

Chapter 8

Apprenticeship and Vocational Education: An Institutional Analysis of Workplace Learning in the German Vocational System

Karl-Heinz Gerholz and Taiga Brahm

Abstract Apprenticeship in the German vocational system is organised as a dual system with both workplace and school-based trainings. This dual system has a long successful history in Germany, which is visible, for instance, in a stable transition from the dual system to employment and a low youth unemployment rate. A main factor for this success is the regulative structure of the German dual system in the society. Accordingly, this chapter analyses this structure from an institutional point of view. The relevant institutions regulate the actions of people in the dual system. These institutions act on different levels, enabling workplace learning in the dual system. Examples for the institutions are the concepts of vocations and occupational competence, the principles of consensus and corporatism as well as action orientation. The institutions have different roles to play, and not all institutions have the same power. Nevertheless, as one result can be mentioned, the quality of workplace learning is assured since people involved appreciate apprenticeship as an institution.

8.1 Workplace Learning in Vocational Education as an Institutional Challenge

In recent years, the discourse on workplace learning has intensified (Malloch, Cairns, Evans, & O'Connor, 2011). In this context, various different developments can be observed, for instance, an intense discussion about the importance

K.-H. Gerholz (✉)

Higher and Vocational Education, University of Paderborn, Paderborn, Germany

e-mail: gerholz@wiwi.upb.de

T. Brahm

Educational Development, University of St. Gallen, St. Gallen, Switzerland

e-mail: taiga.brahm@unisg.ch

of ‘lifelong learning’ in a knowledge-based economy (Billet, 2008; Nijhof, 2005; Stuart, 2007). This is in line with the call for highly skilled workers (Ananiadou, Jenkins, & Wolf, 2004; Ashton & Sung, 2002). There is convincing evidence that workplaces are settings for acquiring the necessary vocational competencies for the knowledge economy (Billet, 2001, 19; Nijhof & Nieuwenhuis, 2008, 5). At the same time, the workplace is, above all, a place to work and to follow economic goals such as achieving profit and sales. In contrast, learning refers to the development of an individual’s personal competences. To deploy the learning potential of the workplace, an appropriate educational design that supports and stimulates learning is required (Billet, 2001; Kell, 2006). Learners have to reflect on their experience in the working situation in order to foster vocational competencies (Bailey, Hughes, & Thornton, 2004, 216). For this reflection of the learners’ work experiences, the working situation needs to be designed in such a way that the advantages of experience-based learning can be achieved. In fact, the mix of workplace and school learning proved to be an appropriate educational design for vocational education and training (Nijhof & Nieuwenhuis, 2008). Both the workplace and the school contribute substantially to the skill development of the individual. This design is successfully achieved in the example of the ‘dual system’, which is implemented, for example, in Germany, Austria and Switzerland (Nijhof & Nieuwenhuis, 2008, 5).

The dual system has a long history in these countries. The main reasons for this are: the high participation rates of young people, the stable transition from the dual system to continuous employment and the comparatively low unemployment rate of adolescents (Ertl & Sloane, 2004). The dual system prepares learners for various vocations with high-level skills of practical relevance. A recent OECD study, ‘Skills beyond School’, confirmed that over 90 % of the 15–24-year-olds in Germany either found employment after compulsory schooling or were able to find another form of education. Compared with other European countries, Germany has the lowest youth unemployment rate, at 8.0 %. In 2012, about 550,000 new apprenticeships were started (Federal Ministry of Education and Research, 2013), with a total of about 1.4 million apprentices in the dual system. The participants in the dual system are also highly competitive on the labour market (Fazekas & Field, 2013).

Thus, the purpose of this chapter is to analyse the elements of the dual system of vocational education and training (VET) in Germany with a particular focus on workplace learning. This analysis draws upon the institutional perspective. Following North, institutions are the rules of the game in a society (North, 1990, 5). Institutions represent the regulative structure and help to organise a social phenomenon such as the dual system. The interdependencies between organisations and their respective environments, as well as the question of legitimacy of organisational behaviour, are the foci of the analysis (DiMaggio & Powell, 1994). The institutions have an influence on the behaviour patterns of the people in the dual system. From this perspective, institution is understood in the sense of rules such as laws, corporative bodies, or cultural conditions (Picot, Dietl, &

Franck, 2005). The aim of this chapter is to describe the institutions enabling workplace learning in the dual system. Our assumption is that one of the major success factors, but also one of the major challenges of workplace learning in the dual system, is the presence of specific regulative structures and institutions, respectively. In the following, we will outline the main structure of the dual system of vocational and education training in Germany (Sect. 8.2). Following this, we examine the institutions from different organisational levels: educational policy (Sect. 8.3.1), the administrative level (Sect. 8.3.2) and the instructional level at the workplace (Sect. 8.3.3). Our goal is to illustrate the effects of the institutions on the several levels regarding the design of workplace learning in the dual system (Sect. 8.4).

8.2 The Structure of the German VET System

The main principle of the dual system is that vocational education and training are organised at companies and vocational schools (*Berufsschulen*) at the same time. The trainees spend 3–4 days a week at the company where they focus on the practical elements and on learning about the requirements of the world of work. They have the opportunity to experience the workplace, on the one hand. The training in the vocational schools, on the other hand, takes place 1–2 days a week and provides general and vocational education. In the vocational schools, classes complement and reflect the trainees' workplace learning experience (Aff, Klusmeyer, & Wittwer, 2010). The duration of an apprenticeship in the dual system varies between 2 and 3 years.

