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## **The German 'Philosophy' of Linking Academic and Work-based Learning in Higher Education: the case of the 'vocational academies'**

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**ABSTRACT** In Germany, structures and channels through the education system at first glance appear to be resilient to possible deviations from paths that have always been identified as reliable and more or less successful. One of the examples of a deeply rooted disinclination to reform is the Dual System of initial vocational training, which owes much of its reputation to the fact that it has remained one of the most frequently copied training systems in the world. Although the dualism of 'learning venues' may, at first glance, be the striking feature of this 'German system' of vocational training there is more to it, especially consensus among the groups involved in the system, the vocational principle as a didactical and structural parameter and also the remarkable contribution to standardisation and quality control from the state. The article depicts what may be seen as the successful transposition of these or similar principles into higher education. The result has been a kind of 'academic Dual System' that, despite its growing importance, is still a regional reform project since the emergence of the so-called 'vocational academies' (*Berufsakademien*) has virtually remained restricted to four of the 16 federal states of Germany.

### **Introduction** <sup>[1]</sup>

The need to modernise training systems as a 'future-proof' strategy has emerged as a central issue of educational policy, both at home and abroad. Although intensity, speed and decisiveness alter from country to country, it appears that modernisation has become an international phenomenon or problem, a fact that is underlined by the European Union's commitment to 'life-long learning' as a global strategy for all European countries (Kommission der Europäischen Gemeinschaften, 1996). As a consequence, the borders drawn between the various sectors of the educational and/or training system, including further and higher

education, are likely to become more and more permeable as the perception of a mismatch of learning outcomes with work requirements demands a fundamental rethinking of traditional courses, as well as curriculum patterns. The overall impression in Germany is that such a process of re-orientation is currently being enforced most visibly and palpably in Britain where, since the early 1980s, 'vocationalism' has established itself as a defining parameter for fundamental changes in mainstream educational policy (Dale, 1985; Melton, 1995; Marks, 1999). So far, this paradigm has clearly affected the institutional and didactical facets of secondary, further and vocational education partly by evoking far-reaching innovations, such as the National Curriculum or the concept of modularisation in Vocational Education and Training (VET; Hodgson & Spours, 1997). Recent remarkable evidence for the persistency of this strategy and its extension to higher education is seen in the establishment of the University Vocational Awards Council, a consortium of 40 universities with an interest in higher level vocational education and training.

In Germany, where 'the continuance of tradition is highly valued' (Phillips, 1995, p. 61), structures and channels through the education system at first glance appear to be stronger, and more resilient to possible deviations from paths that have always been identified as reliable and more or less successful. One of the outstanding examples of a deeply rooted disinclination to reform is certainly the Dual System of initial vocational training which owes much of its reputation to the fact that it has remained one of the most frequently (though not necessarily successfully) copied training systems in the world (Arnold, 1985; Kloss, 1995). At the same time it may be claimed that some of the negative implications of vocational training reform as it has been carried out in the United Kingdom (above all the fallibility of the outcome approach underlying the National Vocational Qualification (NVQ) system) seem avoidable by sticking to quality standards and quality control implementation, which are quite naturally part of the 'philosophy' of initial training in Germany (Raggatt, 1991; Deissinger, 1996). Although the dualism of 'learning venues' and legal responsibilities may, at first glance, be the striking feature of this 'German system' of vocational training (Greinert, 1994), its working principles, as well as its efficiency are also shaped by at least three more principles that govern the qualification process as a whole:

There is no doubt that vocational training in Germany follows a traditional pattern deeply enshrined in the ancient mode of apprenticeship (Deissinger, 1994). This *vocationalism* means that training is workplace-led and predominantly practical by stressing the importance of work experience during the training period. It also means that the system works in accordance with skill requirements defined 'around the workplace' (Harney, 1985; Deissinger, 1998).

Moreover, the Dual System is determined by the involvement of the federal and state administration, which helps make occupational standards and conditions of skilled apprenticeship legally enforceable as well as marketable (Raggatt, 1988). Hence, the German 'training culture' (Brown & Evans, 1994) is based on the notion that vocational training should not only be interpreted as a contractual duty, but also as an educational process.

Finally, the fact that the state's function is restricted to securing quality standards in a predominantly formal manner makes the principle of consensus perceptively one of the long-standing parameters of dual training in Germany. This means that public and private, as well as semi-private institutions have established various forms of cooperation within the system and, even more importantly, that the social partners normally take the initiative when it comes to defining what kind of training should be forged into a training ordinance (Benner, 1984).

The following sections describe what may be seen as the successful transposition of these or similar principles into higher education. The result has been a kind of 'academic Dual System', which despite its growing importance remains a regional reform project since the emergence of the so-called 'vocational academies' (*Berufsakademien*) has virtually remained restricted to only four of the 16 federal states of Germany (Baden-Württemberg, Berlin, Sachsen, Thüringen).

