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Reforming the VET System via National Qualification Frameworks? A Comparison of Germany and Austria

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Issues Determining the Current Development of the German Qualifications Framework

National qualifications frameworks 'support the objectives of strong and accessible qualifications pathways, a transparent qualifications system, and one that facilitates lifelong learning' (Keating, 2008, p. 1). In this context, the European Union – with the implementation of the EQF – sees the boundaries between various sectors of the educational and/or training system, including higher and further education, as more and more permeable sub-systems. This premise is based on a specific understanding of 'competence' – very similar to the concepts developed in Anglo-Saxon countries, such as Australia and the UK, which are countries with rather 'open' training markets without strong formal regulation (Harris, 2001). The idea of a flexible, individual and ongoing acquisition of competences which should be independent from courses also provides the basis for open forms of learning. In this context, which includes new approaches to assessment (Wolf, 1995; Deissinger and Hellwig, 2005; Hellwig, 2006), such as RPL (recognition of prior learning) or APL (accreditation of prior learning), two facets of the debate have become relevant in particular for the German situation and also emerge as problems when it comes to drafting of the DQR published in February 2009:

- The first one refers to the to the problem of interpreting 'competence' in different national contexts, i. e. transforming the EQF to a national semantic level, with the specific German tradition and use of 'competence' being 'holistic' rather than 'functional'. This includes the creation of a 'competence matrix' featuring vertical

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differentiation in reference levels and horizontal differentiation with respect to various competence dimensions;

- The second one has to do with the challenge to define and describe matrix units and to come to terms with the eight levels and three competence dimensions (knowledge, skills, competences) typical for the EQF, as the German framework has now been presented with four competence dimensions (technical competence, methodical competence, social competence, personal competence). Existing 'qualifications' (certificates) now have to be entered into the drafted DQR matrix. This means that qualifications (which are normally strongly input-steered as they are based on training times, curricula, examination modes etc.) have to be translated into notions of competence which have to be aligned with the various levels of the DQR.

The draft quite clearly arrives at a typical notion of competence which underlies the 'philosophy' of VET in the dual system of apprenticeship training in Germany. The understanding of competence hereby has always been linked to 'inputs' rather than 'outcomes' since 'occupational competence' as a result of training 'embodies all that is associated with an occupational identity' (Winterton, 2009, p. 686). Beyond technical issues, there is no doubt that the process of establishing a consensus-based DQR ultimately requires a common understanding and a common will of stakeholders to materialise this understanding of competence in the various fields of education and training, but also to tackle the 'construction sites' of the German VET system. This means that structural tasks directly affecting the DQR are just one element on the 'European pathway' which needs to be taken. Germany is also facing the issue of legal, administrative and political consequences arising from the competence concept and its national realisation.

An alliance of trade unions and the craft sector currently seems to be lining up when it comes to protecting the character, functionality and importance of the dual system of apprenticeship training as the 'heart' of the German VET system (Greinert, 1994). The papers by Esser (2009) and Nehls (2008) are vivid examples for this structurally conservative point of view. Although both tackle the specific topics of alignment and transparency, indicating 'progression' as one of the central objectives underlying the EQF, their major concern is the 'vocational principle' (Berufsprinzip) commonly described as the 'organisational principle' within the German system of VET (Deissinger, 1998). Nehls (2008, p. 50), for example, points out that 'alignment towards competence and employability skills (should not mean) that socially standardised learning processes (in the shape of training regulations) might be replaced by a combination of arbitrary learning objectives'. In his statement, a substantial

fear of modularisation of VET becomes obvious. Nehls also maintains that the DQR should be aligned in a way to 'enable all young people and adults to acquire recognised and high quality competences capable of long-term and marketable application on the labour market within the scope of lifelong learning' (p. 50). Yet, the main concern for relevant stakeholders who function as social partners within the VET system, still seems to be the established structures of the apprenticeship system, which means they are only willing to accept EU terminology in areas where these traditional structures are not at stake.

Given these tensions between a competence-based modular approach and the 'vocational principle' (Deissinger, 2009), the issue of permeability assumes a major role. Esser (2009) refers to the idea of 'removing pillars' (p. 47), although he applies this concept to the demarcation lines between VET and higher education – admittedly a highly relevant borderline within the German educational system – rather than to the demarcations within the VET system as such, which are responsible for the creation of the so-called 'transition system' (Münk et al., 2008). This 'system' has grown significantly in the last 15 years and has become the object of considerable debate in both the academic research and educational policy communities.[1] It is obvious that the problems associated with the 'transition system', with all their implications for social and economic perspectives of young people, will remain a persistent structural challenge for Germany's educational policy in the next 10 to 15 years (Euler, 2011).

