

The emergence and development of the German dual vocational system: Between crises and praises

Jana Heinz
Research Associate, Dr.
TUM School of Education,
Technische Universität München,
Department of Sociology
jana.heinz@tum.de

Georg Jochum
Research Associate, Dipl.-Soz.
TUM School of Education,
Technische Universität München,
Department of Sociology
g.jochum@tum.de

Refereed article

Abstract

In this article we give an overview of the emergence and development of the German dual vocational training system. We show how it developed from training young people in the guilds in the Middle Ages towards a corporatist system including several actors and learning locations. Due to its flexibility and corporative character, the German vocational training system has

managed to emerge strengthened from several social changes that threatened its existence. It is currently regarded as key for Germans economic success and social integration of approximately half of Germany's school leavers in preparing them for the world of work.

Keywords: *German dual vocational training system, VET, vocational training*

The present perception of the German dual vocational training, as an important element of the economic strength and a socially stabilizing force, has led to a growing interest in this form of vocational education. Especially against the background of the persistently high unemployment rates, in particular among young adults in Europe, the practically oriented education with connection to the job market seems attractive to many European countries. This interest is expressed in numerous inquiries about the dual vocational training coming from abroad as well as in EU initiatives supporting this education form.

The term “dual vocational training system” (Duale Berufsausbildung) refers to the structural level of the two locations where German trainees learn their profession: companies and vocational schools. The vocational schools primarily provide theoretical and general knowledge. At the companies the trainees receive their practical occupationally specific training. The dual vocational training is collaboratively organized by the employers and trade unions on behalf of state authorities (Greinert, 1993). The connection of vocational schools and companies of the German vocational training is unique. For example professional training in France takes place predominantly at schools and in the USA there is training “on the job”.

In this article we offer an overview of the structure, the origin and the changes in dual vocational training in Germany. We show how social changes have led to critical developments which, however, resulted in successful adaptations of dual vocational training to social and econom-

ic needs and, finally in its present structure. These reforms have been complicated by the corporatist character of this system, e.g. the numerous actors involved in dual vocational training, which, however, have also secured the involvement of different sides (e.g. the companies as well as trainees). We propose that the changing views of vocational training, ranging from requiems to praises of its effectiveness, result from the complicated yet finally successful adaptation to changes in the standards of competencies of skilled workers and the relevant expertise due to accelerated technological change. Especially the involvement of different social actors in dual vocational training as well as a social consensus that companies and vocational training are responsible for educating young people, has contributed encouraging economic and social integration of about half of all German school-leavers into the world of work.

Historical Emergence

The analysis of the historical emergence of the vocational training system shows how social and economic pressures to change led to adaptations to specific institutional structures and unique developmental trajectories. In the following sections we trace the development of German vocational training from its origin in German guilds over several crises where its demise was predicted to its present corporatist form. We focus on critical phases that generated alterations and show the system’s ability to manage crises.

Feudal labor and social structures of the medieval era

Until the beginning of the 19th century, vocational training was solely an artisanal domain. Wehler estimates the proportion of employees in crafts at about 17 percent of the total population at the beginning of the 18th century (2008, p. 90); the largest proportion was employed in agriculture. The most practiced crafts can be found in the areas of clothing, followed by food trades, carpenters, joiners, and bricklayers (Wehler, 2008, p. 92). Training in the crafts sector was in the hands of the guilds – associations of master craftsmen and artisans safeguarded common interests. In addition to the guilds, “free trades” and partnerships existed that were, however, less respected. Persons outside the guilds were not allowed to exercise guild professions. Up to their demise in the 19th century guilds had powerful political influence. They regulated raw material supplies, employment, wages, prices, sales volumes and even supplied financial support for widows (Stratmann, 1997). Thus, they limited competition within a city. Guilds had the right of self-government; the masters governed their financial affairs independently, selected their leaders and had partly custody of the journeymen check-out and could impose and collect fines.

The guild system originated in the flourishing of trade and crafts in the late Middle Ages, which led to an increased importance of vocational training and to a revaluation of physical activities in the Middle Ages. In the ancient world the distinction between “*artes liberales*” (liberal arts) and the “*artes sordidi*” (dirty arts) existed that expressed the debasement

of the physicality and materiality of vocations in contrast to purely spiritual activities. In the Middle Ages, however, under the notion of “*artes mechanicae*” an appreciation of the craft activities began to take place and with it the associated vocational training (Jochum, 2010, p. 94). With the Reformation, a religious valorization of work occurred. In translating the Bible into German, Luther literally translated “vocation” (*Berufung*) as being called by God in a religious sense, later to the world of work and thus the profession (*Beruf*; derived from German ‘*Ruf*’ = call) became a central dogma of many Protestant faiths (Weber, 2005, p. 49-53). Occupations were thus associated with the idea of an inner calling/vocation to an activity. In German, this specific understanding of the term “occupation” is embedded. In English translations (career, occupation, profession, job), however, these connotations of calling and vocation cannot be adequately reproduced.

The training of the apprentices took place in the form of integration into the life and production of the master craftsmen. The metaphor of the whole house (“*Ganze Haus*”), used by Riehl, illustrates – albeit idealized against the emergence of a perceived disunited industrialization – (Riehl 1854 in Wehler, 2008, p. 82) – the familial bond of vocational education. The importance of this familial inclusion is expressed in the transfer of the educational authority from the apprentice’s father to the master craftsman at the beginning of training (Stratmann, 1997). The technical training was carried out by an imitatio-repetitio model, with a focus on the apprentice’s appropriate behavior, rather than paying attention to the teaching of job-related knowledge. The training, there-

The forms of life and the professions were strongly linked.

fore, served more as a socializing function than a training of manual skills. This is illustrated by the fact that no training objectives were found in the earliest written training contracts but instead they focused on appropriate manners of the apprentices (Stratmann, 1997; Schrömbges, 1997). The forms of life and the professions were strongly linked and thereby mediated the normative social orientations of those times. Christian values were of great importance in the craft training and consolidating of traditional institutional structures and normative orientations. Thus, at the societal level, vocational training contributed to a reproduction of social status based on hierarchized feudal estates structures. This form of integration walled off the influences of the beginning of the Enlightenment and the increasing importance of personal identity orientations to a certain extent. Due to their state-serving and social stabilizing function, the corporate guilds remained powerful against the rising bourgeoisie (Stratmann, 1997).