### **The German System of Higher Education**

Although it has gone through significant changes over the decades, the German higher education system is deeply rooted in the university tradition. The universities, in particular, have been shaped by Wilhelm von Humboldt's idea of general humanistic education typical of the Berlin University in the early nineteenth century, which served as a model for other German universities (Blankertz, 1982, pp. 89 ff.; Menze, 1991). This tradition can still be identified if one looks at the administrative structure of universities characterised by the principle of self-administration, the freedom of teaching and research, and the common belief among German professors that a university should in the first place be a venue for scientific research serving both scholars and students. Hence, the notion of a university qualification at that time was not predominantly linked to preparing students for specific occupations, with the exception of medicine, law and theology. It was only in the twentieth century that degrees – above all the diploma – adopted a certain labour market relevance on a broader scale. Beginning with the 1960s this development was accelerated by the quantitative growth of universities, the emergence of a 'mass university' culture (Baumert et al, 1979, pp. 212 ff.)[2] and the

foundation of new establishments, in particular the polytechnics (*Fachhochschulen/FH*), which up to the present day are seen as an attractive alternative to a purely academic preparation for occupations such as engineer, manager or social worker (Diploma FH). The polytechnics emerged from institutions specialising in practice-related vocational education, notably from the former schools of engineering.

With this increasing differentiation of the higher education system accompanied by an extension of secondary higher education, more and more young Germans [3] now have the opportunity to attend one of the institutions of the tertiary system comprised of:

- universities;
- polytechnics including public administration colleges;
- comprehensive universities (merging university and polytechnic under one roof);
- the distance learning university in Hagen;
- theological colleges;
- colleges of art and music;
- colleges of education (especially in Baden-Württemberg);
- vocational academies (especially in Baden-Württemberg).

As a matter of fact, only about one-third of higher education institutions bear the title of 'university'. Hence, the situation is different from Britain where former polytechnics have become universities. In Germany, there still is a clear distinction between universities and polytechnics and, in particular, the vocational academies are affected by this difference in status and denomination as they belong to the tertiary system but were not always treated as recognised institutions of higher education in a legal sense. Somebody entering the civil service as a graduate from a polytechnic or vocational academy commences at a lower entrance salary, and is normally barred from the highest career positions in public institutions. Another interesting example of differentiation in status among higher education institutions is the so-called *Pädagogische Hochschule* (college of education) in the federal state of Baden-Württemberg, which offers teacher training for primary as well as lower and intermediate secondary schools, but not for employment in vocational or grammar schools, where a university degree is a requirement (Baumert et al, 1979, pp. 225–227). All non-university courses in polytechnics, colleges of education and vocational academies cover 3 years, whereas university studies normally amount to 4 or 5 years of learning. One major difference can also be seen in the fact that polytechnics, vocational academies and colleges of education require compulsory practical courses, internships or even an apprenticeship placement as part of the academic training scheme.

Since 1976, the Federal Government, through the Framework Act of Higher Education (*Hochschulrahmengesetz/HRC*), has been empowered

with a general competence to enact stipulations governing the development of the higher education system in Germany, as well as major organisational principles such as the staff structure and admission procedures. Responsibility for filling this framework with life, however, lies with the *Länder* (federal states), which, according to the German Constitutional Law, also administer the school system and the postacademic and further training of teachers. Therefore, academic staff are civil servants of the respective federal state (e.g. Baden-Württemberg) and these federal states are also the bearers of the running costs of academic institutions.

Currently, some 1.8 million young people are enrolled as students in the German higher education system compared with some 1.6 million in the Dual System of initial vocational training.[4] Admission to a higher education institution in Germany is not necessarily dependent on the final school-leaving certificate, the *Abitur* (the German equivalent to an A-level, granting the right to university study in all subjects). Some secondary general and vocational schools offer polytechnic entrance qualifications or a minor version of the university entrance degree (normally from a vocational upper secondary school or a specialised grammar school), which generally only accesses a limited range of subjects at a university. Whereas enrolment at a polytechnic requires a polytechnic entrance qualification, universities, vocational academies and colleges of education may only be attended by producing an *Abitur*.

#### **Organisational Structure, Training Concept and Legal Status of the Vocational Academies (*Berufsakademien*)**<sup>[5]</sup>

In Baden-Württemberg *Berufsakademien* or vocational academies (VA) provide vocational training outside the Dual System for some 13,000 students in as many as 11 locations and with the cooperation of some 4000 firms offering training placements.[6] The concept actually goes back to 1974 when the first pilot schemes were set up as an alternative to traditional university courses. The VA thus can look back on 26 years of expanded institutional structures, and growing capacity of and participation in the apprenticeship system. The number of academies has increased from two (Stuttgart and Mannheim) to nine. A total of 43 courses are currently offered in the fields of business administration, engineering and social work. The number of school-leavers in Baden-Württemberg taking up a VA course grew with the general development of the VA itself. At the same time, the VA attracted school-leavers from other states, in all one-third of students in 1992. In that year, about 9% of all grammar-school leavers in Baden-Württemberg registered at the VA. This expansion, while helping to solve the problem of too many A-level school-leavers and too few study places, has added a remarkable dimension to specific subjects: business administration alone attracts

two-thirds of the now 13,000 students and, within this, 'management in industry' is the most popular course – of all examinations in business administration in Baden-Württemberg 45.2 % were taken at a VA, 29% at a polytechnic and 25.8% at a university (1991). More recent figures report a share of between 40 and 50% for VAs.[7]