One of the reasons for a lack of commitment in the educational debate to tackle this 'construction site' of the German VET system seems to be the perception that 'competence' and 'modularisation' are twins. In fact, 'Competence-based Education and Training' (CBET) clearly is an Anglo-Saxon invention in the VET world and is linked to 'modularisation' in the respective national contexts (Deissinger, 2009). 'Competence' (e.g. in the British context) or 'competency' (e.g. in the Australian context) can be understood as '... the specification of knowledge and skill and the application of that knowledge and skill to the standard of performance ex-

[1] Although the label of 'programmes of measures' or 'opportunity enhancement system' has been attached to the transition system depending on respective points of view, a closer examination of the structures it exhibits makes it clear that there are at least two transitional thresholds which do not deserve to be associated with a real 'transition' or 'progression' perspective: (i) the first one being the transition from vocational training preparation and similar programmes, both in companies, schools and private training facilities, to 'regular' (i.e. formalised and therefore 'full') vocational training within the dual (apprenticeship) system; (ii) the second one being the transition from full-time VET into the dual system accompanied by the important issue of permeability and equivalence between the two major sub-systems of VET in Germany (Deissinger, 2007).

pected in the workplace'. Consequently, CBET itself may be described as '... training which is performance- and standards-based and related to realistic workplace practices... It is focussed on what learners can do rather than on the courses they have done'. This definition (ANTA, 1998, p. 10; Misko, 1999, p. 3) sees the aim of CBET in the delivery of 'outcomes', which can be combined and measured against standards rather than being linked up with courses, schemes or training institutions (schools, apprenticeships). This outcome orientation also implies new forms of assessment, such as 'Recognition of Prior Learning' or 'Accreditation of Prior Learning' (RPL/APL), mainly through work experience, to ensure the relevance and transferability of skills and knowledge as well as to lead people back into learning. These ideas have been picked up by the 'makers' of the EQF, although it is important to note that attention in the EQF is not simply given to a functionalist understanding of competence: firstly, because 'competence' is seen as a multi-dimensional term; secondly, because competences stand for learning outcomes in a universal understanding, i.e. beyond workplace learning and closely linked to the notion of 'lifelong learning' (Hake, 1999).

This notion of competence implies that learners who complete standards for a qualification are awarded a statement of attainment before they attain a full qualification. It is therefore understandable, given the 'holistic' notion of 'Beruf', that there are also major reservations in the German VET context (once again mainly on the side of trade unions and craft companies) regarding a differentiated observation of the levels of competence between individual training domains as this would affect the traditional formal principle of equivalence between the various training occupations (all in all some 350 in the German apprenticeship system). Esser, for example, (2009, p. 48) suggests a 'scenario 2', which in his view involves following a similar process to that adopted with the 'Bologna qualifications' within higher education, localising both VET qualifications and VET entry entitlements to a specific reference level of the DQR while at the same time allowing various requirement levels only within a defined skills area (e.g. in the sense that a one-year vocational preparation course in the commercial sector would be unambiguously on a lower level than a fully-fledged vocational qualification deriving from a three year course in the apprenticeship system). As this is one of the strong attitudes in the VET policy context in Germany, other issues are closely linked to the belief in the exclusive character of training qualifications in the dual system and the formal value of a 'holistic' competence within the German entitlement system. This goes hand in hand with a lukewarm handling of the issue of informal and non-formal learning, and the fact that comprehensive and reliable accreditation structures and mechanisms even within formalised VET, i.e. above all between full-time VET and apprenticeships,

do not exist at all (Deissinger, 2007; 2010b; Gutschow and Seidel, 2011). The reason for this may be seen in the dominant role the dual system of apprenticeship training plays within the German VET system (Deissinger et al., 2011).

Germany: The Culture of a Long-established Apprenticeship System

With its typical 'learning culture' – quite in contrast with Anglo-Saxon countries – Germany certainly is an 'apprenticeship country' (Harris and Deissinger, 2003). Its institutionalisation as a dual system of VET (Deissinger, 2010a) receives broad acceptance among companies, since it is the most important non-academic route in the post-compulsory sector for those German school leavers seeking for a formal qualification outside the higher education system. These formal qualifications are based on 'skilled training occupations', and the dual system recruits some 60% of 16–19-year-olds (from different school backgrounds including higher secondary education), providing for a generally high level of formal 'intermediate skills' skills in the German labour market (Marsden and Ryan, 1991). Unlike in the UK or in France, where they only stand for a marginal sector within the VET system, apprenticeships exist in nearly all branches of the German economy, including the professions and parts of the civil service.