Political reforms focusing on qualifications

During the transition from feudal to industrial society increasingly economic principles influenced the social logic of modern life. The reforms in the second half of the 18th century strongly focused on the future and technology. Progress towards human and social perfection became two driving forces of this process.

In this process guild privileges were regarded as obstacles to the development of a free trade economy, industrial production and, on a personal level, to the individual development and achievements resulting from personal effort and education instead of class origin (Roessler, 1982). Therefore, vocational training was exposed to massive criticism which, at the same time, was guild criticism. In the dispute over the question, which functions the guilds should have, vocational training played an important role, as it was the central means of their reproduction.

The criticism of the training focused on the constant repetition, which inhibited the apprentices' development and training. The critics of vocational training called for a professional final exam, certified by public authorities, and thus the control of the training performance of the master craftsman, as well as increasing the level of education. König summarizes, in his study of the history of vocational education in Germany of the 19th century, the following features of the first reform concepts (König, 1997, p. 180-181), which were implemented later in various ways in the commercial legislation of the individual German states:

- career aptitude test of the apprentices,
- the definition of job descriptions, the timing and content outline and minimum standards or learning objectives,
- the personal, professional and vocational educational suitability of the master craftsman,
- a new balance between general education competences and the economic utilization of apprentices,
- the monitoring of the training contract and
- the replacement of the traditional graduation procedures ("Freispre-

chungsverfahren”) by impartial inspectors and review of the acquired knowledge during the training.

König sees the first approaches towards modernizing the vocational training and thus the beginning of the dual vocational training in the mid-18th century. Thus, the modernization began in smaller German states such as Baden, where the guilds and craftsmen were obliged to send their apprenticed masons and carpenters to vocational schools to learn drawing. In Munich, in 1793 Franz Xaver Kefer recommended in a reform initiative establishing a Sunday and holiday school with a training praxis that took place at two locations (König, 1997, p. 185-187). This dual structured vocational training model was implemented only in some individual cities and regions. It was not until 1821 that the first training workshop was founded outside of the guilds and by 1830 vocational training schools already existed in several German states. Their curricula were adapted to the occupations of the apprentices.

The change, described by Stratmann as qualification due to the policy-driven reform of the vocational training (1971, p. 162) had to overcome considerable resistance. Wehler, for instance, diagnosed demarcation tendencies in the guilds at this time, which ranged from a general aversion to techniques and labor-saving production methods to the rejection of any performance and innovation-oriented behavior (Wehler, 2008, p. 94). In this period of rapid change, the traditional term “vocation” (Beruf) and the impending industrialist ideas of “working” opposed each other for a longer period of time. To illustrate the continuity of traditional life patterns in a simultaneously modernization process, terms like

defensive modernization (Wehler, 2008) or *partial modernization* (Rüschemeyer, 1971) are used in historical analyses of this change.

With the introduction of the law of free trade in 1868, and the establishment of new trade regulations in 1869 by the North German covenant, the then co-existing different concepts of free trade in the individual states were reorganized (Greinert, 1993, p. 42). More important, with this law the guilds were reduced to the status of free associations and their training monopoly was withdrawn from them (Stratmann, 1997, p. 189-190). The power of the guilds was thus finally broken. However, this bill was undermined by counter-movements from the crafts’ interest groups, which successfully fought for numerous amendments to the Trade Regulation Act of 1869, which aimed at restricting commercial freedom and thereby contributed to maintaining some political stability for crafts (Greinert, 1993, p. 39). Modern successors of guilds in Germany and Switzerland are the artisan guilds. In some places, like Zurich, there are still guilds as craft associations or as folklore or social clubs.

The emergence of the current structure of dual vocational training

The dual principle of vocational training was defined for the first time in the Commercial Regulation amendment of 1897, which suggested that practical training take place in companies and theory-grounded education at training schools. Especially in Munich, Georg Kerschensteiner gained a national and international name by improving training schools and their educational approach. Their new focus was on pro-

viding the young male students a broad general education, which was, however, not very popular among apprentices as it lacked a clear link to their profession. At the same time the old guilds' traditions of training the apprentice by the master craftsmen and with it the "quite incredible neglect of occupational education of the past" were criticized (Kerschensteiner, 1970, p. 124, all translations J.H.). He initiated a reorganization of vocational education in Munich and thereby replaced the general training schools with professionally oriented schools. At the same time, he succeeded in reintegrating the guilds into the training of apprentices and in the renewed vocational training system (ibid., p. 125). From 1895 on, the attendance and the professional orientation of the training schools became mandatory (Greinert, 1993, p. 32).

These reforms contributed to a greater acceptance of the schools and the emergence of a professional identity among trainees: "It was no longer the hated training school where they had to attend, but their technical school; it was no longer the indifferent neighbour, who sat beside him, but his profession comrade (...); it was (...) no longer the alien teacher who stood before him, but a master or journeyman of his trade." (ibid., p. 127)

Kerschensteiner was by no means a singular founding figure of the dual vocational system, but his reforms in the efforts outlined above took place in line with attempts to reorganize the industrial training in other German regions, too. However, he succeeded in adapting the medieval professional concepts to the requirements of industrial society. In so doing his method model was considered a role model, as Wehle states: "The re-

The reform of the professional training aimed at more than the adaptation to the changed needs of an industrialized society.

organization of industrial education in Munich established his worldwide fame, and led numerous visitors to Munich to study his work and take fruitful ideas back home. It earned him the honorary title 'the father of the vocational school' and made Munich the Mecca of German training schools." (Wehle, 1966, p. 188) Beginning at the end of the 19th century, vocational training took root throughout Germany: In 1923 the term "vocational school" was introduced in Prussia. From the mid-1920s, apprenticeships were offered in industry and in 1930 tests were taken by industrial apprentices in the chambers of industry and trade. Furthermore, nationally applicable training standards were defined. Based on the traditional crafts, a state-regulated vocational training system was established and thus, education with its goals of professional qualifications and social skills was mediated via occupations (Brater, 2010).