The enactment of the Law on Vocational Academies (*Berufsakademiegesetz/BAG*) in 1982 brought the almost 8-year trial phase to an end and established the vocational academy as a proper institution in the state's tertiary sector (Reinert, 1999, p. 6). Drawing on the results of the trial phase, not only were the organisational structure and training concept barely modified, but the concept developed in the initial phase as a whole was purposely left unchanged. The following legal definition (article 1 I BAG) resulted:

*Vocational Academies offer both a theoretical and a practice-orientated apprenticeship. They fulfill this task through the combination of state academies and apprenticeship placements (Dual System).*

The legal status of the VA in Baden-Württemberg defines it as an 'independent institution of cooperation between state and apprenticing firms, operating neither under the school nor university statutes' (Erhardt, 1993). With its dual structure of learning, and the cooperation between state institutions and firms, the VA lies somewhere between initial vocational training and university studies. Hailbronner (Hailbronner, 1993, p. 12) characterises the VA as a 'higher vocational training institution', while Erhardt (CDU-Landtagsfraktion Baden-Württemberg, 1994) paints the picture of a 'flagship of the dual vocational training system'. However, as the schooling part of the institution, the state academy, is not a school according to the state school law and, thus, not a vocational school in the normal sense of the Dual System partnership, despite the integrated practical part of the training taken in cooperating firms, VA training does not come under the Vocational Training Act (Deissinger, 1996). This is also because this particular type of training is outside the conditions of article 28 Vocational Training Act ('principle of exclusiveness'). It is, therefore, clear that the VA is not of a primary vocational training nature, but is a tertiary sector university-like institution. The law on VAs (article 1 II BAG) states:

*Vocational Academies are part of the tertiary educational system. They constitute an alternative to polytechnic and university studies ... Successful completion of the three-year course of training and education at the Vocational Academy is the equivalent of a degree awarded upon completion of comparable courses by state-run polytechnics.*

The state law here clearly refers to a functional comparability of VA and polytechnic. Against this background, the label 'University of Cooperative

Education' which has been introduced by the Baden-Württemberg Ministry of Science, Research and Arts in its latest marketing strategy (Reinert, 1999, p. 9) is a totally misleading denomination as it suggests a factual as well as a legal parity between the two institutions. This perception is incorrect and has a clear political implication since the VA, as a 'newcomer' in the higher education system, over the years has had to fight a fierce battle to establish its reputation even alongside the polytechnics and also faced resistance from most of the other federal states of Germany (Deissinger, 1995, pp. 432–433). The Baden-Württemberg 'Equality Order' decreed in 1989 [8] gave the VA parity status to polytechnics as an 'equal' institution only within the tertiary sector of this federal state.

Although stressing the unique system of training in the VA the Science Council of Germany (*Wissenschaftsrat*) maintained in 1994 that VAs were 'equal' to existing institutions of higher education. The Science Council had been asked by the state of Baden-Württemberg to set up a workgroup with the task of giving recommendations based on analyses 'expert and free from bias' (*Wissenschaftsrat*, 1994, p. 4). Such a position was given by the Science Council in Schwerin on 20 May, 1994.[9] Summed up, the Science Council took a 'positive view of the VA training structure'. In their opinion, the VA offered a 'differentiated training course from that of a polytechnic but, in the sense of the professional qualification, a comparable training to that of a polytechnic'. The 'most important strengths' of the VA were seen in the '3-year long training course, the focus on practical work and the scientific basis of the syllabus, which secure an easy transition to the workplace, as well as the social skills emerging from the dual concept of training' (*Wissenschaftsrat*, 1994, p. 89).

In 1995, the Conference of German State Ministers of Culture (*Kultusministerkonferenz*) finally resolved to accord full recognition to the *Berufsakademie*. This means that the VA now confers entitlements identical to those attached to polytechnic degrees. As a consequence, the VA now falls under the regulations of the European Council issued in 1988 (89/48/EWG) with respect to degrees in higher education (Zimmermann & Deissinger, 1995, p. 454 f.; Green et al, 1991, pp. 163 ff.). In the meantime, the state law on VAs has been modified to grant access to postgraduate doctoral studies for VA leavers. Nevertheless, the legal status of the VA still distinguishes it from the classical university, as it is a 3-year programme and does not lead into the highest stratum of the civil service, and it undoubtedly introduces a new structural facet to higher education policy, which is unfamiliar to the polytechnics as well.

