education. The increase in the proportion of individuals who attain a vocational or technological baccalaureate is partly responsible for the increase in the total number of baccalaureate holders (see Table 2.1 for distribution of Baccalaureate certificates).

**Table 2.1 Percentage of cohort attaining three types of Baccalaureate certificates, 1970–2005**

	Academic Bac	Technological Bac	Vocational Bac	Total
1970	16.7	3.4	–	20.1
1985	19.8	9.6	–	29.4
1990	27.9	12.8	2.8	43.5
1995	37.2	17.6	7.9	62.7
2000	32.9	18.5	11.4	62.8
2005	33.7	17.3	11.5	62.5

Source: Ministère de l'Éducation Nationale de France, *Repère et références statistiques*, éd 2006. Percentages of a cohort receiving each particular type of baccalaureate in the year given.

Although the vocational baccalaureate was not supposed to prepare for tertiary education, almost a quarter of students holding this Bac (22%) intend to continue on to higher education either in STS classes (15,6%) or in the first year of university (5%) and a very small group into IUT (0,7%). At university, their chances to succeed are slim and they join the ranks of other university drop outs. Moreover, they generally aim toward a restricted number of tracks that serve as a strongly negative marker (sports and literature, languages). The recent decision to transform this four year program into a three year course will likely exacerbate this problem of access to tertiary education. The competitive advantage of those students who come from a general or technological baccalaureate background over vocational baccalaureate recipients is undeniable and this can be clearly seen in the distribution of Baccalaureate holders among tertiary education institutions (Table 2.2).

**Table 2.2 Distribution of Baccalaureate holders among tertiary education institutions, 2007**

%	Academic Bac			Technological Bac			Vocational Bac
	L	ES	S	STI	STG	Autres	
Universities	70,5	64,3	66,2	23,2	29,2	19,7	5,7
STS	10,1	10,5	6,2	56,3	42,5	28,1	15,6
CPGE	7,7	6	20	2,3	1,1	0,5	0
Autres formations	9,2	11,9	11,8	2,8	4,4	9,9	0,6
Newly enrolled in HE	48583	83765	141536	28942	52978	20310	22949
2007 Bac holders	49843	90354	147461	34197	68519	34889	104975
Continuation rates	97%	93%	96%	85%	77%	58%	22%

Source: Ministère de l'Éducation Nationale de France, *Repère et références statistiques*, éd 2008, p. 99.

If vocational preparation was rebuilt on the basis of full time schooling, not on vocationally-oriented curricula (Ryan 2003), a recent trend toward apprenticeship is unmistakable, with the number of apprentices steadily increasing from 215,500 in 1992 to 407,809 in 2006-07 (Van de Portal 2009). Whereas apprenticeships used to attract mainly level V students, preparing for CAP-BEP, more recently the number of apprentices has increased among level IV and HE students. The distribution of apprenticeships by educational level" is provided in Table 2.3.

**Table 2.3 Apprenticeship in France, 2006-07**

Education Level (VAE)	V	IV	III	II	I	Total
Numbers of students	235,391	91,950	50,316	16,461	13,690	407,808
%	58	23	12	4	3	100

Source:

Note: Niveau V—Preparation for a secondary vocational certification (ISCED 3C); Niveau IV—Preparation for vocational Brevet or vocational baccalaureate (ISCED 3B); Niveau III—Preparation for Bac + 2 technological certification, type BTS or DUT (ISCED 5B); Niveaux II et I—Preparation for higher education, Masters or doctoral degree or *Grandes écoles* degree (ISCED 5A).

This trend towards the broader diffusion of apprenticeships among levels of education results from a broader ideology, along with the incentives for students to make internships in firms, that aims to provide some personal experience of corporations to all students.

A major feature of the French higher education system is a split between training of the elites, through the *Grandes écoles*, and mass higher education mainly in universities. Access to the *Grandes écoles* is limited to those who have spent one, two, or three years in *Classes préparatoires aux Grandes écoles* (CPGE) and passed the highly selective contest ("*Concours*"), in which the number of candidates who may be accepted is restricted to a fixed number. Thus, only the best school achievers are likely to apply. In 2006, out of 72,000 applicants, 38,000 were accepted. CPGE classes attract an increasing number of candidates; applications rose from 57,000 in 2003 to 72,000 in 2006. Almost all CPGE students hold the general Baccalaureate degree, with only 4,2% holding a technological Baccalaureate. In 2004, there were 385,000 successful general and technological Baccalaureate candidates (among which 270,000 were in the general section). The scientific track represents the large share of all General Baccalaureates and is a major provider for CPGEs: 72,5% of CPGE students come from that track.

Turning now to the classification of the French VET system, we discuss why the applicability and relevance of existing ideal-typical typologies needs to be analyzed, as proposed in the Vocgene project. For example, the image of the state-dominated education and training system proposed by Greinert (2005) in his typology that incorporates France in the B type of a "state-regulated bureaucratic model" would be wrong if interpreted to assume the hegemony of the Department of Education at all times and in all places. In fact, its role has been challenged under the influence of a number of factors, such as the competition with other actors, the regionalization process and social partnership, to name a few. In the following, some examples will

be outlined why the state-centered ideal type does not, in our view, sufficiently describe the contemporary institutional landscape in France.

Firstly, in terms of the Department of Education and its competitors, decisions regarding education were made in different places, not only at the state centralized level (Tanguy 1988; Van Zanten 1993). Local communities have long assumed responsibility for a number of aspects of education, such as primary schooling. In technological education, there was a split between state-funded EPCI (*écoles pratiques de commerce et d'industrie*) and ENP (*écoles nationales professionnelles*) created due to the initiative of local communities. Furthermore, there was a long lasting debate over which of the two departments – Commerce or Education – should be responsible for technological education because of the distrust among corporate actors of the administration of the Department of Education and its teachers: they were accused of being unable to understand the basic needs of firms for manual labor.

Secondly, over several stages since 1983, the regionalization process has increased the power of regions concerning VET. As a result, regions fund building, renovation and equipment expenses for high schools. Since 1993, regions are also in charge of continuing education for youth aged 16-25. Each region is in charge of drafting an annual “*Plan régional de formation professionnelle*” for young people (PRDFPJ) that deals with initial as well as continuing vocational education and apprenticeship (Agulhon 2005). While this regionalization process is viewed by some as a threat to the republican model of education (Charlot 1994, Lelièvre 1996), the reality of this new power attributed to regions is difficult to assess. It seems that local political actors have sometime gained supremacy over the *Recteur*, who is the representative in the region of the centralized state (Dutercq 2000). Most of the time, new forms of interaction apart from the traditional formal hierarchy have been formed, creating at regional level a “new space of rules” within the educational system (Dutercq and Lang 2001; Ourliac 2005). As a result, the French state still plays a major role in vocational education, yet more as a regulatory institution than a financial or decision making one (Bel 2001).

Thirdly, the management of VET reflected a complex web of corporate relationships, such as social partnership; specifically, *Commissions professionnelles consultatives* (CPCs). Greinert’s presentation of the French situation greatly underestimates the involvement of corporate actors. Representatives of management unions have explicitly claimed responsibility for VET, although they do not always deliver the services one could expect. A good example of management involvement in VET is the existence of the CPCs, which are bi-partisan committees in which

management and unions representatives as well as representatives from the relevant ministries work together to evaluate existing programs, create new ones, define the content and methods of training (*référentiels*) as well as the requirements for the corresponding certification (*référentiels d'examen*). Apart from this formal role, we argue that CPCs were active in maintaining secondary vocational education separate from the general tracks, in particular by demanding the employment of teachers with long lasting vocational experience. Furthermore, state supremacy over the delivery of certifications, asserted under the Vichy government, has also been recently challenged. The creation of in-firm certifications (*Certificats de qualification professionnelle*, CQP) has been viewed by some as a sign of the erosion of the power of the State over certification (Brucy and Troger 2000; Giret, Lopez, Rose 2005, Coutrot and Lautman 2005).

Other elements reflect this increasing power of companies over individual careers and the social desire to increase the relative importance of past vocational experience over school-based background. The implementation of *logiques de compétences* in firms as a new managerial device is an attempt to emphasize practical experience and one that reflects the increasing power of companies over individual careers and the social desire to increase the relative importance of past vocational experience over simply school-based background. Viewed as the result of changes occurring within the industrial world that bear upon education (Trottier, 2001, 2005; Tanguy 2005), vocational education is at the nexus of a number of influences, not the sole responsibility of the French Department of Education. This multiplicity of actors involved results in diverging objectives and multiple tensions (Giret, Lopez, Rose 2005; Coutrot and Lautman 2005).