Institutionalisation and didactical systematisation as well as standardisation, including a uniform examination system, correspond with a 'learning culture' in the German apprenticeship system which makes companies the principal stakeholders in the process of skill formation (Harris and Deissinger, 2003). At the same time, compulsory vocational education provided through school attendance in the part-time vocational school, lasts until the end of the apprenticeship and includes theoretical vocational learning as well as general subjects. Ryan puts this in contrast with the Anglo-Saxon (English) approach to VET: 'A striking difference from Germany is the absence of minimum training periods, such as a three-year programme for bakers. Similarly, apprentices need not take part-time technical education' (Ryan, 2001, p. 136). As part of compulsory post-secondary education, the apprenticeship system is strongly regulated through the school acts of the federal states, and – with respect to company-based training – the Vocational Training Act (Deissinger, 1996).

It is with respect to VET in schools that the German VET system appears as a segmented entity. Due to constitutional and political reasons, full-time and part-time VET still remain more or less unconnected, even if the local or regional vocational part-time school and the various types of full-time schools are in most cases phys-

ically assembled under one roof in so-called vocational school centres (Deissinger et al., 2006). Against the background of missing links between various forms and sub-systems of VET, the federal government, in 2005, put a new Vocational Training Act into operation, containing the following intentions (Bundesministerium für Bildung und Forschung, 2005):

- the inclusion of vocational preparation schemes within the scope of regulation of the law and with it the implementation of an appropriate system of qualification modules;
- the transferability of credits obtained in school-based VET via by-laws of the federal states;
- a more intense internationalisation of VET by providing opportunities for apprentices to undergo part of their vocational training abroad and
- an ongoing modernisation of examinations by establishing the 'extended' final examination.

Modernisation within the dual system is currently taking shape mainly on the curricular level, including the concept of 'learning fields' in the vocational school curriculum, which abolishes the traditional orientation along subjects and is meant to render instruction in schools more 'realistic' (Huisinga et al., 1999). New or revised training schemes within the system of 'skilled training occupations' now even allow for modest ways of modularisation. Implanting modules within training schemes as didactical units with a mandatory but optional character (like in the IT occupations created in 1997) no longer is seen as incompatible with the traditional idea of holistic skill formation and the 'occupational orientation' of training (Euler, 1998, pp. 96 et seq.; Deissinger, 1998). However, there are other suggestions using modules in a more open manner, and there is agreement in the research community that the system has to become more flexible (Euler and Severing, 2006; Baethge et al., 2007). In fact, the German VET system has hardly any reliable legal or curricular links between VET and higher education in terms of progression, inclusion and permeability of the education system. Another feature concerns unreliable links between different streams within VET, especially when it comes to the valuation and accreditation of school-based full-time VET or vocational preparation and integration measures. A serious deficiency may also be seen in the lack of pedagogical or curricular differentiation within the apprenticeship system in terms of skill levels and duration, also with respect to the special needs of students, including structurally disadvantaged young people. Furthermore, there are no clear relationships, let alone crediting, between non-formal or informal learning and formal VET.

As the EQF has been set up with the idea of improving transparency and comparability of qualifications and certificates, all kinds of 'open borders' may be considered as serving this political strategy. Besides, enhancing permeability and parity of esteem between general and vocational education may be seen as one of the essentials of Europeanisation (Busemeyer, 2009, p. 5). One tool hereby is the implementation of 'hybrid qualifications'. These qualifications so far have played a rather subordinate role within the German education system and do not appear on the current German educational policy agenda. This comes as a surprise as other European countries, including Switzerland and Austria, have successfully implemented and gained experience with hybrid pathways. Progression to higher education in a formal manner in Germany through a fully fledged VET course is limited because there is no direct pathway from apprenticeship to university or polytechnic. Instead, students need to take detours, either before or following an apprenticeship in the dual system, once they want to proceed to higher education. Basically, only two types of institutions provide access from the vocational school system to higher education (full-time not part-time): 1) the 'Wirtschaftsgymnasium' and the 'Technisches Gymnasium' (commercial or technical vocational high school), and 2) the 'Berufskolleg' or 'Höhere Berufsfachschule' (vocational college). In the first case, students obtain a general higher education qualification certificate (Abitur), in the second case they go for a lower-level polytechnic entrance qualification (Fachhochschulreife) together with a so-called 'assistant qualification' (Deissinger, 2007). Only the latter may be considered to have the quality of a 'hybrid qualification' since it is linked to an occupational qualification (which does not yet have any substantial value on the labour market as it is not an apprenticeship qualification).[2] It is obvious that the strong focus on traditional apprenticeships as the gold standard for employment renders these pathways largely irrelevant.