The duality principle is not limited to the learning environments in companies and vocational schools. In addition, there are significant structural elements of the dual system, such as questions of the political regulation of the system (Greinert, 1995). In fact, the duality represents an overriding principle in the German vocational education system. When comparing the dual system to pure market systems of vocational education (e.g. Japan, England) and pure state systems of vocational education (e.g. France) (Deissinger, 1998), the German vocational education system reflects both market system and state system elements. These elements structure the different levels of regulation in the dual system (Kell, 2006; Kutscha, 2010). Greinert therefore describes the dual system as a state-steering market model, which the state forms using specific regulations (Greinert, 1988, 1995).

Three different levels of regulations and institutions can be differentiated for the dual system of VET:

At the macro-level – the policy and society view – two legislative structures regulate the vocational training process. The legal standardisation of the training in the companies is regulated according to federal law. The main law is the Vocational Training Act (*Berufsbildungsgesetz, BBiG*) which regulates apprenticeship in the

dual system. The training in vocational schools is governed by the legislation of the federal states in Germany in the form of school laws. In school law, there is a federalist structure of the 16 federal states in Germany.

At the meso-level – the administrative and organisational view – decrees for the regulation of the learning processes in the companies and vocational schools are in place. For the vocational training part in the companies, there are standardised apprenticeship decrees (*Ausbildungsordnungen*) that regulate the content to be covered and the skills to be developed during the apprenticeship in the company. They are obligatory for all companies in the dual system. For vocational schools, there are so-called framework curricula (*Rahmenlehrpläne*). These are recommendations and must be further defined for the vocational schools in the different federal states. The training process in the companies is monitored by ‘competent authorities’ (*zuständige Stellen*), such as the chambers (*Kammern*). The state delegates the regulatory mandate concerning vocational education to these ‘competent authorities’. Thus, they are an influential element for the organisation, administration and monitoring of the vocational education process in the companies. The counterparts for the training processes in the vocational schools are the school supervisory boards (*Schulaufsicht*) in the federal states.

At the micro-level – the instruction of the trainees – it is important to differentiate between the trainers at the companies and the teachers at the vocational schools. They guide the learners’ vocational development process. The basis for the guidance in the company part is the so-called training plan (*Ausbildungsplan*). The training plan specifies which competencies are to be fostered and which content needs to be covered during the apprenticeship in the company. The basis for the training plan is the standardised apprenticeship decree (see above). The equivalent for the vocational schools is the curriculum (*Lehrplan*), which is derived from the frame curricula (see above). To accomplish its transformation into a training plan, the trainer needs pedagogical and instructional competences. There is a certification of such competences which is regulated by a federal decree, the so-called ordinance of trainer aptitude (*Ausbildereignungsverordnung, AEVO*). The equivalent for the vocational school is the qualification process of the teacher, which consists of academic study and a 2-year traineeship in a vocational school (*Referendariat*). In this context, it is important to clarify that the ‘ordinance of trainer aptitude’ requires more rudimentary qualification process with a duration of 1–2 months – in contrast with the longer duration of the qualification of teachers in vocational schools. In consequence, the qualification processes of trainers and teachers are only partially comparable.

In Fig. 8.1, the main elements of the duality principle in the dual system in Germany are presented, showing the institutions from a legal perspective. In the following section, the institutions in the workplace training part are analysed in greater depth. The analysis is conducted from a legal perspective but also from the perspective of the underlying standards, the day-to-day practices of the actors, and norms in the dual system.

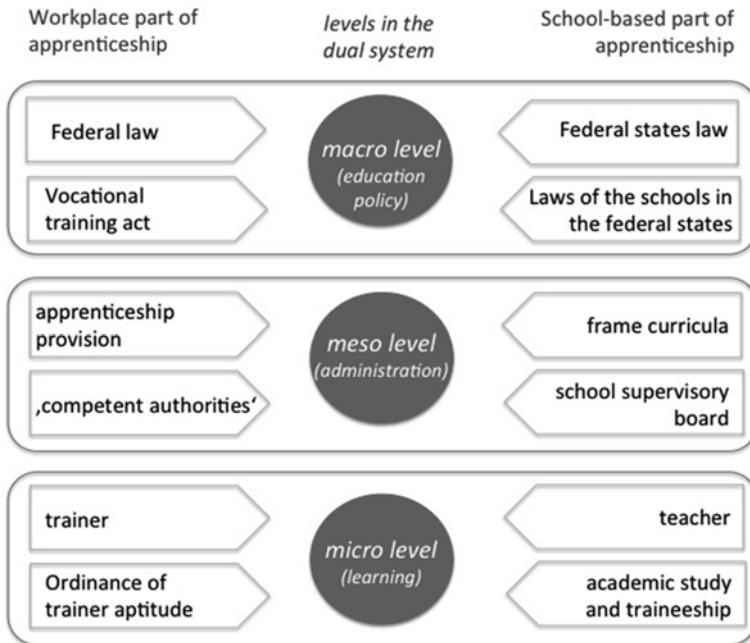


Fig. 8.1 The duality principle at the different levels of the dual system

8.3 Analysis of the Regulation Levels in the Dual System

8.3.1 Macro-level: The ‘Concept of Vocations’ and ‘Occupational Competence’

The vocational training act regulates apprenticeship in Germany. The apprenticeship is agreed through a training contract between the trainee and the company or the employee and the employer as the training contract also represents an employment contract. Therefore, the legal basis is a market-oriented principle, which is based on the freedom to choose an occupation (Kell, 2006). In the training contract, the aim, duration, content and temporal structure of the apprenticeship must be regulated, alongside other aspects. In addition, it indicates the vocational profile in which the trainee is undertaking the apprenticeship.