The VA may be characterised by picking out the following institutional and structural aspects:

The VA is not an institution in itself: it is 'based on the respective laws' (Erhardt, 1993) of the two learning venues, although it serves a genuine



functional objective. Thus, the 'complex cooperation system' of the VA (Erhardt, 1993) is not a legal object as such. This is also shown by the fact that the academy, an educational partner directly comparable to a university, is a state institution with no independent legal status (article 1 III BAG). It is therefore much more state-supervised than a university or polytechnic. The 'state' character of the VA is such that it lacks characteristics typical of public institutions and therefore cannot be classified as an ordinary component of the higher education system (*Hochschule*), such as universities and polytechnics, in a strict legal sense (Hailbronner, 1993, p. 70). Therefore, the decision to grant parity between polytechnic and VA must be seen as a primarily political act which should 'heal' the VA concept of its legal deficits.

In educational policy, the VA continues to be viewed as a tertiary institution, but not as a 'university'. The Conference of German State Ministers of Culture defines the VA as a 'tertiary educational institution' which provides 'secondary school graduates with a professional qualification comparable to a degree in higher education' (Kultusministerkonferenz, 1976). This non-university status can be explained by examining the aims of the educational policy underlying the VA: Erhardt claims that the state law 'did not place the VA outside of the university structure for nothing' (Erhardt, 1993). This was done to avoid imposing such structural requirements on the VA as are required to fulfill the legal definition of a university from the 1976 Framework Act of Higher Education (HRG). In reality, however, it is rather a non-allocation since the university-like status would only be applicable to the VA in two cases: (1) either if the 'homogeneity requirements' included in the Framework Act of Higher Education were fulfilled in the sense that there would be 'an involvement of institution members in structuring the courses' (alluding to the self-administration of universities); or (2) if the HRG provided for a dual concept within the system of higher education institutions apart from traditional universities, polytechnics or other institutions with university status. The VA comes neither under the university nor the polytechnic regulations. At the same time, however, as the law clearly stipulates a tertiary status, the VA does not belong to the school system. Therefore, it plainly has a unique legal and educational status.

The tertiary position of the VA in the educational sector results in peculiarities which do not distance it from the university: The teaching staff are subject to the same professional requirements as universities in general and the polytechnics in particular. VA graduates gain a degree comparable to a polytechnic or university degree: the only difference is an extra 'BA' in the title. Studies are divided into semesters as at the university. On the other hand, the didactical programme in the fields of business administration and social work is orientated less around the (more or less general) functional principle

of importance to the universities, as it is focused on the 'branch principle'. This obviously tends towards the training structure of the Dual System.

Another common feature to both VA and non-academic initial vocational training is the following: The involvement of the apprenticeship firms is guaranteed through their membership of the General Committee, as well as their activities in the respective 'expert commissions'. The Committee gives recommendations on all VA matters, especially on matriculation, training and examination affairs, while the expert commissions are responsible for the overarching professional matters concerning the training offered by the individual VA, especially the drawing up of study and training plans. However, both are advisory bodies as the lack of 'legal subjectivity' of the VA means that the regulatory power of the Ministry of Science, Research and Arts (MWFK) is 'basically untouched' (Erhardt, 1993, article 2 I BAG).

Both committee and expert commissions are composed of equal numbers of representatives from the state and apprenticeship firms. Another reason why the VA does not fit into the legal definition of a 'university' set in the HRG criteria is the participation and influence of the non-state educators. This once again in turn touches on the so-called 'recognition question', which for years had been dictated by the legal debate over different interpretations of the structural characteristics of the various tertiary sector institutions. The non-state contribution is clearly underlined by the fact that nearly half of VA staff members are senior managers or trainers in companies.

Besides the Committee and the expert commissions, the local 'coordination committees', responsible for the communication and cooperation between the two places of training, function as central bodies of the VA. The local coordination committee is composed of the Director of the respective academy, five further members of the teaching staff, six representatives of apprenticeship firms and an advisory student representative from each course (article 5 BAG). The maintenance and extension of apprenticeship placements is an important function of the coordination committee. It is also responsible for the coordination of training capacities, and the implementation of specific training measures between academy and firms.

Finally, the VA possesses structural peculiarities that prevent it from fitting into one of the traditional categories (apprenticeship or university course). One of these peculiarities is the possibility of attaining an intermediate professional certificate before reaching the diploma, which is not typical of a university degree or for the majority of training courses in the Dual System. Once again, the structure of the VA teaching staff is in stark contrast to that of a university: The vast

majority consists of part-time educators, in particular of senior managers or trainers from the apprenticing firms (Zabeck & Deissinger, 1995, p. 7). This is a feature that is not compatible with the Dual System either as schoolteachers and trainers here have distinct responsibilities for their respective parts of the training arrangement. It should also be noted that the VA's matriculation process has its own regulations: only those who have already found an apprenticeship placement after their school examinations are eligible for a place at the VA. The 'training contract' caters for the registration procedures for students at the educational academy, which is the responsibility of the firm, the guarantee of time off during the apprenticeship to attend classes, and conformity to the examination requirements and training guidelines (article 8 I BAG).