The reform of the professional training aimed at more than the adaptation to the changed needs of an industrialized society. The growth in population and the urbanization in Germany aggravated social disintegration, especially for the male school-leavers. As Greinert (1993) shows in his historical study of the German training system, the training schools (continuation schools) in particular had a socially integrative importance at this

time, as they closed the four year education gap for boys leaving school and starting military service. The reform of professional education thus contributed to the social pacification of the society and was also motivated by the fear of the spreading of the socialist movements (Zabeck, 2009, p. 332). Therefore, the German vocational policy is traditionally understood as social policy (Greinert, 1993, p. 132).

This socio-political dimension which in particular Kerschensteiner attributes to the vocational training can already be seen in his prize-winning essay "The civic education of the youth" (1901). This work was a treatise on the question: "How is our male youth to be educated after leaving elementary school up to the entry into the army service?," posed by the Royal Academy in 1900. Against the background of the "education gap", male school leavers without social integration were suspected of being vulnerable to becoming criminals or politically and morally neglected (Greinert, 1993, p. 45). Kerschensteiner's approach – in contrast to the new-humanistic educational ideal of Humboldt – was to strengthen the civic virtues via vocational education. His idea was to train young men to become citizens on the base of appealing to their professional, economic and social occupational interests and in this way to integrate them into society. Therefore, the first aim of education should be "the training of professional ability and working happiness" (Kerschensteiner, 1901, p. 16). On this basis an "insight into the connection between the interests of all and the fatherland in particular" (ibid.) should be developed. In later writings Kerschensteiner emphasizes these concepts and explains – in contrast to humanistic educational ideals, which postu-

lated an opposition between professional education and general education –: "vocational training stands at the gate to the human education" (Kerschensteiner, 1966 [1904], p. 94).

Kerschensteiner's concept can be seen ambivalently: On the one hand the reform of professional education can be regarded as a successful contribution to solving the integration problems of German industrial society. However, on the other hand, it can also be considered as an approach disciplining the work force and integrating the young males into the German Reich. However, too harsh criticism of this "instrumentalization" of vocational training has been rejected by Zabeck, for instance. He points to the fact that a vocational training theory like that of Kerschensteiner was necessary to show how large social classes could be led to "Humanitas" and be educated in the civic virtues, especially in light of educated classes' sceptical perceptions of the professional sector (Zabeck, 2009, p. 491-492).

The vocational training system in the Federal Republic of Germany

Despite the duality of vocational training in Germany, which had been visible for a long time, the term dual vocational training was first coined in a 1964 report published by the German Committee for Education and Training. Crucial input for the structure of the German education system, as we know it today, came from the enactment of the Vocational Training Act of 1969 that Greinert assesses as a keystone of the modern German dual vocational system (Greinert, 1993, p. 100). With this law the state secured a

certain influence on the vocational training, which previously had been regarded as matters of the economy (Greinert, 1993). Furthermore, the fragmented vocational education and training legislation was unified. For example, the Federal Ministry of Education and Science became responsible for the area of vocational education, while the influence of the employer is limited to the training. Thus, the corporatist character of the vocational training and education was codified (Greinert, 1993). Vocational training is regulated nationally through the Vocational Training Act and the Crafts Code and follows the “vocational” principle. Occupations in Germany are characterized by standardized content and examination regulations, which are defined and monitored by the corporatist actors of the vocational system (Federal Institute for Vocational Training (BIBB), 2013). All major boards and committees of vocational training consist of representatives of the employees as well as the employers, so that here too it is possible to coordinate interests.

Vocational training in Germany is also characterized by the vocational training’s duality of industry and crafts. This division is anchored in different education laws, the Vocational Training Act (Vocational Training Act) for industry and the Crafts Code (HwO) for crafts. There are approximately 330 recognized training occupations from which young people can choose. In 2013, more than twice as many trainees entered the sector of industry and trade (318.540, 60 %) than of the crafts (142.137, 28 %). The remaining 13.2 percent of trainees learn their profession in the liberal professions, public services, agriculture, home economics and shipping. Not all young people seeking a profession re-

ceive their training in the dual vocational training system, as certain professions, such as health and social services, are only offered in vocational schools without training in companies. In these cases, in contrast to the responsibility of the federal states (Länder) for the training, the federal government takes responsibility for vocational education.

The crises discourses in 1970s & 1990s

The previous analyses reveal that the crises of vocational training occurred due to necessary adaptations to social changes, which led to the emergence of the German dual vocational training system in its present form. Beginning in the 1970s the functionality of the dual training system was considered to be in jeopardy, again. The criticisms resulted from the perception that by the German vocational training system social inequalities were reproduced. Furthermore, the lack of sufficient training places in the 1990s was discussed as a sign of its functional deficit. Moreover, a lack of adaptability to changes in professions and the world of work it were diagnosed. In the following we will provide a detailed analysis of the crises discourses regarding the lacking inability to fully adapt to a changing working world and to its inability to provide sufficient vocational training for the young. Thus, we focus on these discussions’ underlying criteria, which have changed and have led to alternating interpretations of the vocational training system’s effectiveness.

Functional deficit of supplying sufficient apprenticeships

The objections in the 1970s were directed against the lack of quality of dual vocational training. However, the initial of attempts to improve vocational training ended due to the onset of the 1974 global economic crisis (Greinert, 1993, p. 106).

Ideally, sufficient training places in companies should be available for graduates, who are seeking an apprenticeship in the dual vocational training system (decision of the Federal Constitutional Court of 1980, in Kachel/Hesselbarth/Landherr/Hübner, 1996, p. 20). The number of training places can be regard-

ed as sufficient if it exceeds the number of applicants by 25 %. This surplus of apprenticeships is necessary to ensure that young people have a choice of careers and training places. The economic crisis of the 1980s and the deterioration of the economic situation in combination with baby boomers crowding into the educational systems led to an apprenticeship crisis in Germany. It became particularly acute in the new federal states, where a large part of the economy had collapsed following the unification of the two German states and its structure of predominantly small and medium sized businesses. Table one shows the proportion of applicants for an apprenticeship and company-based apprenticeships in Germany.