This ‘concept of vocation’ (*Berufskonzept*) is a central element in the dual system. It encompasses a bundle of skills or competencies which is applicable in certain functional areas across the boundaries of the several companies. These skills and competencies are fostered during the apprenticeship. The ‘concept of vocation’ has two main meanings in the dual system. It can be viewed from two perspectives: (1) from the point of view of the labour market system (allocation function) and (2) from the point of view of personality development (socialisation function).

8.3.1.1 Point of View of the Labour Market: Allocation Function

Concerning the labour market system, an interconnection between apprenticeship, vocation profile and working life can be identified (Daheim, 2001). The vocational education system and working life are structured across vocations. For an individual who acquires a certain vocational profile in the apprenticeship, the concept of vocation has the advantage that it is accepted in society, useful on the labour market and applicable in the companies (Kutscha, 2010). This enables the transition from the apprenticeship into employment in the labour market. The ‘concept of vocation’ reflects the intention of the dual system that the individual not only develop skills for company-specific requirements, or a small number of specific tasks in a functional area, but rather competences for requirements in an occupational field (Billet, 2008, 2). With the ‘concept of vocation’, the dual system of vocational education applies an allocation function as a bundle of skills that aligns with the specific requirements in the workplace. In addition, a selection function is included, as the vocational profile leads to a selection of specific occupational fields.

8.3.1.2 Point of View of the Personality Development: Socialisation Function

Concerning personality development, the ‘concept of vocation’ is also very important for the individual’s development process. The overarching aim of vocational education and training is to develop the trainees so that they are able to work and act competently in a given vocational environment (Ertl & Sloane, 2004). For example, in paragraph 1 (3) of the Vocational Training Act, vocational educational is defined as preparing the individuals for a vocational profile in a permanently changing world of work by fostering the necessary skills and knowledge and providing sufficient vocational experience. Vocational occupational competence (*berufliche Handlungskompetenz*) points to professional and interpersonal skills, as well as methodical and personal skills (KMK, 2000). This occupational competence is also reflected in the legal foundations such as the ‘framework curricula’ (for vocational schooling) and the vocational training act for workplace learning. Occupational competence enables an individual to act according to the performance requirements in a given working situation (Reetz, 1999). Above all, the purpose of vocational education is not to reduce the individual development to a specific functional field. Competence development in the concept of the vocation should always contribute to the development of a trainee’s identity and personality. At the end of the apprenticeship, the individual should be able to act upon his or her own initiative in a given vocational context. From this perspective, the ‘concept of the vocation’ in the dual system also fulfils a socialisation function. The vocation of a person represents skills concerning a vocational field as well as the personality of the individual.

The ‘concept of vocation’ can be described as a stable institutional pattern in the dual system. It is an ‘organising principle’ in the vocational education system and

the working world (Deissinger, 1998). Currently, there are about 340 vocational profiles in Germany.¹

The strong institution of the vocations implies that vocational education is institutionalised beyond the legislative foundations (see 8.2 and 8.3.2). The ‘concept of vocation’ enables the dual system’s stability but also its rigidity. In a changing working world, the requirements of working situations are constantly shifting. This leads to a discussion in the German vocational education system regarding whether the traditional vocational profiles are appropriate. It can be observed that the vocational profiles are adapted to the requirements of the working world. Most importantly, however, the vocational profiles are the result of a negotiation process between different parties. Vocational profiles are social constructs, and parties such as employers, employees or state partners have an influence on the vocational profiles (Büchter & Meyer, 2010; see Part 8.3.2).

The ‘concept of vocation’ not only has a long historical tradition in the German dual system but can also be identified as a strong institution in the vocational education system. Workplace learning in the dual system encompasses a learner’s development towards a certain vocational profile. In addition to the training of skills required for occupational fields, it also involves the development of the personality and preparation for participation in society. Thus, the institutional pattern of the ‘concept of vocation’ goes beyond the vocational education system.

8.3.2 Meso-level: Co-operation Between Companies and Vocational Schools

The meso-level focuses on the institutional regulation of the learning environments in companies and vocational schools. For the organisation of workplace learning in the companies, there is apprenticeship provision for every vocational profile. This is a nationwide provision and provides the basis for a standardised vocational training process in the companies. The apprenticeship provision defines the aim of the apprenticeship, the contents in the apprenticeship, the fostering of vocational skills and the examination requirements. The requirements in the apprenticeship provision are the minimum standards for the vocational training in the companies (see § 5 BBiG).