EMPLOYMENT		
Diploma in Business Administration (BA)	Diploma in Engineering (BA)	Diploma in Social Work (BA)
semester 6: dual training		
semester 5: dual training		
Business Assistant	Engineering Assistant	Educator
semester 4: dual training		
semester 3: dual training		
semester 2: dual training		
semester 1: dual training		
Business Administration	Engineering	Social Work
ABITUR (university entrance qualification) plus TRAINING CONTRACT		

Figure 1. Study structure of the vocational academy indicating layering of courses.

The organisational structure of the VA is the framework of its daily curricular arrangement (Fig. 1). The following points are seen as vital by the partners:

*Practical orientation with simultaneous scientific methods of training:* this is about the connection of two didactical principles with the aim of smoothly integrating the VA graduates into the working world. The practical side of the training process should increase the mobility and flexibility of the graduates not just in industry in general, but also internally in the firm.

*Dual structure of learning:* the training concept transposes the organisational principle typical of the Dual System of initial training onto the tertiary sector. The cooperation between educational academy and apprenticing firm aims at making the process of learning more efficient, and brings theoretical and practical work as well as work experience together.

*Curricular combination of theory and practice:* the study regulations of the academy and those of the apprenticeships are integrated with each other. This is guaranteed by the already-mentioned subject-specific expert commissions composed of representatives from the state, academies and firms.

*Cooperation of state and industry:* the influence of the 'participating fields of practice' is seen as a major pillar of the VA system as it defines the bodies governing the 'education alliance' (committee, expert commissions, coordination committees). This may be rated as a clear transposition of the 'principle of consensus' from the Dual System into the VA system.

*Complex structure of teaching staff:* the part-time staff of the academy are made up of university and polytechnic lecturers, vocational school teachers and trainers from industry. Thus, practical experience is embodied in the firm, as well as in the academy.

*Layering of training courses:* an intermediate examination can be taken after 2 years – similar to some training courses within the Dual System – which counts as a professional qualification (business assistant, engineering assistant, educator). The qualifications at the end of the course are degrees (Business Administration Diploma, Engineering Diploma, Social Work Diploma). Hence, the second training phase, which lasts a further year, is based on a clear professional or functional specialisation also underlined by the total of 43 existing courses.

### **The Position of the Baden-Württemberg Vocational Academies in Other Federal States**

#### *Vocational Academies in Other Federal States*

There are special training courses for A-level equivalent students in 11 of the 16 federal states either organised by industry or with their cooperation. With the exception of those modelled on the VA in Baden-Württemberg, these courses are not obviously part of the tertiary sector. The name of 'vocational academy' has also caused some orientation problems among the public. It is therefore important to differentiate the VA from other similar training institutions in order to profile its uniqueness and educational position in the educational system of Germany.

*Vocational Academies in Berlin, Sachsen (Saxony) and Thüringen (Thuringia).* The academies in Berlin, Sachsen and Thüringen are closely modelled on those of the state of Baden-Württemberg, reflected in the signature of the 'Five State Agreement' [10] on the recognition of VA degrees in the tertiary sector. Since 1991, *Sachsen* in the new states has

established six academies (Funk, 1993). As in Baden-Württemberg, there are three training areas (business studies, technology and social work) with 35 profiles chosen by a total of 3600 students (Lachmann, 1999a). The state government in Dresden passed a VA statute which became law on 19 April, 1994.[11] The VA here is described as an 'institution in the tertiary educational sector which is not a university'. Its task is to provide 'a three-year theoretical and practical training in the academy and in the apprenticeship firms'.[12] Sachsen has therefore closely followed the Baden-Württemberg model. Yet there is one structural difference in the training: Intermediate examinations cannot be taken after four semesters. While Baden-Württemberg amended its university statutes in 1994 to allow VA graduates to take a university doctorate, Sachsen has been more cautious. A VA qualification is only comparable to that of a polytechnic in the sense of an occupational qualification. The future of the Sachsen VA is seen to be promising as there is strong demand from industry and it is reported that some courses are markedly 'over-booked' with students having to wait to be enrolled for up to 3 years. Also, leavers from the VA in Sachsen have very good prospects in the labour market in relation to what is generally possible in the new federal states of Germany (Lachmann, 1999a).

A VA was founded in *Berlin* on 1 September, 1993 along the lines of the Baden-Württemberg model. It offers the degrees of 'Business Diploma' and 'Engineering Diploma'. Areas of training are banking, trade, industry, computers and construction engineering. The plan then had been to take on 600 students and to extend training to include economic technology and electronic technology. The Berlin VA and university statutes are the same as Baden-Württemberg in the recognition and comparison of qualifications. In both states, the VA is not a university, but is a tertiary sector institution comparable to a polytechnic. Before the general recognition of the VA in 1995, the academy in Berlin was threatening to turn into a polytechnic because of a coalition agreement if the VA training was not recognised as comparable to a polytechnic degree throughout the whole Federal Republic (Industriegewerkschaft Metall, 1993, pp. 19 ff.; Wissenschaftsrat, 1994, p. 46). Now both status and structure resemble strongly the Baden-Württemberg model, and it is also the wish of the Berlin Senate to strengthen and promote the development of vocational academies.