[2] Against the background of increasing qualification needs, the issue of permeability between vocational and general education certainly has become a major focus of European education and training policies and one of the objectives of the EQF. Our Leonardo Project 'Hybrid Qualifications' – increasing the value of Vocational Education and Training in the context of Lifelong Learning (2009–2011), including Germany, Denmark, England and Austria, has been designed to improve understanding of institutional links between higher education, VET and working life across Europe. The specific focus of our study is linked to the topic of this paper and emphasises structures and processes which help to combine VET with qualifications leading into higher education in the sense of a double qualification (see also Deissinger et al., 2011).

Austria: The 'Two-pillar' Concept within the National VET System

Despite its cultural and historical similarities to Germany, Austria is remarkably different with regards to the relationship between full-time and part-time VET. This is even more surprising as only few countries in the European Union have kept structurally highly developed dual systems which have emerged from the traditional apprenticeship culture of the Middle Ages. Besides Austria, Germany and Switzerland, this term may only be used with reference to the Danish and the Dutch VET system (Deissinger, 2010a; see also Steedman, 2010 for an overview of apprenticeships). Due to a high degree of employer involvement in the context of a 'coordinated market economy' and a 'collectivist training regime, which is linked to portable and certified occupational skills' (Trampusch, 2009, pp. 375 et seq.), these VET systems have the advantage that they are able to impart holistic competences needed in the world of work. Especially Anglo-Saxon researchers and observers have positive perceptions of these apprenticeship systems, not only because enterprises play a major role but also because training commitment is partly compensated for by making use of the productive contribution of trainees during the training period, which is specifically manifest, at least in the case of Germany, in quite a number of occupations of the craft sector. If one looks at Switzerland, Austria, but also the Northern province of Italy, the Alto Adige (Südtirol) with its German-speaking population, we find similar structures, once again mainly in the craft sector. Switzerland is the most manifest example of an 'apprenticeship country'. Here, some 70% of young school leavers enter the apprenticeship system (called 'Berufliche Grundbildung' or 'vocational foundation training' in some 250 occupations); in the German-speaking cantons this percentage even exceeds 85% (Gonon and Wettstein, 2009, p. 112). In Austria, some 40% of the school-leaving population normally undergo training in one of the 260 training occupations currently on offer after compulsory schooling. As in Germany, Austrian VET policy enforces a continuous renewal and adaptation of the contents of this training to keep it up-to-date (Archan and Wallner, 2007). However, full-time VET plays a major role in the VET system, and therefore the Austrian VET system may be described as a 'two-pillar concept' (Aff, 2006).

Austria's VET system, as far as apprenticeships are concerned, has many similarities with Germany, due to many parallel historical developments going back to the Middle Ages. Also, Austria is a federal state although the central government has a major say in educational matters, including the regulation of schools involved in VET. The more 'holistic character' of the Austrian VET system may be an expres-

sion of this comparatively strong state regulation, but it is also the structure of the system itself which appears more homogeneous than in the German case. Generally, observers call it a 'two-pillar system' (dual system plus full-time VET) or even a 'three-pillar system', since in fact two types of full-time vocational schools (representing different levels of educational achievement and different course structures) stand in par with the dual system, which is not as highly rated, socially and economically, as in Germany and is not seen as the most relevant pathway into skilled employment (Rauner, 2008, p. 24).

In Austria more students attend full-time VET than the apprenticeship system, and more undergraduates in higher education come from vocational schools than from general education.[3] The two institutions providing this alternative pathway for school-leavers are the 'Berufsbildende Mittlere Schule' (BMS or vocational middle school) and the 'Berufsbildende Höhere Schule' (BHS or vocational high school/college) (Aff, 2006). The BMS is a three-four year type of school which, besides a vocational qualification, offers the opportunity, through an additional examination called the 'Berufsreifeprüfung', to obtain a 'hybrid qualification' which in turn leads to a general university entrance qualification (Klimmer and Schlögl, 2001). The BHS takes five years, and offers a curriculum, like the BMS, that combines general studies with theoretical and practical vocational learning. The BHS includes 'practice firms' (Übungsfirmen), a kind of complex learning environment which has also been implemented in the full-time VET system of Germany, however with little success with respect to raising the labour market value of school-based (non-apprenticeship) qualifications. The BHS with its crucial institutional realisation in the commercial sector, the HAK (Handelsakademie) is a highly attractive training option since it offers entry into relevant labour markets, such as tourism, and also entry to all universities. In the case of a follow-up entry from the BHS to a polytechnic (Fachhochschule) there is even the option to get prior learning from the vocational school course accredited towards the academic course. Another feature which shows how closely BHS and higher education seem to be interwoven is the use of occupational titles commonly reserved for the tertiary system, such