The implementation of the *validation des acquis de l'expérience* (VAE) can be viewed as closely related to the "competencies logic" trend. This newly created scheme is an attempt to reduce the number of uncertified workers by delivering certificates based upon their vocational experience: a part or all of a certification can be earned by having past occupational experiences validated as a source of competence. This involves new ways to assess the value of labor and the role of formal schooling. Also, it is a sign of a change in social conventions (Eymard Duvernay 2003). In France, this attempt to sell the notion of "competence" and to develop further the managerial forecast of jobs and competencies (*gestion prévisionnelle des emplois et des compétences*, GPEC), may be considered a management strategy to get rid of previous bargaining agreements on wages and skill-related grids (Coutrot, 2005). Although that scheme has had limited quantitative impact thus far, its ideological importance is

considerable as it relies upon the as yet underdefined notion of “competence,” which requires further investigation in comparative perspective, especially as the Copenhagen process proceeds to develop European standards in this area.

### 2.3 Tertiary Education

Tertiary education in France exhibits the nexus of a double hierarchy: the *Grandes écoles*/university divide and the split between the selective and non-selective segments of tertiary education. To understand the hierarchy of tertiary education in France, it is essential to understand the *Grandes écoles*, which are all highly selective institutions. This limited group of extremely prestigious institutions may be compared to the Ivy League universities in the United States. There are four *Ecoles normales supérieures* (of various prestige levels) that are supposed to train the body of future higher education professors and researchers. In fact, a substantial number of alumni become either higher level civil servants or managers in private companies. At the *Ecole normale*, tuition is free and students get a monthly allowance during the three or 4 years they spend there. Students may continue on to Sciences Po or the *Ecole nationale d'administration*. The *Ecole polytechnique* and *Saint Cyr* are military schools that train future military elites as well as a substantial part of future higher managers. *Ecole des Ponts et Chaussées* and *Ecole des mines*, as so-called “specialization” schools train the future elite of technical civil servants, who often end up as top managers in private companies. A wide range of private and public *Ecoles d'ingénieurs* of diverse prestige levels trains engineers. Among the diverse schools of commerce there are two tiers, led by a few highly prestigious and very expensive schools, such as *Hautes Etudes commerciales* (HEC), Essec, and local organizations, from *Ecole supérieure de commerce* (Sup de co) in Paris to less prestigious provincial institutions. One of the crucial implications of the social closure of the *Grandes écoles* is that civil servants in charge of defining educational policies and top managers of private companies have mainly been trained in the same institutions, such that they know each other and thus may easily transition from a private to a public position or vice versa.

As mentioned earlier, access to the highly selective *Grandes écoles* is limited to those who have spent one, two or three years in similarly selective *classes préparatoires* and survived the highly selective contest (*Concours*). Such training classes (CPGE) are offered in Lycées, which benefit from a carefully selected and better paid body of teachers, and from the relatively strict discipline of secondary institutions. If in a recent year, 63,000 CPGE students attended a public sector class in a Lycée, 10,300

attended private schools. There have been recent attempts to diversify the social composition of enrolments in preparatory classes, e.g., *Conventions éducation prioritaire* (Sciences Po) as well as efforts to enrol high achieving students from less privileged neighbourhoods. However, CPGE are concentrated in Paris and the Ile de France area (30% in comparison to 15% of the general population), and 21 French departments have no preparatory class. CPGE serve both as preparation for the *Grandes écoles* and as a substitute for the two first years at university. Being accepted in a CPGE and attending classes for 2 years gives access to a certification equivalent to the first 2 years at university in the corresponding discipline. The natural science tracks represent the largest share of all CPGE (64%), followed by business and commerce (17%), with humanities and social sciences (14%) last (Weil 2007).

These students come from a more privileged social and cultural background than regular university students. They are also much more likely to have passed their exam with honours than other candidates. However, significant scholarship programs are available for students in that direction, with 22% of CPGE students in 2006-07 benefitting from a scholarship program. Nevertheless, the high social segregation of CPGE evidences patterns of social closure (Euriant/Thélot 1995; Albouy/Vanecq 2003). However, such selection and closure processes so evident in the status and power of *Grandes écoles* alumni are not limited to them. While access to universities is not terribly selective for those who hold a baccalaureate, which is the first level degree in higher education, access to tertiary vocational tracks is selective.

Widely criticized, the University/*Grandes écoles* divide is often blamed for the current crisis experienced by universities in France. The *Grandes écoles* are accused of stealing the show, attracting the best achieving students, and confining universities to a subsidiary role. However, other potential sources for the current university crisis are manifold (Beaud 2002): lack of economic resources, multiplication of incoherent reforms, increased bureaucratization, the licence/maitrise/doctorat (LMD) reform implemented in a top-to-bottom process, and absence of forecasting of what the future entrance to labor markets might look like. Further, a large proportion of students enroll in universities only after they have been refused access to one or the other selective streams (CPGE, BTS, IUT). Nevertheless, tertiary education enrollments over the 2000s have remained relatively stable (Table 2.4).

**Table 2.4 Tertiary Education Enrollments, France, 2001-08 (thousands)**

	2001-2	2002-3	2003-4	2004-5	2005-6	2006-7	2007-8
Total Registered Students	2164	2208	2256	2270	2283	2254	2228
Universities (except IUT)	1256	1277	1312	1309	1285	1285	1248
IUT	118	115	114	112	113	114	116

STS	237	235	234	230	230	228	231
CPGE	71	72	72	73	75	76	78

Sources: MESR, DEPP.

In terms of vocational tertiary education, the *Diplôme universitaire de technologie* (DUT) is divided into 25 specialized sections either in production or in services and can be attained in 115 *Instituts universitaires de technologie* (IUT). The *Brevet de technicien supérieur* (BTS), prepared for in STS classes in Lycées (high schools), can be earned in 106 different sections or specialities, such as hotel management, industry, health, applied arts, management agriculture. Both the IUT and BTS students are supposed to enjoy equal prestige; however, BTS students are trained in Lycées, which are secondary level institutions, and most have been through technical secondary schooling and often come from middle class or skilled blue collar families. By contrast, IUT students have generally completed general education with good performances, which have enabled them to access IUTs that are more highly selective than most universities. IUT students frequently come from more privileged social backgrounds and are likely to continue further into higher education. There are half as many IUT students as BTS students and even fewer who succeed in scoring a spot in the CPGE (see Table 2.5).

**Table 2.5 Tertiary Education Enrollments, France, 2007-2008**

<b>Institutions</b>	<b>Enrollment</b>
Universities	1,326,000
<i>B.A.</i>	768,500
<i>M.A.</i>	483,000
<i>Doctorate</i>	74,500
IUT	113,000
CPGE	77,500
BTS	235,500
Other private or public institutions (IUFM, Ec, Ingénieurs, Ec, Commerce)	506,500
<b>Total</b>	<b>2,258,000</b>

Source: <http://www.nouvelleuniversite.gouv.fr/les-chiffres-de-la-rentree-2007-2008.html>

The LMD (*licence, maîtrise, doctorat* or Bachelor's, Master's, doctorate) process refers to the new sequences of degree programs offered in universities, for the standard cumulative duration of years of study (3-5-8). Although often presented as a need to adapt the French system to European standards, in fact, few countries in Europe traditionally used such a system. This process involves a shift to a unitary credit system, a fragmentation of training time in terms/semesters and a move away

from a fail/pass examinations to a more flexible system, which has intended and unintended consequences, as well as unknown effects on the quality of education provided.

In the recent years, a major concern has been the “vocalization of tertiary education” reflecting the creation of a large number of *licences professionnelles*, or vocational BA programs. Since 1999, more than 1,800 vocational BA programs have been established, attracting approximately 30,000 students. These programs all include an internship in a firm for three or more months. The number of programs often largely exceeds the number of possible candidate students. Overall, 590,550 students are enrolled in vocational streams, including STS, IUT, paramedical studies, medicine, and CPGE, according to the Goulard report (2007).

Including a chapter on how to “improve vocalization,” the Hetzel report (2006) suggested that each student should define his/her own “personal vocational plan” (Rose 2008) and proposed the acquisition of basic competencies in the domains of foreign languages, computer science and office computer software. Vocalization has recently become a central issue concerning the reform of tertiary education because it addresses the problem of how tertiary education should respond to the demands of firms as well as how general and vocational education should interface. As Table 2.6 shows, however, the historical development of vocalization of higher education in France has its roots in the 1960s, when the IUTs were established, and thus is not merely a recent phenomenon that results from the Bologna process.

**Table 2.6 Development of Vocalization in Tertiary Education, France, 1966–1999**

1966	IUT
1970	Les ENSI (Ecoles nationales supérieures d’ingénieurs)
1973	MIAGE (Maîtrises d’informatiques appliqués à la gestion)
1974	DESS (Diplômes d’études supérieures spécialisées)
1975	MST (Maitrises de sciences et des techniques) et MSG (Maîtrises de sciences de gestion)
1984	DEUST (Diplômes d’études universitaires scientifiques et techniques)
1985	Magistères
1989	IUFM (Instituts universitaires de formation des maitres)
1991	IUP (Instituts universitaires professionnalisés)
1994	DNTS (Diplôme national de technologie spécialisée)
1999	Licences professionnelles

According to (Rose 2008), a “vocational program” can be defined in various manners, such as by the orientation of the program towards labor market entry, by the program content and curricula, by the type of teachers participating and so on.