The state of *Thüringen* decided at first on expanding practical training through the polytechnics. This plan to extend the polytechnics set up in Erfurt, Jena and Schmalkalden in 1991 was a popular scheme in the 1990s because, in the opinion of the Culture Ministry, a separate tertiary dual training scheme would overtax the state's industrial structure. However, in 1998, Thüringen founded the youngest addition to the existing VA system in the Federal Republic. With currently some 200 enrolled students diploma courses are offered in all three main areas.

Interestingly, here we find close cooperation between polytechnics and VAs, and it is not clear if the VA in the 'heart of Germany' will remain as such according to the state government in Erfurt (although there are hints that demand for study places will rise by 20% per annum in the next 4 years). In Thüringen, like in Sachsen, there are no intermediate examinations and another peculiarity is that a polytechnic entrance qualification is seen as sufficient to enrol at the VA (Lachmann, 1999b).

*Vocational Academies in Schleswig-Holstein and Niedersachsen (Lower Saxony)*. In *Schleswig-Holstein*, the Chambers of Commerce, together with the Science and Culture Ministry and the Labour Office, have developed a business/commercial training course for A-level equivalent students. The 'Business Academy' (state recognised vocational academy), founded in 1967, offers a dual-level training concept (Business Assistant, Business Administrator) in the fields of banking, insurance, industry and trade. Because of its A-level equivalent entry requirements and educational aims, this academy can also be seen as a tertiary sector institution.[13] Its formal foundation is based on the regulations of the Culture Ministry and not the Science Ministry, however. Thus, it comes under the regulations of the school administration law and is defined as a 'state-funded special school' or a 'special form of secondary-level vocational school' (Kersten, 1993, p. 14). This is reflected in the fact that degrees (or diplomas) in the sense of those in Baden-Württemberg are not conferred, but 'simply' titles such as 'Business Administrator (VA)' or 'Business Engineer (VA)'. Training is based on the concept of the Dual System of primary vocational training and lasts for 3 (for courses in business administration and business information systems) or 4 years (in the case of business engineering). Even up to today, the VA's status has not been put on a par with the polytechnic. VA degrees are only recognised as intermediate level by the polytechnics. The founding of a 'Northern Academy' (Northern Polytechnic) by industry in Pinneberg in 1993 led to a massive 'emigration' of students from the technology section of the VA, a clear indicator of its 'lowly' status (Gänzler & Lange-Horn, 1994, p. A-12).

*Niedersachsen's* VA does not offer degrees either. Set up in 1990 (Kersten, 1993), it was originally planned as a privately managed 'complementary school' within the educational sector. In contrast to Baden-Württemberg's 12 weeks, the theoretical part of the training is only 10 weeks of every semester. A further difference is the possibility of taking a Commercial Assistant examination at the Chamber of Commerce after four semesters, instead of an intermediate examination at the VA (which as a state institution should be outside the Dual System). However, a VA statute of 18 May, 1994 changed the regulations in Niedersachsen: It describes it as a non-state institution that offers a minimum 3-year theoretical and practical professional training. As in Baden-Württemberg, the VA has been classified as part of the tertiary sector. According to the

statute, VA degrees are recognised as tertiary sector qualifications, but are not comparable to university or polytechnic degrees. As such, Niedersachsen foregoes ‘detailed restrictions’ to the academy’s organisation, whereby, in the opinion of the Science Council, the legal regulations have obviously been set up to avoid giving the impression that the VAs are university-like institutions. Therefore, the VA here is unmistakably classed as lower than the polytechnic, the reasoning being that both institutions differ in their theoretical requirements.

The following matrix should illustrate the differences between the most important schemes of a ‘vocational academy’ in Germany. It shows that only the VAs in Baden-Württemberg and Berlin meet the criteria for alternative postsecondary training courses for *Abitur* holders (Figure 2).

	BW	Berlin	Sachsen	Thüringen	Schl.H.	Nieders
Tertiary institution						
State institution						
Dual concept						
Layering of courses						
Assistant qualification						
Three-year courses						
Diploma						
Parity with polytechnics						

Figure 2. Vocational academies in comparison.

### Special Training and Study Courses with a ‘Dual Character’

Apart from the VAs, there are four other categories of non-traditional training schemes for A-level equivalent school-leavers that have emerged in Germany’s postsecondary education system:

- company-internal training schemes not part of the Dual System;
- school-based training schemes outside the Dual System (vocational full-time schools or colleges with state, not chamber, examinations);[14]
- cooperative training schemes at the Academy of Business Administration (*Verwaltungs- und Wirtschaftsakademie*) which is now seen as part of the VA system of Baden-Württemberg;
- cooperative training schemes at polytechnics and universities.