Table 1. Number of apprenticeships, company-based apprenticeships and applicants in the new and old German Federal states between 1999-2013.

Year	Applicants		Apprenticeships		Company-based apprenticeships	
	old states	new states	old states	new states	old states	new states
1999	568.027	234.621	519.964	134.490	450.932	99.299
2000	545.952	224.396	507.842	139.541	463.036	101.343
2001	524.708	237.463	503802	134973	461.172	87.342
2002	491237	226.257	464550	125778	425.730	76.619
2003	501056	219.902	448740	123732	413.739	72.416
2004	522608	212.874	461409	124950	394.166	69.002
2005	538075	202.472	445947	116868	357.794	64.167
2006	559058	203708	465771	125772	348.672	65.561
2007	547362	186421	516741	127437	355.763	67.150
2008	482010	137820	519267	116508	361.360	71.100
2009	451279	110235	479790	101643	341.550	66.613
2010	462243	96072	484125	95325	461649	76758
2011	454426	91311	509265	89670	493185	77904
2012	468661	92914	499344	85068	481773	76731
2013	468759	91098	483738	80436	468900	73599

These figures show that the number of company-based apprenticeship places was not even available for half of the applicants for an apprenticeship. Based on the above-described ideal ratio of apprenticeships to apprenticeship seekers, the supply of apprenticeships should be three times higher as the number between 1999 and 2005. Apart from the high-achieving pupils, this scarcity led to a drastic reduction of choices for apprenticeship applicants.

To resolve this functional deficit, external measures were necessary and different strategies were chosen by the partners of the vocational training system (Heinz, 2006). These included the following:

- initiatives that enhanced cooperation between the actors of dual vocational training, as for instance the development of trade-offs that involve a reduction in the training wages in favour of additional apprenticeship places by 1997,
- governmental approaches to increasing apprenticeships through subsidizing training companies and additional provisions of apprenticeships outside the dual vocational system by means of the federal government, the EU and the federal states,
- acquisition of training places by appealing to the growing overall social responsibility of companies,
- promotion of vocational training in external institutions,
- promotion of vocational training in institutions outside the dual vocational training system and
- transferring funds from companies which did not provide company-based apprenticeship places for finance of state organized apprenticeships.

Thus, there existed a variety of programs to improve the tense situation on the apprenticeship market. As a result of government subsidies and moral appeals, an increased willingness on the part of enterprises to provide apprenticeships was seen. In the 1990s the training participation of East German companies was approximately similar or even above the level of the old federal states, as an approximately equal number of firms in both the old and in the new states trained young people. Measured by the ratio of apprentices to the workers in an enterprise, the new federal states also had more apprenticeships within the company than the companies in the old federal states (Heinz, 2006). Companies provided apprenticeships beyond their own need for skilled workers. The crafts, in particular, offered high number apprenticeships. Here a special feature of the crafts is evident, the “sponge” function, e.g. the potential of the crafts to “absorb” large numbers of apprentices. This specific quality is visible in the following figures on the training performance of the crafts and in the industry in the old and new states: in the old states, the education levels of industry and trade were in 1991 at 45.6 (industry) to 37.6 percent (crafts). In the new federal states, where there was a demographically large demand for training places in 1991, this ratio was 44.5 (industry) to 43.3 % (craft) (Thüringer Ministerium für Wirtschaft, Arbeit und Infrastruktur, 2004). Thus, while figures remained about the same for industry, the training performance of crafts rose significantly. These different relations show that companies in the crafts are more likely to train more young people than industrial companies. For this sponge effect, the low training costs in the craft play a decisive role; various studies show that a large proportion

of apprentices even generate income for the companies. However, the young people trained beyond the companies' actual demand for skilled workers are often not offered a position after the training in the companies. Thus, they failed at the so-called "second threshold", the transition from vocational training market in the labour market. The problematic access to the profession is therefore hardly solved but rather shifted from the first level (entry into the vocational training market) to the second threshold.

Finally, because of the limited training opportunities in the new federal states, training workshops became important, which replaced the companies' role in vocational training in the dual system. Due to the lack of training places the number of courses was expanded in which young people either could acquire job-related skills or qualifications they needed to access vocational training. These courses included the basic vocational training year (BGJ) and the vocational training year (BVJ). Since these professional courses did not lead to reducing the training period, when these young people got an apprenticeship in the new federal states, the BGJ had only little importance. The BVJ are schooling forms for low achieving pupils, who did not have a degree of secondary schools, so they could obtain a comparable degree. These measures were intended to improve their knowledge and thereby their chances in the competition for apprenticeships. These courses are, however, perceived by many young people and those involved in the education system, as "parking places", e.g. young people take part in them, in order to bridge the time until the next application deadlines for apprenticeships. The replacement of these courses by training modules in companies is currently re-

quired as an important goal of the vocational education policies.

In response to the lack of training places a legally binding regime for the provision of training by companies, the so-called "training levy" was demanded from various political and social groups. As the arguments around this measure illustrate the corporatist character of the dual vocational training as well as the social consensus that economy has a moral responsibility to provide vocational education for young people, we will examine it below.

Excursus: Training Levy (Umlagenfinanzierung)

This term refers in a broad sense to a legally binding commitment of the companies to provide a sufficient number of training places. Companies that do not offer apprenticeships would have to pay training levies in favour to companies training young people. To implement this goal in times of insufficient apprenticeships for training places a considerable political and civic motivation was observable. This funding model was first discussed in the context of reforms of the vocational training system in the 1960s. The focus of the reform of that time was to improve the quality of vocational training through an extension of theoretical components in schools. The costs were to be funded by a levy of the companies.

The application of these regulations was planned only in the case that the employers fail to provide a sufficient number of apprenticeships, thus motivating employers to offer apprenticeships to ensure that the special levy is not necessary. Once, where this is no longer the case,

the state could guarantee training within the dual vocational system without additional financial burdens.