The “vocational” nature of a program may not be defined in the same manner at the BA or at the doctorate level – thus, clear distinctions between what is and what is not a vocational tertiary program is challenging.

Maillard and Veneau (2004) have studied how the creation of vocational BA programs resulted from a variety of intentions on behalf of actors in charge of designing these new (or not so new) programs. Having analyzed the organizational problems associated with this increasing demand for vocationalized programs, (Mignot, Gérard and Musselin, 2001) suggest that academics are increasingly in favour of vocational certification but the system gets harder and harder to supervise by the Ministry of Education. They describe a conflict between a logic of establishment (adequacy of the projects within the broad guidelines of the University) and a logic of field or specialty (assessment of the real intrinsic value of the project). Thus, conflicts may evolve as a project approved in the frame of the 4-year contract between the university and the Department of Education and research may be rejected by the technical expert in charge of the field.

The increasing attraction to vocationalization is a factor of inflation in the supply of programs, since new programs do not simply substitute for older ones and a challenge for experts in the Department of Education is to decide to close already existing programs that claim they respond to some need of the labor market. Furthermore, developing a more diversified supply of programs is viewed by university managers as a way to attract new as well as retain their traditional client groups. However, Galland (1995) shows that students are more attracted by the genuine intellectual interest of the curricula than by the future perspectives they offer on the labor market.

In any event, creating new programs is one way to ensure that corresponding financial resources will be granted to the university. University presidents are very eager to have these new programs approved, as they hope to fill some previously unoccupied niche in an ever-more differentiated educational system. On the other hand, the Department of Education and its experts have a hard time assessing and regulating this swelling demand.

The creation of a Vocational Masters involved a transformation of the academic body and the multiplication of non academics who are active in teaching or managing these new programs. With these new programs, a new key role for academics has emerged, as they help students find internships and negotiate the availability of positions in labor markets. Due to the high endogamy and closure of academic networks, this new role is often problematic and gives new power to non-

academic actors. Some former DESS programs (highly selective 5th vocationally-oriented year in universities) have been redesigned as vocational Masters. Interestingly, most vocationally-oriented Masters happen to be more selective than research-oriented ones.

This process manifests that the traditional role of French universities is being dramatically transformed. Universities used to be largely considered as mainly in charge of general education, except for Law, Medicine, Pharmacy and Architecture. Smaller or larger “Ecoles” were in charge of the vocational preparation of elites or middle-range technicians. Some of these most prestigious tertiary education institutions are public; less so in business and finance (Hec, Essec etc.). A very large number of less prestigious ones (*écoles d'ingénieurs*) was created in the 1970s and 1980s, draining students away from regular universities.

Also at the institutional level, major reforms are in process. The spread of “new public management” theory in higher education has given birth to the LRU (Liberties and Responsibilities of Universities) Bill, passed in August 2007, that grants significant power to university presidents to meet the demands of the “knowledge economy”. The composition of the university board has been downsized and the president may be re-elected immediately after his first term.

The new law reflects a devotion to a market economy, competition, competitiveness, and a certain idea of efficiency. There is a growing emphasis on quantitative methods of individual evaluation and a problematic obsession with the position of France in world university rankings. Charle expresses concern for a Malthusian process that will strengthen the already existing “dualization” between a limited number of major universities and a flock of smaller less prestigious ones, aggravating disparities in HE. Charle (2008) and Charle/Soulié (2007) suggest that the guidelines of Bologna, and the broader Lisbon process, have been perverted. Vinokur (2008) and Neyrat (2008) insist on the ambiguity of the concept of “autonomy” applied to tertiary education institutions. Vinokur argues that the proposed managerial autonomy of universities is a threat for the autonomy of the teaching body of Professors and intellectuals. The increased managerial autonomy granted to university presidents is counterbalanced by an increased control of political and economic authorities. Vinokur notes that this so-called autonomy is limited from several standpoints: Universities grant degrees or diploma that are still defined and certified at the national level. Moreover, they may not get involved in the selection process of enrollments nor increase tuition fees. French (and German) universities remain deprived of a number of assets that benefit British and American

institutions: a philanthropic tradition, including especially the financial support of wealthy alumni, extensive research contracts, and operations budgets funded through high tuition fees paid by foreign students attracted to prestigious English-speaking institutions. Charle and Vinokur agree in acknowledging that the new reform that was intended to bring French universities to the level of excellence of major international higher education institutions stops halfway. As Vinokur puts it “France just stepped onto the last wagon of a train that has already derailed”.

The above-delineated reforms indicate exogenous influences and pressures coming from the European Union as well as through the globalization of education combined with endogenous national trends. Whether and the extent to which these may be similar in France and Germany are open research questions the Vocgene project will address.

#### **2.4 Transitions from VET/HE into the Labor Market**

Because an abundant literature deals with transitions into the labor markets either specifically in France and in comparative perspective, this part of the review will be briefer, discussing a few studies as examples. For instance, Kieffer and Tanguy (2001) focus specifically on the European “Transition in Youth” (TiY) network, emphasizing the extension of the transition period and indeed the emergence of a newly fashioned intermediate period between childhood and adulthood (Galland, Dubet). In this context, the occupational destiny of low-skilled younger workers has been studied in detail by Coutrot and Kieffer (2009). If France is often characterized as a more moderately stratified system in comparison to Germany, this does not necessarily guarantee smooth and rapid school-to-work transitions (Saar et al. 2008), confirmed especially by the figures on less-educated individuals.

Others describe how the changes in the domain of work tend to modify what is expected of education. Trottier (2005) argues that the emergence of a new style in work organisation has brought a new mode of interaction between corporations and the educational system. In contrast to the Taylorian period when employees had to perform precisely described tasks, today the demands on employees are more complex, including problem-solving capacity, firm-specific knowledge, flexibility, managerial qualities, and so on. The relevant frame of reference is the firm more than the trade, which may account for the fact that continuing education has gained increasing importance, which in turn requires tighter co-operation between corporations and the educational system.

Analysts broadly agree on the de-synchronisation of the different events of the transition period, which has led to two major trends in research: increasing attraction for the qualitative approach of life-history analysis of young people (Nicole Drancourt 1991) and on the quantitative side, a desire to develop new methods in order to deal with longitudinal data.

A wealth of quantitative data on labor market entry has been provided by the “Generation” Surveys, conducted by Cereq, since the end of the 1990s. A large sample of young people (16,000 individuals for generation 98) entering the labor market in 1992, 1998, and 2001 were interviewed. This study aims to produce a dynamic picture of transitions, not only at first job but during the following years. The data for the generation 98 youth in France reveal that time works in favour of entry for all, but that those with a better education background fare better. The ratio of school-leavers who hold a job goes up from 74% after one year, to 83% after 3 years, and to 86% after 7 years. Among those who hold a university degree, the rates are 80%, 92% and 93%. By contrast, among the less qualified, only 60% hold a job after one year, 66% after three years, 72% after 7 years. A great amount of job mobility is revealed: 74% of interviewees have moved at least one time to a new company over seven years. During the first seven years of activity, a strong decrease in the proportion of fixed term contracts and temporary jobs is to be noted, also proportional to the education level (Couppié/Gasquet/ Lopez 2006; Cereq 2002, 2007). Upward mobility is the rule but this too varies according to educational background, gender, and social background.

Each year a special issue of *Economie et statistique* focused on Training and Employment, the so-called “Bilan Formation - Emploi” is published by the French national statistical institute and these are valuable sources for portraying youth transition processes (Gautié and Gurgand 2005). For the years 2005-2007, we detect that especially individuals with low or no qualification are highly affected by unemployment (nearly 40%) during the first four years after leaving school (Table 2.7). Individuals having completed vocational training suffer significantly less risk but nonetheless have a high unemployment rate of about 22%. Only those individuals who have obtained a high qualification level (ISCED 5A/B) are significantly less affected. The risk of being unemployed decreases with every additional year after leaving school. Overall, the gender difference in relation to unemployment is rather negligible. Yet among individuals with a low qualification levels, women have a significantly higher risk of being unemployed.

A highly controversial theme is the concern for educational inflation and the resulting *déclassement* and feelings of frustration (Forgeot and Gautié 1997; Tanguy 2005; Duru Bellat 2006). However, comparing which certifications provide access to what type of jobs over time is no easy task when both the structure of education and the structure of jobs have changed. Hence, the controversy over the magnitude of the *déclassement* process remains. Secondary analysis of the “Génération” Surveys have been conducted to study the economic returns of certifications over time (Nauze-Fichet and Tomasini 2005) or to assess to what extent CAP-BEP certifications were still able to provide access to skilled jobs (Bonnal et al. 2005).