The majority of special training schemes follow the dual concept, with Business Academies linked to chambers, and industry or industry-specific training centres working with the vocational schools. However, in contrast to the VAs in Baden-Württemberg, Berlin, Sachsen or Thüringen,

and also the cooperative training schemes at the polytechnics, these courses are not all part of the tertiary sector. Usually, the denominations of these courses indicate only minor deviations from the classical dual apprenticeship. This is particularly the case for special company-internal training programmes: for example, the so-called 'Cologne A-level Model' leads to a 'Business Assistant for Craft Middle Management' qualification. The 3-year apprenticeship that is completed with a 'Qualified Retail Trade Assistant' certificate, known as the 'Düsseldorf Model', is in reality also a further dual training scheme, as the specialised college takes on the role of the vocational school (Kramer, 1994, pp. 12 ff.).

The 'Cooperative Engineering Training' at the Niederrhein Polytechnic or 'Krefeld Model', which leads to an Engineering Diploma (FH), the oldest 'polytechnic course with a continual relationship of higher education and industry' (Wissenschaftsrat, 1994, p. 50), and the 'dual university studies' of the Hagen Distance Learning University with a 'Commercial Diploma' qualification, are all established examples of 'industry and higher education cooperation in the field of 'business-academic' training concepts (Kramer, 1994, pp. 25 ff.). The trend is towards cooperative models or 'alliance concepts', especially in the polytechnics (Anderseck, 1994, p. 449; Stihl, 1994, p. 10). Building on this, the Science Council has proposed expanding and deepening the polytechnic courses in its 'Theses on Higher Education Policy'. Included are 'part-time courses' and 'courses which up to now were only available at Administrative Colleges and Vocational Academies' (Wissenschaftsrat, 1993, p. 34). In September 1993, the German Trade and Industry Council, the Federal Council of German Employers' Associations and the Conference of Polytechnic Rectors developed the concept 'Industry and Polytechnics in an Educational Alliance', which provided for the further expansion of dual professional and educational courses. This is to be achieved through the harmonisation of initial training, further training and academic studies (alliance concept to provide an alternative practical qualification for A-level school-leavers (Bundesvereinigung der Deutschen Arbeitgeberverbände/Deutscher Industrie- und -andelstag/Fachhochschulrektorenkonferenz, 1993).[15] Polytechnic-industry special training courses all share the common characteristic, apart from their dual 'character', that the student numbers are determined by the companies (Anderseck, 1994, p. 451), i.e. that an apprenticeship placement is an entry requirement to the course. The companies, however, do not influence the course structure in every case, which points to a structural, rather than a functional similarity with the VA concept along the Baden-Württemberg model. These study courses are attractive not only because the Dual System structure is transposed onto the higher education system (Konegen-Grenier, 1994), but also because classical qualifications and degrees (diploma and Chamber of Commerce qualifications) are connected to each other.



### Conclusions

The theory-practice institutions in most other federal states lag behind the VAs in Baden-Württemberg, Berlin, Thüringen and Sachsen in their participation in the academic structure. According to Kersten, the VA in Baden-Württemberg, with its 'stamp of quality' image, is a role model for other special training courses available to secondary school graduates (Kersten, 1993, p. 15). Partly because of its strong position in the last two decades in the tertiary sector of one of the largest federal states, the VA is the brand leader among special training programmes in higher education. This important position of the VA in educational policy, coupled with its now 'improved' legal status, has led to a heterogeneous system of higher education options below the university level: it becomes manifest not only in the debate around qualification titles and the conferring of degrees, but also in the decision of some federal states to position alternative postsecondary qualifications well below that of a university or polytechnic, a decision which Baden-Württemberg never has been prepared to accept.

That the debate over the VA has affected and is still affecting many interests is evident. At the back of the mind of everyone involved in the debate is the worry that an expanding educational policy incapable of solving its own problems could spiral out of control. Against this background the VA can be considered to be a pragmatic 'instrument' (Zabeck & Deissinger, 1995, p. 24):

- state and industry are equally bound up in its structure;
- it challenges the competition among higher education institutions;
- it offers an alternative qualification to young people working towards professional and economic independence;
- looking at its output, it is much less of a burden on the state budget than any other educational institution in the tertiary sector.

Although not automatically a loved child of the higher education system of Germany, the success rate of the VA is relatively higher than that of the university: the 'drop-out quota', i.e. the percentage of first-year students who fail to qualify, is around 10%. VA graduates in general are also seen to have good chances of finding a job. Despite shortcomings, the MWFK data here offers some information: in 1994, 64.7% of VA students got jobs in their apprenticing firms and 17.6% worked in other firms. A total of 8.5% were still looking for a job on 30 September, 1994, while 3.4% had decided to take up university studies. These integration effects are confirmed by the study of Zabeck & Zimmermann (1995): both integration into the job and integration into the apprenticing firm are reported to be working well, although unemployment rates are not significantly lower than among university and polytechnic graduates. However, as this only

refers to business administration and engineering the overall picture of the VA should not be painted too brightly.