[3] In 2007/08, approx. 20% of all Austrian 10th year students attended a secondary academic school (AHS), which provides them with a general university entrance qualification (Matura). The striking feature within the Austrian education system, however, is that the majority of students in higher secondary education are located within vocational education. Two out of five students undergo vocational training within the dual system, whereas some 12% attend a vocational middle school (BMS) taking three to four years, and some 35% enter a VET college (BHS) which takes five years (Bundesministerium für Unterricht, Kunst und Kultur, 2009, p. 18).

as 'Ingenieur' (normally a diploma qualification equivalent to a Master), which are granted at technical high schools (Elsik and Piskaty, 1998).

Graduates from the commercial academies (Handelsakademien), which are the business-oriented type of the BHS, undergo occupation-based training as well as general education that enable them to attain the university entrance qualification for all subjects (Allgemeine Hochschulreife). The five-year courses here take longer than in the higher levels (Sekundarstufe II) of general education. If one looks at the student population in recent years, the numbers prove that both students and parents obviously value these qualifications and it is in fact the five-year course which has become increasingly attractive. As a matter of fact, the 'labour market integration ratio' of BMS and BHS rose from 21 to 57% between 1970 and 2005 (Hoppe 2005). It is therefore the BHS which is seen as the 'winner' of this shift away from both general higher secondary education and the apprenticeship system. With the introduction of Bachelor degrees in the wake of the 'Bologna process', however, the commercial academies might be coming under increasing pressure as new qualifications could replace the traditional ones, particularly in the more sophisticated occupational areas.

One of the unique strengths of the Austrian VET systems certainly is that BMS and BHS co-exist alongside the dual system without becoming a 'rival' for the apprenticeship sector. According to experts, the Austrian VET system, with its 'two-pillar concept', offers greater potential for curricular and educational innovation than the strongly traditional German system (Aff, 2006, p. 21). It seems therefore that the Austrian VET system could serve as a 'best-practice-approach' for the future development of full-time VET in Germany.

Concluding Remarks

From a critical perspective, leaving aside political arguments and focusing on pedagogy, 'Europeanisation' of the German educational landscape in connection with the DQR has to consider two issues. First, it seems essential to secure and further develop those aspects of the VET system which are viewed as being purposeful in functional, pedagogical and societal terms. Second, there also needs to be willingness to embrace something new in order to take a constructive approach to overcoming national problem areas and working on the above-mentioned 'construction sites' by referring to 'Europe' as a motivator and blueprint. It is also important, however, to avoid simply copying a 'philosophy' with uncertain benefits because it clashes with traditional values and features of the VET system.

Quite clearly, there are signs that VET policy in the case of Germany is at least rhetorically willing to proceed on the 'European path of change'. The consultations on the German Qualifications Framework (GQF), under the umbrella of both the Federal Ministry of Education and Research (BMBF) and the German Education Ministers Conference (KMK), are a proof for this. Nonetheless, the relevant actors (above all trade unions and employers organisations) in Germany still find it hard to conclude from the EQF blueprint that introducing different levels of occupations or occupational profiles or even designing training according to more explicitly modular principles would be corresponding measures that could help realise the 'competence concept' underlying the EQF. A study commissioned by the Federal Ministry of Education suggests that all kinds of VET, independent from the venue and the duration of the training measure, should be re-aligned in a national modular system, without giving up the option to get trained in a 'full occupation' (Euler and Severing, 2006).

For Germany, taking the European framework issue seriously means that permeability – both inside and outside the narrower scope of the VET system, inevitably has to become a crucial feature of educational policy, with the aim to enable students to travel from one system to the other along specified progression routes. For this purpose, the following questions have to be raised and discussed seriously:

- How should the increasing pluralism be tackled within the VET system (apprenticeships, full-time school based VET, vocational training preparation and other 'measures') and what perspectives have to be taken for an adoption of the so-called 'transitional system' within the DQR?
- What policy and what kind of didactical tools are required to give appropriate consideration to the function of school-based VET within the overall VET system, especially with regard to interlinkages and accreditation mechanisms, and how is it possible to enhance its value substantially?
- To what extent can informally acquired competences be linked with the certification structures of conventional educational pathways and what kind of certification or accreditation system is needed for this purpose, including institutional and legal areas of responsibility?