In vocational training such financing models already exist, such as in the area of construction. Here, a levy was negotiated under a collective agreement between employers and unions in the 1980s. Employers pay about 2.8 % of gross payroll into a fund, out of which large parts of the training wages, holiday pay and the cost of inter-company training are financed. Through this agreement, cyclical undulations, the construction industry in particular is affected from, had been mitigated quite stable. The training rate, which measures the proportion of trainees in relation to the number of employees in the company, is 9 to 10 % and thus at the top compared to the training rates in other industries.

The likelihood that the training levy will be established in whole vocational education, has declined by the foreseeable decreasing of the apprenticeship demand beginning 2007, which was induced by the decreasing number of school leavers who made up a large number of applicants. In addition, the negative effects and the risk of government intervention in the structure of political power of the dual system of vocational training speak against the introduction of a training levy. While in the 1960s this instrument aimed at improving the professional training and adaptation to standards in the world of work, they were discussed in the situation of lacking apprenticeships under predominantly quantitative aspects. Therefore, there were concerns that companies provided apprenticeships to avoid a training levy but would neglect quality standards.

At the moment the situation of lacking apprenticeships has led to a lack of apprentices. Accordingly, from the perspective of the economy an U-turn in the assessment of school-leavers is taking place. Previously, applicants with low or without school-leaving certificates had been assessed as not being capable of filling an apprenticeship and therefore the absence of necessary additional training places was legitimized (Giegel, Rosa, & Heinz, 2000). Currently, however, various initiatives can be found at prestigious companies such as Porsche, Deutsche Bahn or REWE, that offer large scale supportive initiatives for low achievers, with an emphasis on incentives and strengthening their motivations to successfully complete apprenticeships (Lau, 2013).

The end of life-long profession?

In addition to a shortage of apprenticeships, the traditional vocational principle was subject to criticism in the 1980s. Traditional career patterns, which embodied the idea of a “lifelong profession”, were perceived as being too rigid with regard to ongoing technological change and the need for flexibility in the world of work. The notion of a “vocations crisis” began to spread (Rosendahl & Wahle, 2012, p. 26). In particular, the established order of occupations was the object of general criticism. The German concept of occupation with its quasi-religious connotation coming from Luther appeared to be obsolete and thus “the ax was laid to the myth of the life-long profession.” (Brater, 2010, p. 819) Voß, for instance describes three main trends that are crucial for the loss of importance for the traditional professionalism (Voß, 2001, p. 295). Firstly, due to technological dynamism, he sees a rising “half-life

The traditional career concept has lost its centuries-long orientation function for the individual, society and professional training.

of knowledge” (ibid.) contributing to a rapid obsolescence of professional knowledge and making frequent reorientation necessary. At the same time, interdisciplinary and non-specific skills were becoming more important and superseded progressive specialization. The traditional professionalism no longer guarantees socio-economic security and is regarded as problematic as “the tendency of decoupling of profession and employment (...) makes a rigid attachment to a life vocation an existential risk.” (ibid., p. 295) These changes were accompanied by increasing calls for the individual’s willingness for a constant change and the demand for lifelong learning. Rosendahl and Wahle, for instance, describe a conflict between a standardized occupational principle and individualization processes in a complex and diverse world of work. The idea of profession is increasingly in contrast to the open and modern concept of “employability”.

According to these notions, Rosendahl and Wahle argue, “the traditional career concept has lost its centuries-long orientation function for the individual, society and professional training” (2012, p. 26). With regard to the vocational training system, the German education system was characterised by a “dysfunctional professionalism” (ibid., p. 26). In

particular, the computerization of the working world has caused an increase in knowledge-intensive research and development activities that could only partially be covered by the traditional apprenticeship system. With the transition to a knowledge society an “erosion of the dual mediated professional qualifications as a guarantor for business careers” was foreseen (ibid., p. 32). Overall, the professional model underlying the dual vocational system did not appear to be functional in a dynamic and borderless world of work in general and at the same time the importance of vocational training was questioned. Similarly, the EU increasingly criticized the vocational education and training, considering the “concept of occupation (Berufsförmigkeit) as hampering progress” (Brater, 2010, p. 831). Since 2006, the concept of “lifelong learning” has become an important EU-objective, guiding all knowledge formation systems, and thus emphasizing a biography-based modular approach to vocational education, which contrasts with the model of professionalism in the dual vocational system (ibid.).

These crisis discourses ultimately resulted in the programmatic article “Beyond vocation and professionalism” (Jenseits von Beruf und Beruflichkeit) (Baethge, 1998), where Baethge and Baethge-Kinsky suggest that not only the vocation, but also – particularly pronounced in Germany – professionalism will lose its organizing principle for education and work processes as well as for social security and social integration. They point out, “our argument is that the specific combination of professionalism, social integration in operation and social status, which characterized the traditional German occupational concept, is dissolving more and more, and thus undermining the va-

lidity of the professional approach.” (Baethge & Baethge-Kinsky, 1998, p. 469).

However, current descriptions of the dual vocational training system have fundamentally changed: Thus, the successes of the German economy are attributed especially to the specific formation of the working force, provided by the dual vocational training system. For instance, the OECD, which had repeatedly lamented the low proportion on students in Germany and the continuing adherence to the seemingly outdated VET-system, has now acknowledged its effectiveness (Fazekas & Field, 2013).

We attribute the reasons for the change in perception of the dual vocational training system to its flexibility with regard to demands of a new ideal of professionalism (Rosendahl & Wahle, 2012, p. 41). Thus, on the part of the organization of dual vocational training, a broad basic vocational education has been added, which facilitates gaining new specializations and relearning after vocational training. While in the past professional knowledge and skills were primarily taught, the focus is now on the concept of “qualification” and on the ability to cope independently with specific technologies (ibid.). Furthermore, since 2000, 76 professions have been modernized and 26 new jobs have been created. More than half of all new training contracts were in these new occupations (ibid.). With the introduction of so-called “additional qualifications” in vocational training, individualisation of training and a greater adaptation to the specific requirements of companies was made possible (ibid.). Overall, a trend towards a “more open training design for occupations” (ibid.) can be observed. In vocational schools, the so-called “learn-

ing field concept” was introduced, meaning that areas of learning became didactic units, which are not structured to serve clear vocations, but specific logics of professional fields (Huisinga, Lisop, & Speier 1999; Lipsmeier 2000).