While the federal minister in office decrees apprenticeship provision, the relevant societal groups of the vocational education system co-operate in order to develop the apprenticeship provision. This represents the so-called consensus principle which ensures the participation of all relevant societal groups in vocational training. The societal groups include the agents of the employers (employer associations) and employees (trade unions) as well the federal ministries and the federal states. In

¹For instance, in the commercial field ‘industrial clerk’ and ‘bank clerk’ or in the technical area ‘electrical fitter’ or ‘recycling and waste management technician’. An overview can be founded at: <http://www2.bibb.de/tools/aab/aaberufuebersetzungen.php?bt=1>

order to develop apprenticeship provision, an agreement between these societal groups is needed. This complex process, comprising several stages of decision-making, is moderated by the Federal Institute for Vocational Education and Training (*Bundesinstitut für berufliche Bildung, BIBB*). The development of the framework curricula for the vocational schools is embedded in this moderation process (see Sect. 8.2). This ensures that the apprenticeship provision for the workplace training and the framework curricula for the vocational school are consistent. In sum, the ‘principle of consensus’ can be described as a specific form of negotiation of educational policy decisions (Kutscha, 2010). From the point of view of an employer, the companies have an influence on the design of the apprenticeship, but there also needs to be consensus with the other societal groups. A benefit of this ‘consensus principle’ is that the constitution of the training process is commonly accepted. Through this process, the risks of market as well as government failures are limited, and barriers to implementing decisions in vocational training laws can be overcome (Kutscha, 2002). Despite all these advantages, the need for consensus often leads to time lags and halts during the redevelopment of apprenticeships. Sometimes it seems that it is easier to continue with an existing consensus than to negotiate a new one (Ertl & Sloane, 2004). In the light of fast-changing working environments and the corresponding new competence requirements, the principle of consensus can be described as inflexible. In particular, the employers see the danger that a modernisation of vocational training would take a great deal of time. Nevertheless, the ‘principle of consensus’ ensures the participation of the relevant stakeholders and establishes the broad social acceptance of vocational training.

While the ‘principle of consensus’ is an influential social rule in the (further) development of vocational training, the ‘principle of corporatism’ can be outlined as the social rule for the administration and monitoring of the apprenticeship. As mentioned at the beginning of this chapter, the dual system is a state-steering market model, in which the state applies corporatist institutions to regulate the vocational training process. The institutions are bodies of self-government, such as the chambers (e.g. the Chambers of Industry and Commerce and the Craft Chambers). The legal function of these institutions is the ‘competent authority’ (*zuständige Stelle*) which means that they are responsible for the realisation of the vocational training and the practical implementation of the legal vocational norms and regulations (Ertl & Sloane, 2004; Kutscha, 2010). It includes the administration and the organisation of vocational training. Furthermore, the chambers supervise the organisation of the examinations and act as awarding authorities for vocational qualifications. Thus, the chambers and ‘competent authorities’, respectively, can be described as intermediate organisations between the state and the companies (Ertl & Sloane, 2004). While the ‘principle of consensus’ is the basis for the collaboration between the societal groups in the vocational training system, the ‘principle of corporatism’ ensures the implementation and monitoring of the negotiated rules between the social groups.

The ‘principle of consensus’ and the ‘principle of corporatism’ are regulative institutions for the administration of the workplace learning in the dual system. In order to match the learning process in the companies and in the vocational schools, the ‘principle of co-operation between the learning venues’ (*Lernortkooperation*)

has evolved since the 1960s. This principle of co-operation does not only include the companies and the schools, but it also includes the competent authorities and other learning venues (for instance, those organised by industrial enterprises and banks) (Schmidt, 2004, 41).

This co-operation can have different objectives and content and, as a consequence, can be characterised by different levels of intensity (Euler, 2004, 14). Buschfeld and Euler (1994) distinguish between three levels of co-operation:

- (a) At the level of information, the teachers (schools) and the trainers (companies) exchange information and communicate about the expectations, experiences and challenges of apprenticeships. This is conducted via letters from both partners.
- (b) At the level of co-ordination, teachers and trainers agree (and develop) different measures which will then be implemented based on division of labour and respecting the conditions of schools and companies.
- (c) Finally, the level of co-operation includes direct teamwork between teachers and trainers. Their actions are targeted at supporting the learning process of the apprentices, for instance, by preparing content collaboratively and working on it in the companies and/or in the schools at the same time (Euler, 2004, 15).

At the meso-level, the dual system of vocational training can be described as a mix of state, corporate and market regulation. The process of negotiation of the rules between the social groups is meaningful and essential in order to maintain the balance between these regulations and the partners involved (Kutscha, 2002). The employers aim to ensure their influence on the vocational training process; in consensus with the other social groups, they try to achieve their aims. In summary, through these principles, the corresponding parties accept the negotiating rules. This allows workplace learning to match the objectives of the requirements of the companies but also serves the overall goal of apprenticeship of educating the apprentices.

8.3.3 Micro-level: ‘Action Orientation’ as an Institutional Principle in the Instructional Process

The micro-level deals with the realisation of the actual vocational training. Workplace learning is anchored here. As mentioned above, operations in companies generally follow economic aims and criteria. Thus, educational aims need to be designed in connection with these economic functions (Kell, 2006). At the same time, workplace learning enables a learning process in an authentic environment, gradually leading the trainee to more ambitious workplace requirements. Therefore, the learning venue of the ‘workplace’ offers the conditions to foster occupational competence, including both the skills required for different occupational fields and the development of the personality (see Sect. 8.3.1). To achieve these twofold goals, workplace training needs a corresponding instructional design.