The 'demarcation lines' typical of the German VET system are a main contributing factor in making VET which takes place outside the dual system, i.e. in vocational schools, one of the problem zones within the German VET system. Although school-based vocational training is recognised in terms of its educational policy function, it has traditionally suffered from the subordinate role accorded to the training function of school-based qualifications (Deissinger, 2007, 2010b). Against

the 'hegemony' of the dual system, school-based occupations according to federal state law in particular are still being measured against apprenticeships and hence do not possess a value as such. In contrast to vocational schools in Austria (Aff, 2006), full-time vocational schools in Germany only fulfil classical training tasks to a very limited extent. The emphasis away from vocational training in a traditional labour-market related sense indicates the intention (in particular in the southern federal states of Germany) to lead students to a follow-up vocational training course in the dual system through a vocational full-time school, and students have a relatively clear perception of this. At the same time, this means that occupations which are regulated in accordance with federal law (Vocational Training Act) and for which training takes place at full-time vocational schools produce different 'values' on the labour market compared to training courses constructed under federal state law, which are in a strong competitive relationship with the state-recognised training occupations based on the Vocational Training Act, and therefore with the dual system.

In my view, the DQR with its focus on outcomes instead of courses also calls for a differentiated form of modularisation aligned towards the principle of skilled occupations, which does not need to be a copy of the Anglo-Saxon modular approach (Deissinger, 2009). A normative argument, which I am able to follow for pedagogical reasons, may be used to underline this: A paper produced by the Federal Catholic Youth Social Work Association (BAGKJS, 2009) has issued, with respect to the DQR, a warning not to lose sight of educational opportunities for disadvantaged young people, which are over-represented in the 'transition system'. This exhortation comes up with demands to adopt the basic ideas of the EQF and DQR in an abridged form as well as to become aware of the 'educational biography approach' and thereby to the concept of competence. Although no direct adoption of the outcome principles originating within the Anglo-Saxon VET system policy context is required for this purpose, we need to deal comprehensively with the 'construction sites' within the German educational and VET systems. With regard to the 'transition system', my view is that the major guiding principle should be that aspects such as traditions, areas of responsibility and trust in something which is fully tried and tested do not abandon those young people who do not benefit from a 'regulated system' of vocational education and training. At the same time, on a higher level of the DQR hierarchy, rethinking the links between VET and higher education seems essential.

The case of Austria proves that a well-functioning apprenticeship system does not need to be in conflict with demanding VET courses leading to 'hybrid qualifications' and therefore contributing to maintaining a highly trained workforce on all levels of commerce and industry. The two countries do not just differ on ac-

count of their institutional diversity in the VET system and the relevance of various modes of vocational training (on-the-job/dual and off-the-job/school-based respectively), but also in their respective reform strategies which seem to be influenced by the European agenda in different ways. It seems that Austria is 'more prepared' for transferring this agenda, in particular when it comes to 'hybridity', and we may agree with Trampusch that 'in Austria, Europeanization happens as institutional change by default' rather than as a deliberate 'proactive' reform process (Trampusch, 2009, pp. 386 et seq.). It needs to be added – without entering a political science analysis – that the latter is certainly visible in Germany, although still more on rhetorical than practical levels.

Bibliography

Aff, J. 2006. Berufliche Bildung in Vollzeitschulen – konjunkturabhängige Hebamme des dualen Systems oder eigenständige bildungspolitische Option? M. Eckert and A. Zöller, (eds.), *Der europäische Berufsbildungsraum – Beiträge der Berufsbildungsforschung*, Bielefeld, Bertelsmann, pp. 125–38.

Archan, S. and Wallner, J. 2007. Von der Idee zur Umsetzung: Die Entstehung von Lehrberufen. *bwp@ Berufs- und Wirtschaftspädagogik online.* http://www.bwpat.de/ATspezial/archan_wallner_atspezial.pdf (Accessed 22 June 2010.)

Australian National Training Authority. 1998. Updated Guidelines for Training Package Developers: Australia's National Training Framework. Melbourne.

Baethge, M.; Solga, H. and Wieck, M. 2007. *Berufsbildung im Umbruch. Signale eines überfälligen Aufbruchs.* Berlin, Friedrich-Ebert-Stiftung.