The quality of professionalism has undergone a fundamental change.

These developments also led to a shift towards the so-called “key qualifications” (Mertens, 1974; Beck, 1993) and an associated “competence-oriented change in vocational education” (Brater, 2010, p. 823). The focus is now on more general interdisciplinary skills that are applicable in new areas of work, in particular on concrete skills that guarantee professional flexibility. Accordingly, a changed understanding of professions took place that emphasizes broadly applicable competence instead of content-specific skills (ibid., p. 823). As a result, vocational training has become more flexible and dynamic, without sacrificing professionalism at the core of the working force and offering an identity-rendering principle.

Furthermore, the quality of professionalism has undergone a fundamental change. Diagnoses of “subjective professionalism” (Bolder, Kutscha, Dobischat, & Reutter, 2012, p.11) or “subjectivized professionalism” (Voß, 2012) indicate that the profession reaches beyond the formal education. It is increasingly becoming a lifelong biographical project of people marketing their own skills – with-

out losing its importance as an institutional framing and identity-defining role.

This subjectivized professionalism strengthens people and gives them security, identity, stability, and dignity especially in an increasingly changing and precarious labour market that other forms of training cannot offer. The German dual vocational system has – in addition to its capacity to teach specific skills – the ability to create a subjective identity (Bolte, 1983), which may be of more importance in the future.

Effects of the European reforms on the German vocational system

Another influence on the German VET has come from the Copenhagen process: In 2002, the European ministers of education decided on a new form of cooperation in the area of vocational education, aiming at comparability and mutual recognition of competences and qualifications (European Ministers of Vocational Education & Training European Commission, 2002). Important instruments in the process are the European Credit System for Vocational Education and Training (ECVET) and the European Qualifications Framework (EQR) that describes and differentiates between eight different qualification levels (European Parliament 2008, p. 124). The EQR was implemented in Germany in 2012 by the German Qualifications Framework for Lifelong Learning” (DQR) (Federal Ministry of Education and Research (BMBF), 2013). Beginning from summer 2013 on, qualification has been assigned to the DQR levels. The gradation and the assigning of educational degrees to different levels led to heated discussions in Germany. Thus, while a consen-

sus was reached on some vocations, finding agreement on the questions whether the German Abitur should be assigned to level four or five was postponed to a later date. Some see potential negative effects for the German vocational system with regard to a reevaluation of higher education and devaluations of professions (Powell, Bernhard, & Graf, 2012). These effects might be accompanied by a decrease in wages and competition between students holding a BA-degree and professional qualifications. The degree to which European education systems are driven to convergence by pan-European reforms like the Bologna or the Copenhagen process is evaluated differently in research. Thus, there is a consensus in comparative education that top-down reforms are modified for different educational structures and cultures in the individual countries. With regard to the German VET system, Powell and colleagues write: “While those European countries that have been major sources of models – Germany, France, and Britain – may be less challenged to meet the ideals and standards of European skill formation identified here, all countries have made and continue to make changes in their skill-formation systems to match the perceived ideals and to achieve the international standards codified in this emergent model.” (Powell et al., 2012, p. 256). Thus, in their analyses of current trends like the Bologna Process in higher education and the Copenhagen Process in vocational training in Europe, Powell and Solga see a trend of ‘blurring boundaries’ between academic general and specific vocational training through differentiation and the emphasis on economic benefits of formal education (Powell & Solga, 2010, pp. 709-708). They find evidence of this hypothesis in developments as the vocationalization of high-

er education in France or the rise of the vocational academies (Berufsakademien) and dual study programs (duale Studiengänge) at praxis-oriented universities in Germany, which offer both a mixture of general higher education and in-firm vocational education and training.

Conclusion

Current trends indicate that vocations still have important stabilizing and integrating functions (as for instance with regard to the labour market, institutional stability or socialization) as well as that trends towards more flexibility and individuality have not led to an end of vocations and the vocational principle. Their capacities are a source for the vocational system's astonishing renaissance overcoming several crises resulting from technological and social changes which caused a modernization of vocations and vocational training. Still, the majority of young people are trained in the area of the German vocational education system: in 2012 approximately 1.43 million apprentices learned a profession here (BMBF, 2014).

From an international perspective, the combination of working and learning is regarded as an advantage of the German dual vocational system. In many aspects, as for instance with regard to its integrating function, wages for apprentices or learning outcomes it seems to be superior to classical vocational training at schools with no inclusion of companies. Analyzing role models in the areas of higher and vocational education in Europe, Powell and colleagues conclude that the German training model remains influential (Powell et al., 2012, p. 255), although they did not find "elements of one hegemonic national model" but instead that the Eu-

The German vocational system is currently prized worldwide and exported to other countries.

ropean model in VET is an assemblage of diverse characteristics that more or less resembles the models of highly influential countries" (ibid, p. 256).

Nevertheless, the German vocational system is currently prized worldwide and exported to other countries. At an international level, the EU alliance for apprentices (EaFA) was initiated, which is supported by the European social partners, the European Commission and the member states (BIBB, 2014). The international initiative iMOVE (International Marketing of Vocational Education) by the German ministry of science and research supports German companies as well as foreign interest groups of in implementing dual vocational training forms (BIBB, 2014, p. 153). However, these attempts are regarded rather critically. Comparing the VET systems in England, the Netherlands and Germany, Brockmann, Clarke and Winch identify marked differences with regard to the stakeholders involved in vocational training, a key distinction between the knowledge-based approach in VET in the Netherlands and Germany and the skills-based approach in England, and how these approaches are linked to curricula and pedagogy. In contrast to Germany and the Netherlands, in England, for instance, learning outcomes are defined according to employers' skill needs but with no wider trade union or educational involvement, and are further-

more disconnected from curricula and teaching. The authors argue that without taking into consideration the diverging understandings of these concepts, it remains questionable whether the aims of the EQF, such as enhancing transferability and comparability, can be fulfilled. Similarly, studies investigating attempts to import the German vocational training system, point to cultural and structural differences of the individual VET systems, which impede its successful implementation in other countries (Reindal, 2013).