**Table 2.7 Unemployment rate <4 years after graduation by obtained qualification and sex**

Year	ISCED level	Qualification	Men	Women	Total
2007	5A	Enseignement supérieur long	9	9	9
	5B	Enseignement supérieur court	11	7	9
	3A/3B	Bac et équivalents	14	13	14
	3C	CAP-BEP et équivalents	19	27	22
	2A	Brevet, CEP et sans diplôme	36	41	37
		Overall	17,1	14,8	16,0
2006	5A	Enseignement supérieur long	10	10	10
	5B	Enseignement supérieur court	12	9	10
	3A/3B	Bac et équivalents	13	15	14
	3C	CAP-BEP et équivalents	20	31	24
	2A	Brevet, CEP et sans diplôme	39	44	41
		Overall	17,7	17,4	17,5
2005	5A	Enseignement supérieur long	9	9	9
	5B	Enseignement supérieur court	12	10	10
	3A/3B	Bac et équivalents	13	17	15
	3C	CAP-BEP et équivalents	20	25	22
	2A	Brevet, CEP et sans diplôme	35	44	38
		Overall	16,6	16,8	16,7

Source: [http://www.insee.fr/fr/themes/tableau.asp?ref\\_id=NATnon03314&reg\\_id=0](http://www.insee.fr/fr/themes/tableau.asp?ref_id=NATnon03314&reg_id=0)

Finally, we may go back to the institutional and structural factors that frame transitions of youth into the labor market, following Verdier’s suggestion to adopt the perspective proposed by Maurice, Sellier and Silvestre. The design and organization of the particular relationship between the education system and production results from a certain mode of combining labor training, work organization, coordination of work activities, and the way industrial relations are managed and negotiated between social partners. “This construction is ‘societal’ in that sense that each national society has its own way of defining its policies, of inventing new schemes, of defining norms and rules that frame the articulation between education and training, work, employer/employee relations. This

articulation is the product of the social strategies developed by actors and when youth are concerned they depend upon their own way of viewing the match between education and work” (Verdier 1996: ••).

## 2.5 Social (in)equality

Parallel to the controversy on *déclassement*, the debate over the capacity of educational expansion policies to reduce unequal access to education has been very active in France. Such investigations are tightly linked with social mobility research, indebted as they are to the idea that education organized on a meritocratic basis should help to develop a more fluid social society, in which the weight of social inheritance (ascription) would be less important than school achievement in defining the future life conditions of individuals. This has been a major hope of western societies for decades.

Throughout the world, public policies have emphasized the importance of more years of formal education as the means to achieve “the twin aims of economic growth and social inclusion” (Grubb & Lazerson, 2004). This “educational gospel” (Grubb & Lazerson 2004) went hand-in-hand with “vocationalism” (Hayward 2004). The “vocationalist turn” in education is about making learning more relevant and therefore also to motivate even lower attaining and disaffected learners (Mayhew et al.). Gleeson and Keep (2004) argue that the VET system has been used to create a myth or a new spirit for the New Right, at the expense of other educational aims, exemplified in frequent conflicts of interest between individuals, employers and an education system run under the aegis of a state obsessed with the idea of an enterprise culture. An underlying suspicion about the effect of such policies is that there is no guarantee that continued higher education expansion will automatically lead to the many positive social and economic outcomes that policymakers wish for. Indeed, as early as the 1960s, Bourdieu and his followers have implicitly criticized the educational gospel in their research on social reproduction process.

Whereas most European investigators use “educational expansion,” many French authors make use of the term “democratization” of schooling. This metaphorical use of a term that belongs to the political lexicon can be seen as an attempt to believe or make us believe that the quantitative increase in access to education has led to a victory over social inequalities. This is far from being the case, as indicated in studies of all three main types of inequalities: access and participation, achievement and attainment, and returns to education via participation in labor markets.

In France, Thélot and Vallet (2000) detect a certain reduction of the educational gap between social groups, yet this has been criticized by Merle (2002), who argues that these results are flawed because of the categories adopted by their authors. The importance of qualitative and new signals of inequalities in education has been suggested (Duru-Bellat and Kieffer, 2000).

Convert (2003) documents the correspondence between baccalaureate types (general, technological or vocational), social origin and further destinations in education. The general baccalaureates are most frequently passed by students of privileged social backgrounds, who are more likely to continue into the *Grandes écoles* or complete 4 to 5 years of university study. At the other extreme, vocational baccalaureates are held by students of working class origin and lead either to direct entry into labor markets or to the less prestigious segments of tertiary education. In between, students holding a technological baccalaureate are more likely to choose 2-year tertiary programs. He also notes some impact of social background on future options among high achievers: 67% of those who pass the general scientific baccalaureate with honors (*mention bien ou très bien*) apply for a CPGE, when only 11% of those who have passed a technological baccalaureate with honors do so, which he argues suggests a tight relationship between social origin and risk adversity. Whereas students from privileged backgrounds may take risks in choosing long-term programs, less privileged students may prefer shorter programs that offer more possibilities for segmenting the risks. The former feel less compelled by their first involvement into a subject whereas the latter tend to stick to the options defined by the type of Baccalaureate they have chosen.

The proportion of baccalaureate-holders per cohort has risen. But, as the education system changed, new hierarchies were formed in education that contribute to reproduce the social structure. The types of baccalaureates, the meaning of passing it with honors, the options for certain types of curricula (*Grandes écoles*, law, medicine) are renewed social markers that bind future destiny (Duru-Bellat and Kieffer, 2008).

Moreover, social background weighs upon the economic returns of education on the labor market. Couppié et al. (2006) show that over the first seven years of their careers, a substantial proportion of youth of the generation 98 cohort moved up from unskilled into skilled jobs, with the proportion of young people holding non skilled job dropped from 31% of the cohort to 18%, and the proportion of *cadres* increasing from 12% to 18%. However expectations are not the same across the cohort. Among young people holding a Bac+2 certification who start their career in a middle class occupation (*professions intermédiaires*), the likelihood to become promoted to a *cadre*

position is 15% among the children of the bourgeoisie, but only 7% for those of working class origin.

If the thesis of segregative democratization has been confirmed (Merle 2002; Duru-Bellat and Kieffer), the question remains how the recent transformation of HE and VET responding to Bologna and Copenhagen will affect these disparities.

### 3 Shifting Tensions between VET and HE in Germany

#### 3.1 Pathways into and within VET and HE

In this section, we give an overview on participation rates in vocational training and education, in higher education, and in newer hybrid organizational forms that straddle the boundaries between levels of VET and HE (see Figure 3.1 for current educational pathways).

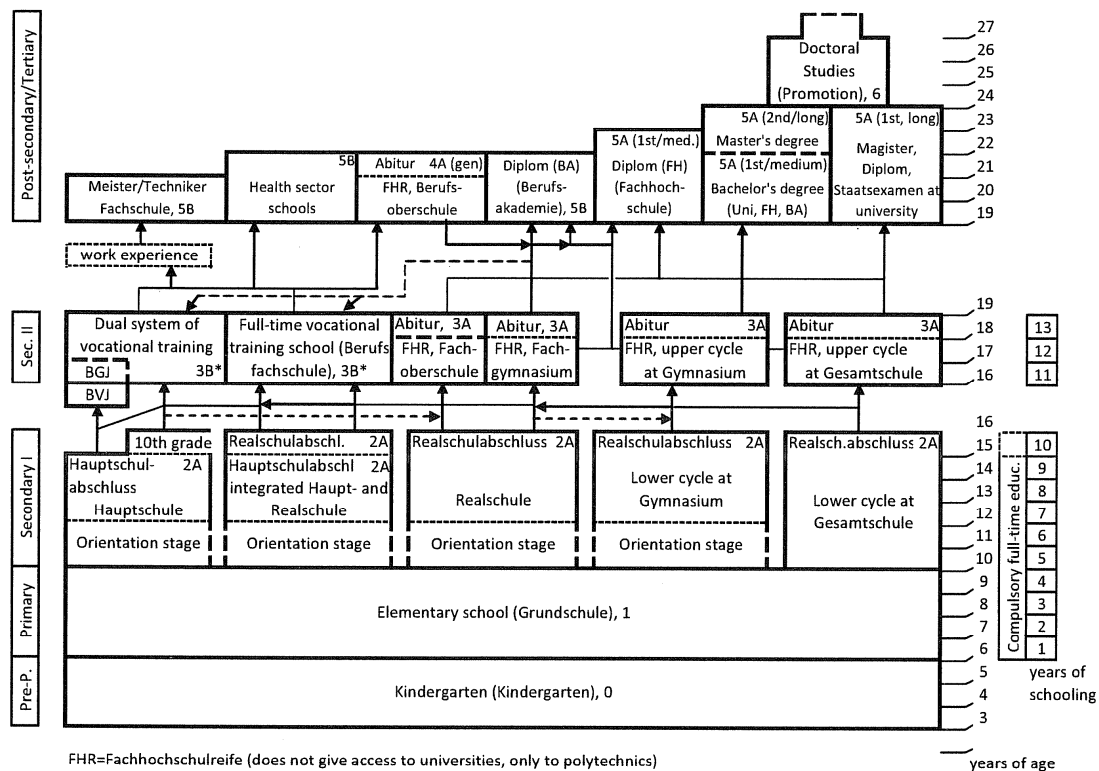
German secondary schooling is highly stratified (Allmendinger 1989). In fact, the secondary level of the educational system is divided into five separate organizational forms: Students are sorted very early (after grade 4 or 6) one of the following school types (with further variants in the new *Länder*): (1) the lower secondary school (*Hauptschule*), (2) the intermediate track (*Realschule*), (3) the upper secondary school (*Gymnasium*), (4) in a multi-track comprehensive school (*Gesamtschule*) offering a range of certificates, or (5) one of ten special school types (*Sonderschule*). The *Hauptschule* ends after grade 9 (10), and leads to *Hauptschulabschluss* (*erweiterter Hauptschulabschluss*). The intermediate secondary school-leaving certificate (*Realschulabschluss*) is received after grade 10. The highest secondary school level (*gymnasiale Oberstufe*) ends after grade 12 or 13 and leads to the general higher education entry certificate (*Allgemeine Hochschulreife*) (Schneider 2008b), which is required to access tertiary education. Generally speaking, these tracks lead to specific positions in the labor market – blue collar, white collar, academic – and the permeability between the tracks is relatively low (cf. Leuze 2007).