One institutional instructional principle for the vocational training process can be described as ‘action orientation’. A translation of the German discourse concerning this topic is not easily achieved. The main idea of ‘action orientation’ is that instructional methods should be informed by the vocational action process. The learning environment should allow the trainee to try out different vocational actions. Thus, a second instructional principle is ‘learner centeredness’ (Bransford, Brown, & Cocking, 2000): The individual’s or the trainee’s actions should always be the starting point of the learning process. In summary, the apprenticeship provision recommends an instructional design in which the trainee autonomously and self-dependently plans, carries out and evaluates his or her work tasks. This capability is also a component of the examinations of the apprenticeship.² This conception of ‘action orientation’ is an influential institutional pattern in the German vocational education system. The model includes that learning and acting have a structural identity. During the acting process, the individual is exploring a learning object (e.g. a specific working process), and during this process, there is a change in the individual’s cognitive and occupational competence (Dilger & Sloane, 2007; Sloane, 1999). Thus, it is a dual process including an execution of the working process and an acquirement of skills (Czycholl, 1996). ‘Action orientation’ is not limited to the preparation to act in the working practice. Furthermore, there is also a traditional dimension in the vocational education system to prepare the trainees for autonomous and responsible action in future social situations (Kutscha, 1995). The concept of ‘action orientation’ is also reflected in the discourse of workplace learning. Accordingly, Billet states that learning and working are interdependent. People learn through acting in conscious goal-directed activities (Billet, 2001). Goal orientation and awareness are also key characteristics of action processes (Gerholz, 2010).

The design of such ‘action-oriented’ learning environments is one of the challenges faced by the trainers in the companies. Based on the vocational training act (*BBiG*), only those who are qualified personally and professionally can take on the role of the trainer. Professional ability refers to vocational skills and knowledge. Beyond that, it also includes educational and pedagogical skills (§ 28, 30 *BBiG*). As described above, the confirmation of these skills is regulated in a federal decree, the ‘ordinance of trainer aptitude’ (*Ausbildereignungsverordnung, AEVO*). The examination of the ‘ordinance of trainer aptitude’ is organised by the chambers as ‘competent authorities’ (see above, Sect. 8.3.2). The requirements for the trainer include the planning, implementing and controlling of the trainees’ apprenticeship. Thus, the trainer has to be able to create a training plan for the apprenticeship, and this plan needs to be derived from the apprenticeship provision (see Sect. 8.3.2). The training plan specifies which competencies are to be fostered and which content needs to be covered during the apprenticeship in the company. The training plan should consider the process orientation in the world of work, i.e. the learning environments should be developed with the working and business processes in mind. This again leads to ‘action orientation’. Furthermore, the trainer has to be able to counsel the trainees concerning their individual conditions and learning needs. This

²As an example, please see the apprenticeship decree for an industrial clerk (Sects. 8.2 and 8.3).

refers to ‘learner centeredness’ and includes the necessary role change from instructor to learning counsellor.

The legal regulation of the ‘ordinance of trainer aptitude’ ensures that the workplace training aspects of apprenticeship are organised by well-suited and educationally qualified people. The ordinance is supposed to ensure quality assurance for the instruction in the workplace. However, in the training practice at the companies, the situation is different. The qualified trainers are indeed responsible for apprenticeship in the company, but often these trainers assign the actual training tasks to employees in the working process. Thus, in most companies, the instruction of the trainees is carried out by other employees who are not qualified with the ‘ordinance of trainer aptitude’. In consequence, the trainers who are qualified are often not involved in the apprentices’ competence development since they are responsible for the organisation of the apprenticeship (Seifried & Baumgartner, 2009). In summary, the purpose of the ‘ordinance of trainer aptitude’ and the training practice in the companies are not in alignment. A gap in the effectiveness of the ordinance can be identified.

At the same time, there has been critical discussion regarding whether the ‘ordinance of trainer aptitude’ is sufficient for the requirements of a modern vocational education process (Buschfeld, 2010; Gössling & Sloane, 2013; Pätzold, 2008). The changes in the world of work from an industrial society to a knowledge society require that trainees learn to act within holistic connections and orient themselves towards the processes in the working life. Therefore, the trainer in the apprenticeship requires specific pedagogical skills. The ‘principle of action orientation’ has to be reconstructed within these modern requirements of apprenticeship. In this context, there are several different trainer profiles. At the instructional level, trainers are required who can prepare the trainees for standardised provisions of service and working tasks and also trainers who focus on the preparation for working fields that feature intense use of knowledge and skills. At the curricular level, trainers are required who are able to reflect on the conditions of the learning environments in the workplace, and based on that, they are able to develop curricular solutions for a modern apprenticeship (Gössling & Sloane, 2013; Pätzold, 2008). The current ‘ordinance of trainer aptitude’ fulfils these requirements only partially. The idea of a rather generalist qualification for the trainer is widespread. Therefore, ‘action orientation’ has to be reconstructed relative to the modern requirements of the companies, including the design of ‘learner-centred’ environments.

8.4 Regulating Institutions of Workplace Learning Within the Dual System

The structure of the dual system in the German vocational education system reflects the historical development (Kell, 2006; Kutscha, 2010). The different levels of the vocational system were described earlier in this chapter (see Sects. 8.3.1, 8.3.2, and 8.3.3). In the following figure, these levels and their interconnections are presented.