As to internal aspects, the reputation of the training schemes is high and companies normally report satisfaction with the motivation and performance of their trainees.[16] Interestingly, though, the students identify with the 'profession' or 'occupation', rather than the company – which is a typical German phenomenon. With this tradition in mind it is evident that the VA has been able to develop into a comparatively successful model of higher education because it has been embedded within a framework strongly determined by the 'mentality' of training underlying the Dual System and not so much by the German university tradition. Therefore, it ought to be seen as an attractive alternative to university education, rather than a clone of a purely academic preparation for employment. This is once again underlined by the results of the Mannheim VA study: according to Zabeck & Zimmermann (1995) the professional and practical aspects of VA training are much more relevant both to employers and leavers than the scientific profile, which is included in the original definition of the VA Baden-Württemberg. Against this background and considering the labour market relevance of VA qualifications the so-called 'recognition question' loses much of its dramatic appeal. In March 1999, the state of Baden-Württemberg decided to pump more money into the VA system and to create nearly 5000 new study places within the next 4 years (Wetzell, 1999). Those promoting and supporting the VA ought to be proud because this higher education institution is different from both the universities and polytechnics and not because it could one day belong to the same league.

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#### **Notes**

- [1] With regard to the formal quality of this article, I am indebted to Fiona Higginson for her valuable proof-reading and lingual recommendations
- [2] A clear indication is the fact that between 1975 and 1988 the number of students rose by 75% (Friedeburg, 1989, p. 428).
- [3] The share of students with a working class background rose from 6% in 1963 to 13% in 1976, in a time span that can be seen as the triggering period of educational expansion in Germany (Baumert et al, 1979, p. 218).

- [4] The female share is at 44.5%, the share of foreigners at 9.2%. The Federal Statistical Office reports an average age of students in Germany of 26.7 years (see: [www.statistik-bund.de/basis/d/biwiku/hochueb1.htm](http://www.statistik-bund.de/basis/d/biwiku/hochueb1.htm)).
- [5] Looking at the number and type of publications about the VA, it is not hard to see that the VA does not belong to those tertiary sector institutions well known and understood to the public. This is particularly so for analyses on the whereabouts of graduates, a topic of great interest in further education research. The VA was first made into a proper educational institution after a fully documented forerunner (Zabeck & Müller, 1975) or trial phase (Zabeck/Weibel/Müller, 1978; Zabeck & Weibel, 1981). Most of the information on vocational academies presented in this article has been drawn from Zabeck & Zimmermann (1995), which is the most recent comprehensive scientific analysis of the VA. I have referred to Zabeck & Deissinger (1995), Zimmermann & Deissinger (1995) and also to Deissinger (1995) in particular.
- [6] See: [www.ba-bw.de](http://www.ba-bw.de).
- [7] See: Beilage zur Stuttgarter Zeitung (Sonderthema Berufsakademie), 12 November, 1999, p. 2.
- [8] Order of the Ministry of Science, Research and Arts on the Equality of Diploma Qualifications from the Vocational Academies in Baden-Württemberg with those of the Polytechnics, 10 April, 1989. See: *Wissenschaft und Kunst*, No. 6, 12 June, 1989, p. 202. The order is based on article 1 II, No. 2 BAG.
- [9] The descriptive part of that position was based almost entirely on data from the Ministry of Science, Research and Arts (MWFK) of Baden-Württemberg (Wissenschaftsrat, 1994, pp. 6–57) so that the scientific value of the results is doubtful (Zimmermann & Deissinger, 1995, p. 444 f.).
- [10] Agreement of the Education Ministers/Senators of the States of Baden-Württemberg, Berlin, Mecklenburg-Vorpommern, Sachsen and Sachsen-Anhalt on the Recognition of Vocational Academy Degrees in the Tertiary Sector, 27 January, 1993.
- [11] Law on the Vocational Academy of Saxony (SächsBAG), 19 April 1994.
- [12] Article 1 I SächsBAG.
- [13] Quotation in: Hübner, 1977, p. 245.
- [14] There are also vocational schools and colleges which offer assistant training schemes for Abitur holders (Kramer, 1994, p. 30 f).
- [15] 'In need of expansion are the relations between professional training, studies and practical experience, building on a strong nationwide structure of institutions, using the synergy effects of close harmonisation, and taking the EC Single Market into account to ensure that graduates are qualified in European terms' (Bundesvereinigung der Deutschen Arbeitgeberverbände/Deutscher Industrie- und -andelstag/Fachhochschulrektorenkonferenz, 1993, p. 2).

- [16] A survey of the VA Mosbach reports an 'overall content' among companies with the VA concept (Neumann, 1999). Such statements should not be accepted without reservation because the data basis of this survey cannot be compared with the study carried out by Zabeck & Zimmermann (1995).

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