The vocational training system in Germany is similarly differentiated. This system is made up of three sectors: the pre-vocational training system, the school based vocational training system, and the dual system proper (apprenticeship). Traditionally, as has been described in the book by Maurice et al. (1986), the *Hauptschule* provides a low level of general education and was originally established to prepare students for craft and industrial occupations. But an ever larger proportion of students (50,8% in 2006) from *Hauptschulen* do not find a place to train but are forced to participate in the pre-vocational training system. For pupils without any general education certificate, the situation is even worse, as about 80% of these school-leavers (mainly from *Hauptschulen* and *Sonderschulen*) end up in this system (Autorengruppe Bildungsberichterstattung 2008: 158).

Overall, the general education level of the students determines the entrance to a specific field of vocational training. Training in vocational schools leads mostly to

occupations in the following sectors: health, social work, teaching, and media. Especially in the last sector of the training system, students with *Allgemeine Hochschulreife* and the *Mittlerer Schulabschluss* prevail whereas school leavers from the *Hauptschule* make up the smallest part of the students. In crafts, agriculture and some domestic jobs, *Hauptschule* graduates make up the majority of the vocational training students. In industry, commerce, public service and free professions the trainees are recruited primarily from *Realschule* and increasingly from the upper secondary schools. In fact some vocational training, e.g. for bank clerks, even requires the *Allgemeine Hochschulreife* as a precondition for receiving an apprenticeship contract (Autorengruppe Bildungsberichterstattung 2008).

Figure 3.1 The Educational System in Germany



Source: Schneider (2008b: 79).

There are several pathways into higher education, requiring the following certificates for entry: the *Allgemeine Hochschulreife* or the *Fachgebundene Hochschulreife* (subject-specific entry certificate). Having obtained the *Allgemeine Hochschulreife*, school leavers are entitled to study at any institution of higher education. The *Fachgebundene Hochschulreife*, on the other hand, allows entry only to universities of

applied sciences (*Fachhochschulen*) or specified courses of studies at universities (see Appendix for more details on the different organizational forms in the German educational system and their ISCED classifications). In addition, the *Allgemeine Hochschulreife* can also be obtained after leaving secondary school, such as attending evening classes. However, workers who attain the *Allgemeine Hochschulreife* in this way account for only 1% of all admissions to university and 2% of all admissions to universities of applied sciences. This alternative pathway into tertiary education (*Zweiter Bildungsweg*) remains marginal; the upward permeability of the educational system is lacking.

In terms of VET in Germany, we observe that the proportion of all pupils in the second phase of secondary schooling (ISCED 3) in general and technological education tracks in Germany (41%) was lower than the OECD mean (54%) in 2006, because of the relative size of specific vocational training (Statistisches Bundesamt 2008: 68). However, the variation between *Länder* (e.g. 30-50%) reflects differences in the structures of skill formation systems, disparities in the availability of apprenticeships and other vocational training opportunities as well as shifting preferences of youth as they proceed through educational pathways. In 2007, 623,929 youth signed a new training contract in the dual system, 7.4% more than a year earlier, boosting the population in the dual system to 1.59 million youth ([www.destatis.de](http://www.destatis.de)). But in contrast to public discourse, the dominance of the dual system in German vocational education no longer exists (cf. Solga 2008). Over the past two decades, the two main sectors of the VET system – the dual system and the pre-vocational training system – have become nearly equal in quantitative terms, whereas the importance of school-based vocational training has remained stable at around 17% of all entrants into VET since 1990. In 2006, 43.5% of new entrants into VET were integrated into the dual system proper and 39.7% were placed in the pre-vocational training systems' diverse programs (Autorengruppe Bildungsberichterstattung 2008). The distribution of entrants among these programs in 2006 – none of which offers a qualified training certificate – was 188,230 (37%) in vocational-technical colleges (*Berufsfachschulen*), 110,778 (22%) in vocational preparatory courses (*Berufsvorbereitende Maßnahmen*), 83,126 (17%) in vocational schools (*Berufsschulen*), 50,001 (10%) in school-based vocational preparation year (*Schulisches Berufsvorbereitungsjahr, BVJ*), 36,612 (7%) in full-time school-based vocational basic skills preparation year (*Schulisches Berufsgrundbildungsjahr, BGJ*), among others (Autorengruppe Bildungsberichterstattung 2008).

While eligibility requirements for transfer from VET programs to HE vary by *Land*, the figures on students at tertiary level who have completed vocational training provides an indicator of permeability, as it measures actual mobility between VET and HE. Since reunification, the proportion of those students beginning their studies who hold an occupational training certificate has declined from just over a third to around a quarter: Over the past two decades, around one-half of this substantial minority of all students have completed vocational training *before*, one-half *after* they attained the necessary certificate to enter a tertiary course of study (Baethge, Solga and Wieck 2007). Thus, while less tertiary-level students have a training certificate than in previous years, a sizable minority experiences multiple phases of differing types of skill formation. In recognition of this fact, newer organizational forms cater directly to such interests.

Besides the increase in internships completed by tertiary students as part of their general academic courses of study, official dual study programs join in-firm vocational training with a course of study at a vocational academy (*Berufsakademie*), business college, *Fachhochschule* or university have also been steadily increasing. The advantages of such programs is manifest: while firms gain highly qualified and motivated younger workers, higher education organizations benefit from direct interaction with firms and can enhance their profile. When such arrangements are well-coordinated, they can optimally combine and alternate general academic education and in-firm praxis-based phases into a vocationally-oriented academic program. Students stand to gain much, as they receive high-quality training that enhances their labor market opportunities – similar to the advantages of the dual system at secondary level.

In ISCED, vocational schools, the vocational academies and the schools for healthcare professions (e.g. nursing) that offer two-year and three-year courses are classified as post-secondary education (5B). Operating in Baden-Württemberg, Bavaria, Saxony, Thuringia and Berlin, vocational academies provide practically-focused but academically-based VET that can lead to a B.A.-level degree after three years of study in such fields as economics or social work or engineering. For example, the School of Economics in Berlin (*Fachhochschule für Wirtschaft*) offers a *duales Studium* in a vocational academy division for 1,650 students in a range of 15 disciplines that combine theory and praxis in cooperation with 480 firms (see <http://www.fhw-berlin.de/index.php?id=1027>). It is precisely such newer institutions and organizations that must be recognized when asking whether the standard dimensions of difference upon which typologies – usually only of HE or

VET – are based continue to be valid and useful. If the duration and quality of educational careers is changing, so too are the skill requirements (e.g., toward more general knowledge) and the distribution of workers among occupations (e.g., away from production and toward services).

Distributed among levels according to International Standard Classification of Education (ISCED), the net entry rates into tertiary education in 2006 were: ISCED 5A: 35% (26% in 1995); ISCED 5B: 13% (15% in 1995) (OECD 2008: 68-69). For tertiary-type 5A this figure is low as compared to the OECD average of over 50% (DESTATIS 2008: 8). As a result, in 2006, only 21% of a cohort were awarded a degree at the level of ISCED 5A (DESTATIS 2008: 41). Again the OECD average is much higher (37%), which, however, is partly due to the fact that in some other OECD countries VET is classified as belonging to higher education (cf. DESTATIS 2008: 40).