The astonishing renaissance of the German VET system and its regained international reputation may also be due to the social and economic crisis in Europe. This raises the question of how to integrate young people not only into the job market but also into society. Similar to the social upheavals of the German industrial society in the early twentieth century, the current changes of the global economy are leading to problems with integrating European school-leavers. As we discussed previously, Kerschensteiner suggests integrating young people into the German state via their vocational training; in the same way the question arises how to include young people into the European society. Thus, exporting the German VET system may indeed contribute to an improved integration of young people; on the other hand these attempts may also be regarded as disciplining the youth and suppressing social conflicts. In addition, due to the economic situation in Europe, integration via a VET system like in the German model does not seem to be realistic in all countries. In this respect, an ideological function can be connected with the export of the German vocational training system as it might offer a false solution

and at the same time prevent the realization of deeper reaching reforms. Importing and implementing it for economic or disciplinary reasons alone will not be successful. As our analyses show, the German dual vocational system's effectiveness and ability to adapt to changing social surroundings result not at least from its large infrastructure of corporate stakeholders and a widely shared social consensus of its responsibility to integrate young people.

References

- Baethge, M., & Baethge-Kinsky, V. (1998). Jenseits von Beruf und Beruflichkeit?: Neue Formen von Arbeitsorganisation und Beschäftigung und ihre Bedeutung für eine zentrale Kategorie gesellschaftlicher Integration. *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung*, 31(3), 461–472.
- Beck, H. (1993). *Schlüsselqualifikationen: Bildung im Wandel* (1st ed.). Darmstadt: Winklers Verlag Gebrüder Grimm.
- Bolder, A., Kutscha, G., Dobischat, R., & Reutter, G. (2012). Beruflichkeit: Ein Kampf der Einzelnen gegen die Institutionen? In A. Bolder, G. Kutscha, R. Dobischat, & G. Reutter (Eds.), *Bildung und Arbeit: Vol. 3. Beruflichkeit zwischen institutionellem Wandel und biographischem Projekt*. Wiesbaden: Springer VS.
- Bolte, K. M. (Ed.). (1983). *Subjektorientierte Arbeits- und Berufssoziologie*. Frankfurt u.a.: Campus-Verl.
- Brater, M. (2010). Berufliche Bildung. In F. Böhle, G. G. Voß, & G. Wachtler (Eds.), *SpringerLink: Bücher. Handbuch Arbeitssoziologie* (pp. 805–837). Wiesbaden: VS Verlag für Sozialwissenschaften/GWV Fachverlage GmbH, Wiesbaden.
- Brockmann, M., Clarke, L., & Winch, C. (2008). Knowledge, skills, competence: European divergences in vocational education and training (VET) – the English, German and Dutch cases. *Oxford Review of Education*, 34(5), 547–567. doi:10.1080/03054980701782098.
- Bundesministerin für Bildung und Forschung. (2014). *Berufsbildungsbericht 2014*. Retrieved from <http://www.bmbf.de/de/berufsbildungsbericht.php>.

- Bundesinstitut für Berufsbildung (BIBB). (2013). *Liste der staatlich anerkannten Ausbildungsberufe und Berufe in Erprobung*.
- European Ministers of Vocational Education and Training/European Commission & European Commission. (2002). "The Copenhagen Declaration": *Declaration of the European Ministers of Vocational Education and Training, and the European Commission, convened in Copenhagen on 29 and 30 November 2002, on enhanced European cooperation in vocational education and training*. Retrieved from http://www.bmbf.de/pubRD/copenhagen_declaration_eng_final.pdf.
- European Parliament, C. o. t. E. U. (2008). *Recommendation of the European Parliament and of the Council of 23 April 2008 on the Establishment of the European Qualifications Framework for Lifelong Learning*. Retrieved from [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008H0506\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008H0506(01)&from=EN).
- Fazekas, M., & Field, S. (2013). *A skills beyond school review of Germany. OECD reviews of vocational education and training*. Paris: OECD.
- Federal Ministry of Education and Research (BMBF) & Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK). (2013). *German EQF Referencing Report*. Retrieved from https://ec.europa.eu/ploteus/sites/eac-efq/files/German_EQF_Referencing_Report.pdf.
- Giegel, H.-J., Rosa, H., & Heinz, J. (2000). Die schwache Aktivierung der Zivilgesellschaft. Eine empirische Untersuchung am Beispiel der Lehrstellenkrise in den neuen Bundesländern. *Jenaer Beiträge Zur Soziologie*.
- Greiner, W.-D. (1993). *Das „deutsche System“ der Berufsausbildung: Geschichte, Organisation, Perspektiven (1st ed.)*. Studien zur vergleichenden Berufspädagogik: Vol. 1. Baden-Baden: Nomos.
- Heinz, J. (2006). *Einflussfaktoren zivilgesellschaftlichen Engagements in den neuen Bundesländern. Eine empirische Studie am Beispiel der Lehrstellenkrise in Thüringen*. Bibliotheks-Online Portal der Universität Jena. (Dissertation).
- Huisinga, R., Lisop, I., & Speier, H.-D. (1999). *Lernfeldorientierung: Konstruktion und Unterrichtspraxis*. Frankfurt a.M: Verlag der Gesellschaft zur Förderung arbeitsorientierter Forschung und Bildung.
- Jochum, G. (2010). Zur historischen Entwicklung des Verständnisses von Arbeit. In F. Böhle, G. G. Voß, & G. Wachtler (Eds.), *SpringerLink : Bücher. Handbuch Arbeitssoziologie* (pp. 81–125). Wiesbaden: VS Verlag für Sozialwissenschaften/ G WV Fachverlage GmbH, Wiesbaden.
- Kachel, S., Hesselbarth, M., Landherr, K., & Hübner, C. (1996). Eckwerte beruflicher Bildung. *Opposition konkret: Verschiebepfad der Ausbildung?* Bonn.
- Kerschensteiner, G. (1901). *Staatsbürgerliche Erziehung der deutschen Jugend*. Erfurt: Verlag Villaret.
- Kerschensteiner, G. (1966). Berufs- oder Allgemeinbildung? (first 1904). In G. Kerschensteiner, & G. Wehle (Eds.), *Schöningh Sammlung Pädagogischer Schriften. Quellen zur Geschichte der Pädagogik. Berufsbildung und Berufsschule* (pp. 89–104). Paderborn: Ferdinand Schöningh.
- Kerschensteiner, G. (1970). Die fachlich gegliederte Schule im Dienst staatsbürgerlicher Erziehung. In U. Müllges (Ed.), *Erziehungswissenschaftliche Reihe: Vol. 5. Beiträge zur Geschichte der Berufsschule* (pp. 122–133). Frankfurt am Main: Akad. Verl.-Ges.
- König, K. (1997). Zur Geschichte der Berufsausbildung in Deutschland des 19. Jh.s. In *Bayerisches Schulmuseum <Ichenhausen>: Schriftenreihe zum Bayerischen Schulmuseum Ichenhausen: Vol. 15. Berufliche Bildung. Geschichte, Gegenwart, Zukunft* (pp. 177–254). Bad Heilbrunn: Klinkhardt.
- Lau, P. (2013). Die Nebenschüler. *brand eins*, 15(6), 124–128.
- Lipsmeier, A. (Ed.). (2000). *Zeitschrift für Berufs- und Wirtschaftspädagogik : Beihefte: Vol. 15. Lernfeldorientierung in Theorie und Praxis*. Stuttgart: Steiner.
- Mertens, D. (1974). Schlüsselqualifikationen: Thesen zur Schulung für eine moderne Gesellschaft. In W. König (Ed.) *197 Glossare zur Arbeitsmarkt- und Berufsforschung 7* (pp. 36–41). Stuttgart: Kohlhammer.
- Powell, J. J. W., & Solga, H. (2010). Analyzing the nexus of higher education and vocational training in Europe: a comparative-institutional framework. *Studies in Higher Education*, 35(6), 705–721. doi:10.1080/03075070903295829.
- Powell, J. J. W., Bernhard, N., & Graf, L. (2012). The Emergent European Model in Skill Formation: Comparing Higher Education and Vocational Training in the Bologna and Copenhagen Processes. *Sociology of Education*, 85(3), 240–258. doi:10.1177/0038040711427313.
- Reindal, S. M. (2013). Bildung, the Bologna Process and Kierkegaard's Concept of Subjective Thinking. *Studies in Philosophy and Education*, 32(5), 533–549. doi:10.1007/s11217-012-9344-1.