BAGKJS. 2009. Kompetenzen – nicht allein Abschlüsse – entscheiden. Mit Hilfe des Deutschen Qualifikationsrahmens benachteiligten Jugendlichen Bildungschancen ermöglichen. (Position paper from 25 May 2009.)

Bundesministerium für Bildung und Forschung. 2005. Die Reform der beruflichen Bildung – Berufsbildungsgesetz 2005. Bonn.

Bundesministerium für Unterricht, Kunst und Kultur. 2009. *Zahlenspiegel 2008. Statistiken im Bereich Schule und Erwachsenenbildung in Österreich.* http://www.bmukk.gv.at/medienpool/17604/zahlenspiegel_2008.pdf. (Accessed 22 June 2010.)

Busemeyer, M.R. 2009. Die Europäisierung der deutschen Berufsbildungspolitik. Sachzwang oder Interessenpolitik? Berlin, Friedrich-Ebert-Stiftung.

Deissinger, T. 1996. Germany's Vocational Training Act: Its function as an instrument of quality control within a tradition-based vocational training system. *Oxford Review of Education*, Vol. 22, pp. 317–36.

Deissinger, T. 1998. Beruflichkeit als „organisierendes Prinzip" der deutschen Berufsausbildung. Markt Schwaben, Eusl.

Deissinger, T. 2007. 'Making Schools Practical': Practice firms and their function in the full-time vocational school system in Germany. *Education and Training*, Vol. 49, No. 5, pp. 364–79.

Deissinger, T. 2009. Modularisierung im angelsächsischen Kulturraum – bildungspolitische Ausgangslagen und strukturelle Umsetzungen im Großbritannien. M. Pilz (ed.), *Modularisierungsansätze in der Berufsbildung. Deutschland, Österreich, Schweiz sowie Großbritannien im Vergleich*. Bielefeld, W. Bertelsmann Verlag GmbH & Co. KG, pp. 113–31.

Deissinger, T. 2010a. Dual System. P. Peterson; E. Baker and B. McGaw (eds.), *International Encyclopedia of Education*, 3rd edn, Vol. 8. Oxford, Elsevier, pp. 448–54.

Deissinger, T. 2010b. Warum funktionieren berufliche Vollzeitschulen in Deutschland anders als in Österreich? – Kritische Anmerkungen im Zeichen nationaler und internationaler Problemlagen. R. Fortmüller and B. Greimel-Fuhrmann (eds), *Wirtschaftsdidaktik – Eine Tour d'Horizon von den theoretischen Grundlagen zur praktischen Anwendung*. Wien, Manz, pp. 181–89.

Deissinger, T.; Heine, R. and Ott, M. 2011. The dominance of apprenticeships in the German VET system and its implications for Europeanisation – a comparative view in the context of the EQF and the European LLL strategy. *Journal of Vocational Education and Training*, Vol. 63, No. 3, pp. 397–416.

Deissinger, T. and Hellwig, S. 2005. Structures and Functions of Competence-based Education and Training (CBET): A Comparative Perspective. *Beiträge aus der Praxis der beruflichen Bildung*, No. 14.

Deissinger, T.; Smith, E. and Pickersgill, R. 2006. Models of Full-time and Part-time Vocational Training for School-leavers: A comparison between Germany and Australia. *International Journal of Training Research*, Vol. 4, No. 1, pp. 30–50.

Elsik, M. and Piskaty, G. 1998. *Das Berufsbildungssystem in Österreich*. Luxemburg, Amt für amtliche Veröffentlichungen der Europäischen Gemeinschaften.

Esser, F.H. 2009. Der DQR in der Entwicklung – Würdigung und Vorausschau. *Berufsbildung in Wissenschaft und Praxis*, Vol. 38, No. 4, pp. 45–49.

Euler, D. 1998. Modernisierung des dualen Systems – Problembereiche, Reformvorschläge, Konsens- und Dissenslinien. Bonn, Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung.

Euler, D. 2011. Lauthals schweigen? – Über den Umgang mit (Ab-)Brüchen und fehlenden Übergängen auf Bildungswegen. *Zeitschrift für Berufs- und Wirtschaftspädagogik*, Vol. 107, No. 3, pp. 321–27.

Euler, D. and Severing, E. 2006. *Flexible Ausbildungswege in der Berufsbildung*. Nürnberg, Bertelsmann.

Gonon, Ph. And Wettstein, E. 2009. *Berufsbildung in der Schweiz*. Bern, hep verlag.

Greinert, W.-D. 1994. The 'German System' of Vocational Training. History, Organization, Prospects. Baden-Baden, Nomos Verlagsgesellschaft.