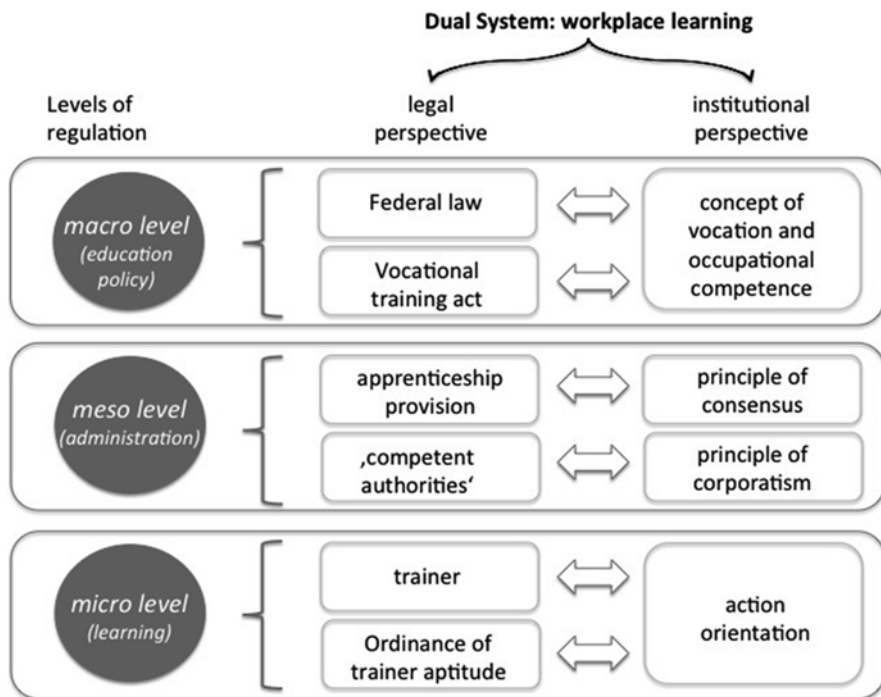


Fig. 8.2 Regulations of workplace learning in the German dual system

This represents the regulation of vocational education and training in the workplace. The regulation instances can be described from a legal perspective (the legal conditions) and from an institutional perspective (the rules of the vocational education system) (Fig. 8.2).

The institutions regulate the actions of the people in the vocational education system and especially with regard to workplace learning. In this context, the question of the extent to which these rules are highly institutionalised is often posed. According to Zucker, it can be assumed that highly institutionalised settings have a strong influence on the thinking and acting of the people, mostly leading a resistance to change (cultural persistence) (Zucker, 1994).

With regard to the macro-level, the ‘concept of vocation’ provides a highly stable structure in the vocational education system. In the last two decades, different reform discussions have been led with regard to the dual system (e.g. Euler & Severing, 2006; Kutscha, 2002). Nevertheless, the ‘concept of vocation’ was never fundamentally put into question. In addition to the fostering of skills required in occupational fields, workplace learning also implies the development of the trainees’ personality. However, differences in the foci of the people involved in the dual system can be identified. Empirical analysis has shown that the trainer in the companies and the employer association focus on the training of the skills for the

specific working fields, while for the trade unions, personality development and participation in the employment system are key aspects of apprenticeship (Ebbinghaus, 2009).

At the meso-level, the ‘principle of consensus’ and the ‘principle of corporatism’ represent influential patterns for those involved in the vocational education system. It ensures participation in the design and decision-making processes of the stakeholders. How these principles influence development processes can be demonstrated, for instance, by the development of the National Qualification Framework (NQF), which originates from European educational policy. The NQF and the German education system were supposed to be joined in a common framework. Since the NQF is geared towards outcome orientation, visible in learning outcomes defined for each qualification, a new governance tool was introduced into the German education system. During the implementation process in Germany, the principles of corporatism and consensus were present. It becomes apparent that the social groups do not place the key aim, that is to say the learning outcomes, in the foreground. Instead, the social acceptance of the framework by the stakeholders, i.e. the idea of a consensus, is more important (Sloane & Gössling, 2012). In consequence, outcome orientation is not implemented consistently. In fact, it can be described as a combination of input and outcome elements.

‘Action orientation’ can be described as a less institutional pattern at the micro-level. From a legal perspective, the ‘ordinance of trainer aptitude’ provides a qualification requirement for the trainers. From an institutional perspective, the institutions at the micro-level could be interpreted as a formal structure in the sense of legitimation. For instance, the trainer’s certificate shows that the company can offer the instructional skills for workplace learning. Thus, as Meyer and Rowan (1994) have conceptualised, the organisation develops its formal structures in order to meet the legitimacy standards of society, but it could be that the real activities of an organisation – the activity structures – do not fit the formal structure (Meyer & Rowan, 1994). As discussed in Sect. 8.3.3, the current qualification process of the trainers is not adequate to be consistent with the modern requirements of apprenticeship in the activity structure. Further developments of the trainer’s qualification are required, in alignment with the requirements of the world of work. Through such advancements, the intention of ‘action orientation’ could indeed have an effect on workplace training in apprenticeships. Additionally, it has been shown that in training practice, that is to say, in the activity structure, the instruction of the trainees is *de facto* carried out by other employees rather than by the qualified trainers. However, formally at least, only the qualified trainers are responsible for the training process. In the future, it is essential to close the gap between the formal requirements and the activity structure to assure the quality of the apprenticeship.

However, the different principles result in a high level of acceptance of apprenticeship and especially of workplace learning in companies. As a consequence, the quality of workplace learning is assured since the people involved appreciate apprenticeship as an institution.

The institutions have different roles to play, and not all institutions have the same power in the system of workplace learning. As already mentioned, there is a great deal of potential for further development. The system's weaknesses are indeed being discussed in Germany, and they are often ascribed to the structure of the system. However, from the outside, the dual system is seen as 'good practice' because of its structural embeddedness at the different levels. On a final note, it can be stated that the structural elements have grown historically. There is a threat that the system is more resistant to change, but there is also the potential of a wide range experience to exploit in the future and in other countries.