In 378 higher education institutions in 2006, a total of 1,986,106 students were enrolled. Students enter either a university, focused more towards a general curriculum and science, or a university of applied sciences (*Fachhochschule*), which emphasizes more applied fields and praxis-based training. Nearly 70% or 1,386,784 students study at 123 universities and equivalent institutions, 28.6% or 567,729 students are enrolled at 200 *Fachhochschulen* (including colleges of administration or *Verwaltungsfachhochschulen*), and 1.6% or 31,593 students at 55 colleges of art and music (KMK 2008: 182ff.). In addition, 28,525 students study at *Berufsakademien* (KMK 2008: 182ff.). As already mentioned above, these are colleges of advanced vocational studies, combining an apprenticeship with postsecondary-level teaching that represent an example of a newer type of hybrid organizational form (cf. Powell and Solga 2008: 24, 30). However, this relatively new organizational form remains quantitatively marginal and limited to certain *Bundesländer*, such as Baden-Württemberg.

### **3.2 Vocational Education and Training**

In a well-known typology of VET systems, Greinert (2005) lays out three “classical” training models that persist: Type A is the liberal market economy model (Great Britain), Type B the state-regulated bureaucratic model (France), and Type C the dual-corporatist model (Germany). The German dual-corporatist model’s key is the combination of in-school and in-firm education and training (apprenticeships), which involves extensive mediation and coordination among state, employer, and labor representatives in an autonomous system of vocational training (Greinert 2005). This extensive system of vocational training provides attractive apprenticeship

opportunities at upper secondary level. Vocational training plays a far more significant role in preparing young adults for the labor market than in other European countries where general academic education is primary (cf. e.g. Shavit and Müller 2000). Germany's skill formation institutions have been of historical importance as models for the development of both university education and vocational training internationally (cf. Powell 2009). Arguably, the latter has more recently (and possibly more steadily over time) been emulated in other countries than the university model. The attraction for other countries to Germany's VET system is due largely to the fact that it provides a highly-skilled workforce, smooth transitions from school-to-work, and some insurance against the high youth unemployment rates that plague many other European countries (Deissinger 1994; Regini 1997). On the other hand, the dual system of vocational training no longer seems as successful as it once was at providing attractive training opportunities to the majority of a cohort leaving secondary schooling, at matching youth with firms offering stable career perspectives, or at regularly providing youth from lower social backgrounds or from ethnic minority groups with work and social mobility (Baethge, Solga and Wieck 2007). Indeed, regardless of fluctuations due to the business cycle and technological change, the demand for training opportunities has grown far beyond what firms have been willing to offer. Especially less-educated youth are in danger of not successfully garnering a spot within the dual system proper and thus will likely remain at the margins of labor markets in future (Solga 2005) as low-skilled persons' labor market vulnerability has increased not only in Germany, but in all Western countries over the past quarter century (Solga 2008).

Between compulsory schooling and employment in Germany, there are two transitions: into post-secondary education and training and from that stage into labor markets. However, a substitute – the “pre-vocational training system” – has developed rapidly, such that each year about half a million young people do not enter into regular vocational training, but instead find themselves shunted off into a range of pre-vocational programs (Konsortium Bildungsberichterstattung 2006). While these measures, similar to the dual system proper, aim to enhance youth's work aptitudes, occupational orientations, or vocational preparation as well as empowering them, this takes place outside the regular training system, often solely school-based and without the crucial element of work experience within firms. As a result, the dual system has experienced an upgrading (in regard to the formal qualifications held by trainees), while leavers of *Hauptschulen* and *Sonderschulen* are increasingly excluded (Powell 2006).

World polity researchers have argued that the appeal of vocational education rose and fell over the twentieth century due to the changing importance of specialized workers because of the shift from industrial production to services and the simultaneous rise of standardized educational provision for future citizens in egalitarian societies (Benavot 1983). But Germany, which largely clings to its traditions in education and training, provides via its *Sonderweg* a difficult case for such global trend analyses that argue from a bird's-eye view. Indeed, the tremendous costs of such a system as that of pre-vocational training indicates how highly institutionalized the idea of apprenticeships and the dual system is in Germany, which slows its transition to the egalitarian citizenship model (that favors general academic education) so influential elsewhere. Even the German full time vocational training schools (*Berufsfachschule*) have integrated extended apprenticeship periods into the curriculum, as the occupational principle diffuses throughout skill formation systems' elaborate organizational fields.

Significantly, over the past two hundred years, divided and parallel systems of general, academic education and vocational education and training have grown, over time solidifying the institutional and organization distinction between general academic and vocational preparation, what (Baethge 2006) has termed the "German educational schism" (see Table 3.3). Here, Baethge compares a variety of key institutional dimensions that undergird the schism between general education and VET. Whereas general education has as its dominant goal or ideal the development of individual personality, self-control, and autonomy, that of VET is to develop in individuals their occupational competence and agency, such that they can carry out specific tasks. Thus, the orientation when defining learning goals and elaborating curricula is not a scientific approach guided by a canon of representative knowledge for general education, but rather a view toward the labor market and its demand for qualified workers in the case of VET.

**Table 3.3 Institutional Dimensions of General Education and VET**

Institutional Dimension	General	VET (dual system)
Cultural-cognitive: Dominant goals, Ideals	Educated personality, individual self-control, autonomy, occupational (disciplinary) identity	Occupational competence, agency, occupational identity ( <i>Beruflichkeit</i> )
Cultural-cognitive: Orientation in the definition of learning goals, Curricula	Canon of representative knowledge, science	Labor market, economic demand for qualified workers
Normative: Status of learners	Pupils, students	Trainees/Apprentices in an employed status

Normative:	Theoretical education in	Praxis-based training (connection
Organization of learning	independent organizations	between work and learning)
Normative:	Professionalized, civil servants	Non- or semi-professional, private
Personnel		work contracts
Regulative:	<i>Länder</i> (democratic control)	Corporatist self-administration by
Governance, Supervision,		industry (chambers) on the basis of
Quality control		federal regulations
Regulative:	Public ( <i>Länder</i> , local)	Mainly private (organizations that
Finance		train)

Source: Adapted from Baethge, Solga, and Wieck (2007: 17); Translation JP.

In terms of the regulatory pillar, the sixteen German *Länder* not only finance but also exert democratic control as they govern and supervise the content and quality of general education. By contrast, federal regulations guide the corporatist self-administration by industry (chambers) of VET as they do the organizations that pay the apprentices' wages and other training costs. Whereas in VET individuals are quasi-employees, in general education they are pupils or students. The organization of learning is theoretical education in independent organizations on the one hand and praxis-based training that ideally melds work and learning, on the other. In terms of personnel, professionalized civil servants compare to non- or semi-professionals employed under private contracts.

### 3.3 Higher Education

The German higher education system consists of public and private state-recognized institutions of higher education (ISCED 5A), which are categorized as follows:

1. Universities (*Universitäten*) and equivalent higher education institutions (*Technische Hochschulen/Technische Universitäten, Pädagogische Hochschulen*);
2. Colleges of art and music (*Kunsthochschulen* and *Musikhochschulen*); and
3. *Fachhochschulen* (universities of applied sciences) and *Verwaltungsfachhochschulen* (universities for public administration).

*Universities* are the classical type of higher education institution. At present there are 109 universities<sup>7</sup> operating in Germany whereas most of them are so-called full universities which offer the whole range of academic subjects. These generally include law, cultural studies, arts and humanities, natural sciences, and economics/business administration, teacher training and, with some exceptions, medicine. Compared with *Fachhochschulen*, universities attach great importance to basic research. All types of universities have in common the traditional right to

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<sup>7</sup> Number of universities are taken from the following official homepage of the Conference of Rectors and Presidents of Higher Education Institutions (Hochschulrektorenkonferenz): [http://www.hochschulkompass.de/kompass/xml/index\\_hochschule.htm](http://www.hochschulkompass.de/kompass/xml/index_hochschule.htm) (09.03.2009)

award the doctorate and the post-doctoral lecturing qualification (*Habilitation*). Thus the focus is on academic and scientific research and teaching as well as on the training of the next generation of academics. Admission requirements generally include the general higher education entrance qualification (*Abitur*) whereas in some cases admission is restricted to the Numerus Clausus or universities select their students themselves.

*Colleges of art and music* offer courses of studies in the area of film, television and media, in the performing visual, and design arts as well as in various music subjects. The number of study places in these colleges is strictly limited. Only applicants who pass an entrance test to prove their talent have the chance of being accepted. In contrast to general admission requirements to higher education, particularly talented applicants can be admitted to studies, even if they don't hold a higher education entrance qualification.

*Fachhochschulen* (universities of applied sciences) were introduced in 1970/71 as a new type of institution in the system of higher education in Germany. *Fachhochschulen* offer application-oriented study courses mainly in, Economics, Engineering, Social Work, Public and Legal Administration and Health and usually offer integrated semesters of practical training. In contrast to the more academic orientation of university courses of studies *Fachhochschulen* are characterized by their professional orientation including professors, who, in addition to their academic qualifications, have gained professional experience outside the field of higher education.