Gutschow, K. and Seidel, S. 2011. Can the German Qualifications Framework contribute to the recognition of non-formal and informal learning? *BWP Special Edition 2011*, pp. 35–38.

Hake, B.J. 1999. Lifelong Learning Policies in the European Union: developments and issues. *Compare*, Vol. 29, No. 1, pp. 53–70.

Harris, R. 2001. Training Reform in Australia – Implications of a Shift from a Supply to a Demand-driven VET System. T. Deissinger (ed.), *Berufliche Bildung zwischen nationaler Tradition und globaler Entwicklung. Beiträge zur vergleichenden Berufsbildungsforschung*. Baden-Baden, Nomos Verlagsgesellschaft, pp. 231–54.

Harris, R. and Deissinger, T. 2003. Learning cultures for apprenticeships: A comparison of Germany and Australia. J. Searle; I. Yashin-Shaw and D. Roebuck (eds), *Enriching Learning Cultures. Proceedings of the 11th Annual International Conference on Post-compulsory Education and Training*, Vol. 2. Brisbane, pp. 23–33.

Hellwig, S. 2006. Competency-based Training: different perceptions in Australia and Germany. *Australian Journal of Adult Learning*, Vol. 46, No. 1, pp. 51–73.

Hoppe, M. 2005. Merkmale und Besonderheiten vollzeitschulischer Berufsausbildung in den Niederlanden, Österreich und Dänemark. *Berufsbildung Wissenschaft und Praxis*, Vol. 34, No. 4, pp. 51–54.

Huisinga, R.; Lisop, I. and Speier, H.-D. 1999. *Lernfeldorientierung. Konstruktion und Unterrichtspraxis*. Frankfurt a. M.

Keating, J. 2008. Qualifications Systems and National Qualifications Frameworks. Melbourne, Australia. (Paper presented at Monash University-ACER Centre for the Economics of Education and Training Annual Conference, 31 October 2008.)

Klimmer S. and Schlögl, P. 2001. Die österreichische Berufsreifeprüfung – Konzeption und erste Erfahrungen. G. Rothe (ed.), Die Systeme beruflicher Qualifizierung Deutschlands, Österreichs und der Schweiz im Vergleich. Kompendium zur Aus- und Weiterbildung unter Einschluss der Problematik Lebensbegleitendes Lernen. Wien, öbv and hpt, pp. 190–92.

Marsden, D. and Ryan, P. 1991. Initial Training, Labour Market Structure and Public Policy: intermediate skills in British and German industry. P. Ryan (ed.), *International Comparisons of Vocational Education and Training for Intermediate Skills*. London, The Falmer Press, pp. 251–85.

Misko, J. 1999. *Competency-based Training*. Leabrook, NCVER.

Münk, D.; Rützel, J. and Schmidt, C. (eds). 2008. Labyrinth Übergangssystem. Forschungserträge und Entwicklungsperspektiven der Benachteiligtenförderung zwischen Schule, Ausbildung, Arbeit und Beruf. Bonn, Pahl-Rugenstein Verlag.

Nehls, H. 2008. Noch kein Konsens bei der Konkretisierung eines Deutschen Qualifikationsrahmens. *Berufsbildung in Wissenschaft und Praxis*, Vol. 37, No. 2, pp. 48–51.

Rauner, F. 2008. *Steuerung der beruflichen Bildung im internationalen Vergleich. Eine Studie im Auftrag der Bertelsmann Stiftung*. http://www.bertelsmann-stiftung.de/bst/de/media/xcms_bst_dms_25899_25900_2.pdf (Accessed 15 December 2009.)

Ryan, P. 2001. Apprenticeship in Britain – Tradition and Innovation. T. Deissinger (ed.) *Berufliche Bildung zwischen nationaler Tradition und globaler Entwicklung*. Baden-Baden, Nomos-Verlagsgesellschaft, pp. 133–57.

Steedman, H. 2010. *The State of Apprenticeship in 2010. International comparisons.* London, Centre for Economic Performance, The London School of Economics and Political Science.

Trampusch, C. 2009. Europeanization and Institutional Change in Vocational Education and Training in Austria and in Germany. *Governance*, Vol. 22, No. 3, pp. 369–95.

Winterton, J. 2009. Competence across Europe: highest common factor or lowest common denominator? *Journal of European Industrial Training*, Vol. 33, No. 8/9, pp. 681–700.

Wolf, A. 1995. *Competence-Based Assessment*. Buckingham.