References

- Aff, J., Klusmeyer, J., & Wittwer, W. (2010). Berufsausbildung in Schule und Betrieb. In R. Nickolaus, G. Pätzold, H. Reinisch & T. Tramm (Eds.), *Handbuch Berufs- und Wirtschaftspädagogik* (pp. 330–336). Bad Heilbrunn, Germany: Klinkhardt.
- Ananiadou, K., Jenkins, A., & Wolf, A. (2004). Basic skills and workplace learning: What do we actually know about their benefits? *Studies in Continuing Education*, 26(2), 289–308.
- Ashton, D. N., & Sung, J. (2002). *Supporting workplace learning for high performance working*. Geneva, Switzerland: International Labour Office.
- Bailey, T. R., Hughes, K. L., & Thornton, M. D. (2004). *Working knowledge: Work-based learning and education reform*. London: Routledge.
- Billet, S. (2001). *Learning in workplace. Strategies for effective practice*. Crows Nest, Australia: Allen & Unwin.
- Billet, S. (2008). Emerging perspectives on workplace learning. In S. Billet, C. Harteis, & A. Eteläpelto (Eds.), *Emerging perspectives of workplace learning*. Rotterdam, The Netherlands: Sense.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn. Brain, mind, experience and school*. Washington, DC: National Academy Press.
- Büchter, K., & Meyer, R. (2010). Beruf und Beruflichkeit als organisierendes Prinzip beruflicher Bildung. In R. Nickolaus, G. Pätzold, H. Reinisch & T. Tramm, (Eds.), *Handbuch Berufs- und Wirtschaftspädagogik* (pp. 323–326). Bad Heilbrunn, Germany: Klinkhardt.
- Buschfeld, D. (2010). Alte Bekannte in der neuen Ausbilder-Eignungsverordnung (AEVO). *Berufsbildung*, 64(122), 37–39.
- Buschfeld, D., & Euler, D. (1994). Antworten die eigentlich Fragen sind – Überlegungen zur Kooperation der Lernorte. *Berufsbildung in Wissenschaft und Praxis*, 23(2), 9–13.
- Czychołł, R. (1996). Handlungsorientierung in der beruflichen Bildung. In B. Bonz (Ed.), *Didaktik der Berufsbildung. Beiträge zur Pädagogik für Schule und Betrieb* (pp. 113–131). Stuttgart, Germany: Schneider Hohengehren.
- Daheim, H. (2001). Berufliche Arbeit im Übergang von der Industrie zur Dienstleistungsgesellschaft. In T. Kurtz (Ed.), *Aspekte des Berufs in der Moderne* (pp. 21–38). Opladen, Germany: Leske+Budrich.
- Deissinger, T. (1998). *Beruflichkeit als "organisierendes Prinzip" der deutschen Berufsausbildung*. Markt Schwabl, Germany: Eusl.
- Dilger, B., & Sloane, P. F. E. (2007). Die wirklich vollständige Handlung – Eine Betrachtung des Handlungsverständnisses in der beruflichen Bildung unter dem Fokus der Selbstregulation. In F.-W. Horst, J. Schmitter, & J. Tölle (Eds.), *Wie Mosel Probleme löst: Lernarrangements wirksam gestalten* (Vol. 1, pp. 66–103). Paderborn, Germany: Eusl.
- DiMaggio, P. J., & Powell, W. W. (1994). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 63–82). Chicago: The University of Chicago Press.