The German higher education has been depicted as a system of “political legalism” in which legal procedures play a dominant role in the resolution of conflicts (Goldschmidt 1991: 5-6). By contrast, Clark characterizes the German higher education governance-regime as “a combination of political regulation by the state and professional self-control by ‘academic oligarchies’” (Clark 1983: 140). Four prominent “traditional” features of HE in Germany discussed by Teichler (2002: 349-350) are: (1) universities are strongly orientated towards science; (2) universities are of more or less the same quality; (3) programs usually lead to degrees that are oriented towards a vocation (cf. e.g. Müller, Brauns and Steinmann 2002: 42); and (4) the state plays a significant role in the steering of higher education.<sup>8</sup> The “German model” of higher education gained prominence based largely on the Humboldtian ideal of a community of professors and students as well as the principle of

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<sup>8</sup> It should be noted that higher education in Germany is mostly within the realm of governance of the *Länder* – and this has been considerably strengthened by the Federalism Reform of 2006.

“education as a public good” (as opposed to “education as a commodity” and the principle of competition). With regard to evolutionary dynamics, the German HE system is typically characterized as conservative, slowly moving, and inclined towards incremental rather than radical changes (cf. Teichler 2005). Considering this tendency towards inertia, the recent rapid shifts in academic programs, such as the widespread diffusion of a dual degree structure (BA/MA) throughout the country within a very few years, represent an important case of study for institutional change—and to challenge theoretical expectations of path dependence.

Over the past few years Germany’s higher education system has seen a number of liberalizing reforms, which raises interesting questions about the future stability of its traditional mode of coordination, or regulation mode (cf. Graf 2008: 15). Examples for current institutional reforms are, next to the formalization of the dual degree structure, the introduction of tuition fees of up to 500 Euros (in currently 7 *Länder* albeit with differences in concrete regulations), performance-based bonus pay for professors, increased institutional autonomy for universities and university presidents, and the “Excellence Initiative” (cf. Bultmann 2008: 10-11; Spiewak and Wiarda 2008: 62).<sup>9</sup> As the higher education sector is deregulated and “New Public Management” strategies gain a foothold (cf. Krücken 2007: 192), some commentators already claim the switch to a “neo-liberal” market model (albeit a “German” one), in which universities acquire the status of *organizational actors* as they reduce the power of the academic oligarchy.<sup>10</sup> However, it is still up to debate how far this new “marketization” can be directly related to the Europeanization of higher education (cf. e.g. Nullmeier 2000).

The implementation of the Bologna process in Germany has been described as a large experimental “field trial”, with unknown consequences and risks (Dobischat, Fischell and Rosendahl 2008: 97). According to Pritchard (2006: 112), “The dialectic among global, national, and local forces will eventually hybridize German higher education into its own distinctive, new model”. The introduction of the dual degree structure is the innovation most visibly linked to the European education and

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<sup>9</sup> The status of “elite institution of the country” was introduced in 2006 with the Excellence Initiative (“*Exzellenzinitiative*”) of the German Federal Ministry for Education and Research (BMBF) and the German Research Foundation (DFG). Through this competition-based support scheme, selected universities and programs receive extra-funding (see GWK 2008 for an overview and evaluation of the Excellence Initiative).

<sup>10</sup> According to Krücken and Meier (2006), the four main elements increasingly underpinning an organizational conception of the university are “... organizational accountability, mainly through the establishment of evaluation procedures; the tendency towards defining ‘own’ organizational goals through mission statements [...]; the ongoing elaboration and expansion of formal technical structures around these goals; and the transformation of university management into a profession” (Ibid.: 4).

training reforms associated with “Bologna”. In Germany, the legal principles for Bachelors and Masters as the standard degree structure were created in 2002 (KMK 2007: 8). Accordingly, over the past few years, traditional degrees like *Magister*, *Diplom*, and *Staatsexamen* were gradually substituted.<sup>11</sup> However, due to the ongoing transition between types of courses of study, today we find the parallel existence of the ‘old’ and the ‘new’ degree systems (e.g. Witte 2006: 196) that reduces the transparency important for entrants into the system and those who attempt to judge the value of differing courses of study and certificates. Further, operating this parallel system is a substantial *double burden*, especially as the growing demands on universities are not covered by a proportional increase in universities’ financial resources (cf. Himmelrath and Mersch 2007: 19); in fact, Germany’s universities have suffered a considerable reduction in overall resources over the past few decades. In addition, faculty and staff and students must adjust their teaching and learning programs and styles. Often in these new courses of study, “competences and educational objectives are defined with a view to the demands of labor markets” (KMK 2007: 11). Consequently, the new Bachelor programs are more vocationally oriented (cf. Krücken 2007: 192; Reuter 2003: 20-24). Thus, there are both elements of academic education being added to previously mainly practice-oriented training programs and elements of vocationally-specific training being merged into previously purely academic general programs. Precisely such changes, leading to an altered relationship between such organizational forms as universities and universities of applied science (*Fachhochschulen*) are a key focus of our investigation.

For years, one of the most important and consensual goals of education and training policy has been to make skill formation systems more flexible, more transparent, and more permeable – both within VET and at the nexus between VET and HE – as part of lifelong learning initiatives of the European Union (Berufsbildungsbericht 2008: 198). Among the developments which seem to lead to more permeability are qualifications frameworks and credit transfer systems, which both promise to increase transparency between the two sectors. However, without common understanding of the concepts of “credit”, neither national or European qualifications frameworks will succeed, since learning outcomes will still need to be assessed individually, which is difficult and time consuming (Freitag 2007). Nevertheless, such attempts at rationally defining learning inputs and outcomes,

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<sup>11</sup> These ‘old’ degrees were not based on a significant distinction between undergraduate and graduate studies, with only doctoral-level studies marking a hierarchical division in higher education institutions (the universities of applied science cannot confer doctorates) and credentials.

where successful, will assist employers evaluating job-seekers and will support individuals entering domestic (and foreign) labor markets.

### **3.4 Transitions from VET/HE into the Labor Market**

Here, we discuss the current state of transitions from both the VET and HE systems into the labor market, paying particular attention to recent changes in the tertiary-level certificates (BA/MA). Traditionally, Germany has been known to have a VET system with a relatively smooth transition process from training to employment. Characterized by its highly standardized and stratified educational system (Allmendinger 1989; Shavit and Müller 1998), the German apprenticeship model furthermore retains its prestige due to relatively low youth unemployment rates. However, the regularity of smooth transitions has become challenged over the past few years. Post-training unemployment search phases directly following the end of vocational training vary by occupation. The highest rates of take-up in the training firm are to be found in traditional industrial branches as well as in the credit and insurance industry, at over 80%, and the lowest rates in the service industry.

Overall, this transition phase's duration has extended since 2000, such that by 2005, more than a third of successful leavers of apprenticeship training do not immediately transition into employment. As shown in the 2008 Education Report, in the first twelve months after completing training, 64.4% of youth have entered full-time or part-time work, 4.6% are inadequately employed, 9.3% are receiving some transfer payments (such as unemployment benefits), and data is missing for a further 21.7% (Autorengruppe Bildungsberichterstattung 2008: Abb. H5.2-3). Youth unemployment has also been rising and unemployment rates for young people have grown over-proportionally in comparison with other age groups. The differences in the transition process not only mirror the chances of youth in certain occupations, but they also signal matching problems between training offers and the demand for qualifications in the labor market. A month after completed training, the disparities in employment are so large that it can correctly be characterized as polarization: from over three-quarters of employees in the banking and insurance industry to a third of painters and woodworkers. Occupations also differ greatly in terms of the adequacy of vocational training and the acquired skills, which heighten the probability of a good match in employment.

For higher education, clearly the demand for graduates has continuously increased—and will likely continue to rise in future. In the mid- to long-term, the labor market prospects for HE graduates are very good overall, indicated by their

qualification-specific unemployment rate of under 5% since 1975 (Autorengruppe Bildungsberichterstattung 2008: I2). After 1993, the unemployment rates of persons with and without a higher education degree have diverged: whereas the general rate in 2005 was 11.8%, for HE graduates it was only 4.1%. However, since the mid-1980s young people need increasingly longer to find a first job. In addition, they face higher unemployment risks after having entered employment. That is, both insecurity and instability have increased.<sup>12</sup> While we can observe a trend towards an ‘academization’ of the educational and employment systems,<sup>13</sup> the transition of HE graduates into a first job has become more complex and time-consuming (Teichler 2002: 366).

With regard to the new BA and MA degrees, their success depends on how they are accepted on the labor market, but also how graduates fare in their jobs (Müller, Brauns and Steinmann 2002: 59). In 2004, “... the legal provision for changed relationship between HE and the labor market was largely in place, [while] mentalities and practices still needed to adjust...” (Witte 2006: 204). Indeed, human resources managers of leading German enterprises have started a campaign called “Bachelor Welcome!”, stating their willingness to take on BA and MA graduates (BDA 2004; see also BDI 2005). Nevertheless, problems still arise given the lack of familiarity of employers with regard to the new Bachelor’s degrees. This goes hand in hand with uncertainties about the competencies of Bachelor’s graduates (Briedis 2005: 48; cf. Sperling 2008: 20). Thus, it is still an open question how smooth transitions of BA graduates into the labor market are going to be (Alesi et al. 2005).