Roessler, W. (1961). *Die Entstehung des modernen Erziehungswesens in Deutschland*. Stuttgart: Kohlhammer W. Retrieved from <http://www.amazon.de/Die-Entstehung-modernen-Erziehungswesens-Deutschland/dp/3170920014%3FSubscriptionId%3DAKIAJEIOIHAJER6RL7K-QQ%26tag%3Dws%26linkCode%3Dxm2%26camp%3D2025%26creative%3D165953%26creativeASIN%3D3170920014>.

Rosendahl, A., & Wahle, M. (2012). Erosion des Berufes: Ein Rückblick auf die Krisenszenarien der letzten vierzig Jahre. In A. Bolder, R. Dobischat, G. Kutscha, & G. Reutter (Eds.), *Beruflichkeit zwischen institutionellem Wandel und biographischem Projekt* (pp. 25–47). Wiesbaden: Springer VS.

Rüschmeyer, D. (1971). Partielle Modernisierung. In W. Zapf (Ed.), *Neue wissenschaftliche Bibliothek: Vol. 31. Theorien des sozialen Wandels* (3rd ed., pp. 382–398). Köln [ect.]: Kiepenheuer und Witsch.

Schrömbges, P. (1997). Aspekte der Berufsausbildung im spätmittelalterlichen Köln. In M. Liedtke (Ed.), *Berufliche Bildung* (pp. 113–136). Bad Heilbrunn, Obb.

Stratmann, K. (1997). Die Geschichte der Berufserziehung in der ständischen Gesellschaft (1648–1806). In *Bayerisches Schulmuseum <Ichenhausen>: Schriftenreihe zum Bayerischen Schulmuseum Ichenhausen: Vol. 15. Berufliche Bildung. Geschichte, Gegenwart, Zukunft* (pp. 139–176). Bad Heilbrunn: Klinkhardt.

Thüringer Ministerium für Wirtschaft, Arbeit und Infrastruktur. (2004). *Berufsbildungsbericht 2004*. Erfurt.

Voß, G. G. (2001). Auf dem Wege zum Individualberuf: Zur Beruflichkeit des Arbeitskraftunternehmers. In T. Kurtz (Ed.), *Aspekte des Berufs in der Moderne* (pp. 287–314). Opladen: Leske + Budrich.

Voß, G. G. (2012). Individualberuf und subjektivierte Professionalität.: Zur beruflichen Orientierung des Arbeitskraftunternehmers. In A. Bolder, G. Kutscha, R. Dobischat, & G. Reutter (Eds.), *Bildung und Arbeit: Vol. 3. Beruflichkeit zwischen institutionellem Wandel und biographischem Projekt* (pp. 283–316). Wiesbaden: Springer VS.

Weber, M. (2005). *Die protestantische Ethik und der Geist des Kapitalismus. Wort-Schätze*. Erfstadt: Area.

Wehle, G. (1966). Georg Kerschensteiners Beitrag zur Begründung der modernen Berufsschule. In G. Kerschensteiner, & G. Wehle (Eds.), *Berufsbildung und Berufsschule. Ausgewählte pädagogische Schriften. Band 1* (pp. 188–199). Paderborn: Ferdinand Schöningh.

Wehler, H.-U. (Ed.). (2008). *Deutsche Gesellschaftsgeschichte: 1700–1815* (Erste, durchges. Aufl. der broschiierten Studienausg.). München: C.H. Beck.

Zabeck, J. (2009). *Geschichte der Berufserziehung und ihrer Theorie*. Paderborn: Eusl-Verlagsgesellschaft.