- Ebbinghaus, M. (2009). Empirische Modellierung von Outputqualität betrieblicher Ausbildung. *Zeitschrift für Berufs- und Wirtschaftspädagogik*, 105, 33–52.
- Ertl, H., & Sloane, P. F. E. (2004). The German training system and the world of work: The transfer potential of the Lernfeldkonzept. *bwp@*, 7. Online: http://www.bwpat.de/7eu/ertl_sloane_de_bwpat7.pdf. 5 Apr 2013.
- Euler, D. (2004). Lernortkooperation im Spiegel der Forschung. In D. Euler (Ed.), *Handbuch der Lernortkooperation: Theoretische Fundierungen* (Vol. 1, pp. 25–40). Bielefeld, Germany: Bertelsmann.
- Euler, D., & Severing, E. (2006). *Flexible Ausbildungswege in der Berufsbildung* (Ziele, Modelle, Maßnahmen). Bielefeld, Germany: Bertelsmann.
- Fazekas, M., & Field, S. (2013). *Postsekundäre Berufsbildung in Deutschland*. OECD Publishing. Online: <http://browse.oecdbookshop.org/oecd/pdfs/free/9113075e.pdf>. 7 June 2013.
- Federal Ministry of Education and Research. (2013). *Berufsbildungsbericht 2013*. Online available at http://www.bmbf.de/pub/bbb_2013.pdf. 30 Sept 2013.
- Gerholz, K.-H. (2010). *Innovative Entwicklung von Bildungsorganisationen. Eine Rekonstruktionsstudie zum Interventionshandeln in universitären Veränderungsprozessen*. Paderborn, Germany: Eusl.
- Gössling, B., & Sloane, P. F. E. (2013). Die Ausbildereignungsverordnung (AEVO): Regulatorischer Dinosaurier oder Ansporn für innovative Bildungsarbeit? *Zeitschrift für Berufs- und Wirtschaftspädagogik*, 109(2), 232–261.
- Greinert, W.-D. (1988). Marktmodell-Schulmodell-duales System. Grundtypen formalisierter Berufsbildung. *Die berufsbildende Schule*, 40, 145–156.
- Greinert, W.-D. (1995). *Das duale System der Berufsausbildung in der Bundesrepublik Deutschland – Struktur und Funktion*. Stuttgart, Germany: Holland und Josenhans.
- Kell, A. (2006). Organisation, Recht und Finanzierung der Berufsbildung. In R. Arnold & A. Lipsmeier (Hrsg.), *Handbuch der Berufsbildung* (pp. 453–484). Wiesbaden, Germany.
- KMK – Sekretariat der Ständigen Konferenz der Kultusminister der Länder in der Bundesrepublik Deutschland. (2000). *Handreichung für die Erarbeitung von Rahmenlehrplänen der Kultusministerkonferenz für den berufsbezogenen Unterricht in der Berufsschule und ihre Abstimmung mit Ausbildungsordnungen des Bundes für anerkannte Ausbildungsberufe*. Online: <http://www.kmk.org/doc/publ/handreich.pdf>. 9 Aug 2011.
- Kutscha, G. (1995). Didaktik der beruflichen Bildung im Spannungsfeld von Subjekt- und Systembezug. In P. Dehnbostel & H.-J. Walter-Lezius (Eds.), *Didaktik moderner Berufsbildung – Standorte, Entwicklungen, Perspektiven* (pp. 266–278). Bielefeld, Germany: Bertelsmann.
- Kutscha, G. (2002). Regulation and deregulation: The development and modernisation of the German dual system. In: P. Kämäräinen, G. Attwell, & A. Brown (Eds.), *Transformation of learning in education and training*. Online: http://www.cedefop.europa.eu/EN/Files/3025_en.pdf. 5 Apr 2013.
- Kutscha, G. (2010). Berufsbildungssystem und Berufsbildungspolitik. In R. Nickolaus, G. Pätzold, H. Reinisch, H., & T. Tramm (Eds.), *Handbuch Berufs- und Wirtschaftspädagogik* (pp. 311–321). Bad Heilbrunn, Germany: Klinkhardt.
- Malloch, M., Cairns, L., Evans, K., & O'Connor, B. N. (2011). *The SAGE handbook of workplace learning*. Thousand Oaks, CA: Sage.
- Meyer, J. W., & Rowan, B. (1994). Institutionalized organizations: Formal structure as myth and ceremony. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 41–62). Chicago: University of Chicago Press.
- Nijhof, W. J. (2005). Lifelong learning as a European skill formation policy. *Human Resource Development Review*, 4(4), 401–417.
- Nijhof, W. J., & Nieuwenhuis, L. F. M. (2008). The learning potential of the workplace. In W. J. Nijhof & L. F. M. Nieuwenhuis (Eds.), *The learning potential of the workplace* (pp. 3–13). Rotterdam, The Netherlands: Sense.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge, UK: Cambridge University Press.
- Pätzold, G. (2008). Ausbildereignungsprüfung wichtig für Image und Qualität beruflicher Bildung. *Zeitschrift für Berufs- und Wirtschaftspädagogik*, 104(3), 321–326.

- Picot, A., Diel, H., & Franck, E. (2005). *Organisation. Eine ökonomische Perspektive*. Stuttgart, Germany: Schäffer-Poesche.
- Reetz, L. (1999). Zum Zusammenhang von Schlüsselqualifikationen – Kompetenzen – Bildung. In T. Tramm (Eds.), *Professionalisierung kaufmännischer Berufsbildung. Beiträge zur Öffnung der Wirtschaftspädagogik für die Anforderungen des 21. Jahrhunderts. Festschrift zum 60. Geburtstag von Frank Achtenhagen* (pp. 32–51). Frankfurt a. M., Germany: Lang.
- Schmidt, H. W. (2004). Kooperation in der Berufsbildung – ein deutsches Spezifikum. In D. Euler (Ed.), *Handbuch der Lernortkooperation: theoretische Fundierungen* (Vol. 1, pp. 51–59). Bielefeld, Germany: Bertelsmann Verlag.
- Seifried, J., & Baumgartner, A. (2009). Lernen aus Fehlern in der betrieblichen Ausbildung – Problemfeld und möglicher Forschungszugang. In *bwp@ Berufs- und Wirtschaftspädagogik – online* (Vol. 17, pp. 1–20). Online: www.bwpat.de/ausgabe17/seifried_baumgartner_bwpat17.pdf. 17 Aug 2013.
- Sloane, P. F. E. (1999). *Situationen gestalten. Von der Planung des Lehrens zur Ermöglichung des Lernens*. Markt Schwaben, Germany: Eusl.
- Sloane, P. F. E., & Gössling, B. (2012). Zur Entkopplung von Input-Faktoren und Outcome-Zeremonien im Diskurs um den Deutschen Qualifikationsrahmen. *Zeitschrift für Berufs- und Wirtschaftspädagogik*, 108(3), 329–361.
- Stuart, M. (2007). Introduction: The industrial relations of learning and training: A new consensus or a new politics? *European Journal of Industrial Relations*, 13(3), 269–280.
- Zucker, L. G. (1994). The role of institutionalization in cultural persistence. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 83–107). Chicago: University of Chicago Press.