Taking the cohort of graduates who completed their final exams in 2002/2003 as an example, 80% of the BA graduates from universities embark on further studies (for BA graduates from *Fachhochschulen* the figure is 60%) (KMK 2007: 11). It is not yet established whether this high proportion (as compared to Anglophone countries) is due to uncertainties about the value of the new Bachelor degrees or due to educational interests and ambition per se. Briedis (2005) finds that most Bachelor graduates had in mind to continue with postgraduate studies already when they started at university (Ibid: 48). At the same time, skepticism of students towards the new degrees relates to lacking transparency in regard to the acceptance of these degrees on the labor market (Dobischat, Fischell and Rosendahl 2008: 97). In many

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<sup>12</sup> Yet, in Germany the risks of unemployment still remain comparatively low compared to other OECD countries (Buchholz and Kurz 2008). Moreover, it should also be noted that the risks are not distributed equally. With regard to young migrants, as well as education and occupational class more generally, a relative worsening of position can be observed (Ibid.).

<sup>13</sup> For instance, the number of higher education graduates employed has risen significantly in nearly all economic sectors between 1995 and 2005 (Dobischat, Fischell and Rosendahl 2008: 98).

cases even HE lecturers do not yet “trust” the new undergraduate programs and advise students to stay on for postgraduate studies (Reichert and Tauch 2005).

On the other hand, the majority of those BA students who do not continue with further studies enter jobs that are considered as traditional jobs for graduates from higher education (see also Briedis 2005; KMK 2007: 11). A difference still arises as, overall, “climbing the career ladder” in the first job is subject to a longer trial period for Bachelor graduates as compared to *Diplom* graduates (Konegen-Grenier 2004). Thereby, the career chances that employers grant to BA graduates also depend on the particular sector of the economy. For example, chances are relatively equal in logistics/transport, agriculture and forestry/environment, research/development, and industry, but lower in the fields of NGOs/associations, marketing/trade, and health care (Sperling 2008: 19-20). Here, on-going research must monitor the opportunities given and taken as BA and MA graduates become ubiquitous.

### **3.5 Social (in)equality**

A key goal of the VOCGENE study of skill formation systems in France and Germany is to indicate the extent to which the goal of universal access to education – and training or “lifelong learning” – has been achieved and what recent shifts in these institutional arrangements might mean for participation by differing social groups. Currently, contrary media representations surrounding educational reforms make a range of claims that need to be tested by empirical social science research that demonstrates how access to educational pathways, the quality of general education and skill formation, and attained certificates have and are changing. Such investigations can assist societies to monitor the extent to which institutional changes are helping them to achieve their widely-held goals, from universal literacy and economic competitiveness to social security and solidarity. While there are indications about the implications of the changes in tertiary education since the Bologna declaration, those responding to the Copenhagen process are less clear; thus, mainly the former are discussed here.

It can be argued that social background has a selective impact until students reach the *Abitur*, but less so afterwards (Teichler 2002: 367). Given the very early branching point into different secondary school types that determine eligibility for postsecondary studies, demands for equal opportunities at the later stages are somewhat moot. Correspondingly, in the German context, inequalities are rather observed in relation to the choice of vocational training versus university education (cf. Duru-Bellat, Kieffer and Reimer 2008: 365). However, the new consecutive degree

structure could have a social cost, as students from lower SES backgrounds may refrain from post-graduate studies (Reuter 2003: 23), the effect being reinforced by the introduction of tuition fees in some states.

To date, the structural changes due to the Bologna reforms have not yet increased the disposition of those from lower social classes to study. Moreover, the reforms have not increased the proportion of those who are eligible to embark on higher education studies (Kretschmann 2008: 59). In fact, political goals associated with the Bologna reforms regarding the age of graduates, fewer dropouts, reduction of disciplinary boundaries, and increase of mobility of students (cf. e.g. KMK 2003), have not yet been achieved, and are actually called in question considering some recent developments (Dobischat, Fischell and Rosendahl 2008: 97). For example, while projections show a rapidly growing demand for higher education, the supply of study places is under pressure due to the transition to the new degree structure, which requires a higher staff capacity (Kaiser et al. 2007: 28f.; Kaulisch and Huisman 2007: 33). Another issue is that the creation of a European Higher Education and Research Area facilitates heightened competition between universities and, as such, will most likely be to the advantage of the natural and technical sciences as compared to the humanities, and, thus, may reinforce already existing gender imbalances (Kupfer 2004: 155ff., 274f.).

At this stage, findings with regard to the link between the Bologna and Copenhagen reforms and rising social (in)equality, new transition patterns into employment, or growing tensions between universities and *Fachhochschulen* and other skill formation organizational forms are still preliminary. This, in turn, reinforces the necessity to look beyond national borders, not only to see how European education and training policies affect differing national educational and employment systems, but also to better determine the mechanisms through which nationally specific institutional settings influence individual outputs and outcomes.

## 4 Comparing the French and German Cases

This study, which will compare Germany and France along the lines presented in the above country chapters, follows the logic of difference that suggests an investigation of what may be similar reactions to recent European reforms despite such different national educational ideals and institutional arrangements. The on-going research task is to contrast international and European isomorphic pressures in the reforms of dissimilar skill formation sectors in France and Germany and examine whether international arguments and agreements wield greater influence in federalist Germany than in more centralized France—and how they are interpreted and implemented. In other words, the relationships between ideas, norms, and policies in *both* HE and VET sectors need to be understood within their national contexts and close attention paid to Europeanization processes in educational systems responsible for skill formation as well as in the receiving labor markets. Furthermore, if Duru-Bellat, Kieffer and Reimer (2008) find stable social background effects over the past few decades in comparing access to postsecondary education in France and Germany, what consequences does this have for on-going Europe-wide policy reforms and institutional changes in each country?

## 5 Appendices

### *Upper Secondary Education Organizational Forms, Germany (ISCED 3A, 3B, 4A)*

ISCED	Organizational Form	Entrance Requirement (minimum)	Certificates awarded
3B (access to 5B)	Berufsschule (part-time vocational school plus apprenticeship; dual system)	Hauptschulabschluss	Leaving certificate/certificate of apprenticeship
3B (access to 5B)	Berufsfachschule (full-time vocational school)	Mittlerer Schulabschluss*	Assistant ..., Assistant ... + Fachhochschulreife, Leaving certificate
3B (access to 5B)	Schule des Gesundheitswesens (health sector schools)		Leaving certificate for auxiliary medical occupations
3A (access to 5A)	Berufliches Gymnasium/Fachgymnasium (vocational Gymnasium)	Mittlerer Schulabschluss*	Fachhochschulreife, Fachabitur/fachgebundene Hochschulreife, Abitur/allgemeine Hochschulreife
4A (access to 5A)	Fachoberschule, Berufsoberschule FOS 13 (in couple of federal states), BOS 13	Mittlerer Schulabschluss* + apprenticeship certificate	Fachhochschulreife, Fachabitur/fachgebundene Hochschulreife, Abitur/allgemeine Hochschulreife
4A (access to 5A)	Berufskolleg	Mittlerer Schulabschluss*	Regionally specific, a selection of above

### *Post-secondary & Tertiary Education Organizational Forms, Germany (ISCED 5A & 5B)*

ISCED	Organizational Form	Entrance Requirement (minimum)	Certificates Awarded	Duration (years)
5B	Schule des Gesundheitswesens (health sector schools)	Qualification for medical auxiliary occupations or apprenticeship certificate	Leaving certificate	2-3
5B	Fachschule, Fachakademie (part- or full-time advanced vocational schools)	Apprenticeship certificate and work experience in the respective occupation	Fachhochschulreife, Fachschulabschluss	2
5B	Berufsakademie (vocational academy)	Abitur/allgemeine Hochschulreife, employment with a company	Bachelor, Diplom (BA)	3
5B	Hochschule für öffentliche Verwaltung (college of public administration)	Fachhochschulreife, plus usually appointment by the respective public authority	Diplom (FH)	3-4
5A	Fachhochschule	Fachhochschulreife, plus often a relevant internship	Bachelor Master Diplom (FH)	3-4 1-2 4
5A	Universität, Hochschule <sup>14</sup>	Abitur/allgemeine Hochschulreife	Bachelor Master Diplom Magister Artium 1. Staatsexamen	3-4 1-2 4-5 4.5 4.5

Source: Adapted from Schneider (2008b) \* Realschulabschluss, Mittlere Reife, Fachoberschulreife

<sup>14</sup> The term *Hochschule* refers to *Technische Hochschule* (technical universities), *Pädagogische Hochschule* (colleges of education), and *Musik- und Kunsthochschulen* (conservatoires and art colleges).

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