



ELSEVIER



CrossMark

Available online at www.sciencedirect.com

ScienceDirect

Procedia - Social and Behavioral Sciences 204 (2015) 300 – 308

Procedia
Social and Behavioral Sciences

4th World Congress on Technical and Vocational Education and Training (WoCTVET), 5th–6th
November 2014, Malaysia

Transfer of IVET Systems to Other Countries: The German Example

Gerald Thiel*

DEKRA Akademie, Germany

Abstract

In some countries the conviction has arisen that their traditional national systems of Initial Vocational Education and Training (IVET) are no longer sufficient for preparing individuals to meet the requirements of the modern world of work referring to a state of the art that is determined by global competition. An easy way to initiate necessary changes appears to be the use of systems that seem to cause economic success. This is obviously the background of bilateral collaboration agreements between the German government and the governments of Greece, Italy, Latvia, Portugal, Slovakia, and Spain (here called “reform countries”) in the IVET-area that shall help the reform countries to change their IVET systems in a way that they better fit to the needs of the labour market. The “reference model” for this kind of collaboration is the German IVET-system. However, there are many conditions for implementation which need to be reflected with regard to a successful “IVET system transfer”. The article at hand will deliver suggestions how to deal with this fact properly, after the German system of IVET and its strengths and weaknesses have been shortly described.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of Faculty of Technical and Vocational Education, University of Tun Hussein Onn Malaysia.

Keywords: initial VET; dual system; transfer of VET systems

1. Introduction

In the majority of cases, responsibility for education in Germany is the domain of regional governments, assigned to 16 states (“Länder”). This is not true for Initial VET where federal bodies as well as institutions of the Länder share the power; moreover, there are some responsibilities - in other countries belonging to public administrations - which are ceded to private organizations working on behalf of public bodies.

The main stakeholders of collaboration within this public-private partnership are players relevant for the set-up and update of occupations:

- The Federal Government represented by the Ministry of Economy, the Ministry of Agriculture, and the Ministry of Education and Research (who delegates the main tasks to the Federal Institute of Vocational Education who works on behalf of this ministry)
- Associations of companies working at sectoral as well as at overarching positions
- Trade unions working at sectoral level
- “Competent bodies” of various origin, responsible for the control of IVET, mostly situated within specific economic or societal areas (as chambers, equivalent public organizations)

2. Setting up an occupational profile*

The set-up starts with an *initiative* that is taken by

- A sectoral association of entrepreneurs
- One of the umbrella organizations of entrepreneurs
- Trade unions
- A competent ministry
- The Federal Institute of Vocational Training and Education (Bundesinstitut für Berufsbildung – BIBB)

There is no unique way how this initiative is specified: Starting points might be preliminary discussion among social partners (organizations of entrepreneurs and unions), but also the results of a research project carried out by BIBB; and, of course, also a ministry can come up with a directive to start the official set-up (or update) of an occupational profile. In the majority of cases, the social partners come up with suggestions for basic values to be considered for regulations of occupational profiles. These basic values concern the following topics:

- Title of the occupation
- Duration of training
- Structure of training (Possible differentiation according to focuses)
- Form of examination
- Chronological structure
- Issues of environment protection
- Catalogue of minimum requirements for knowledge, skills, and competences

On the basis of these suggestions, the bearers of the initiative apply to the responsible ministry (mostly the ministry of economy and energy) to host a meeting with all stakeholders in order to base the set-up process on the consensus of all involved parties.

This set-up process takes place on a legal basis: the Vocational Education Act (Bundesberufsbildungsgesetz). The act rules in a formal way the procedure to be applied; this includes the roles of stakeholders in this process. Among others, it is determined in this act that *experts* have to be nominated by the social partners and by BIBB who will *together* elaborate the basic values agreed on in the session with the competent ministry. This work leads to a

* The following description benefits from the brochure *Bundesinstitut für Berufsbildung (Ed.) Ausbildungsordnungen und wie sie entstehen*, [1] It uses also information that the author provided in the project *EQF Predict* (<http://www.project-predict.eu>) [2]

draft regulation of training (Ausbildungsordnung) and is related to the first pillar of the dual system of initial VET, training integrated in work of private (enterprises) and public organizations (administrative bodies). This regulation is based on federal law i.e. a decrees of the competent ministry

The second pillar of the dual system of IVET is based on legal regulations determined by the “Länder”. These regulations rule vocational education taking place at vocational schools (Berufsschulen), supplementing training within enterprises and equivalent public organizations by theoretical instruction referring to the occupational profile and also by dealing with subjects of a more generic character (as German language, social studies, calculating). For this purpose, experts nominated by the Länder have to draft a skeleton curriculum (Rahmenlehrplan) that can be, if necessary, be specified for every Land. This curriculum comprises as structural elements:

- Fields of learning
- Learning content
- Learning objective
- Suggested time allocation

All in all, it encompasses 1/3 generic instruction: social studies (German, foreign languages, sports/religion or alternately ethics) and 2/3 specialized instruction: technology, economic fields of learning.

Both groups of experts meet in order to harmonise their drafts. In the course of this collaboration, also the *Europass Certificate Supplement* is drafted which will be attached to the final certificate, explaining achieved knowledge, skills, and competences and assigning them to the levels of the European Qualification Framework (EQF), thereby intending to make the qualification comparable with qualifications achieved in other countries and thus to enhance professional mobility; the supplement has then to be translated into English and French.

After this harmonization process has been finished, the “Common Committee of the Federal Government and Länder Governments for the Coordination of Training and Regulations and Skeleton Curricula” (Bund-Länder-Koordinierungsausschuss Ausbildungsordnungen/Rahmenlehrpläne) has to accept both drafts. Then the competent ministry issues the decree on the training regulation and Länder governments take over the skeleton curriculum, possibly deriving from it a part of the land.



Fig. 1 Delivers a schematic description of the set-up process

3.0 How the German system works

As already mentioned above, the German IVET system is based on two pillars:

- In-company training working on the basis of federal law: 3 – 4 days per week
- VET education within vocational schools, ruled by laws of the Länder: 1 – 2 days per week

The legal basis of this dual system is summarized by Figure 2:

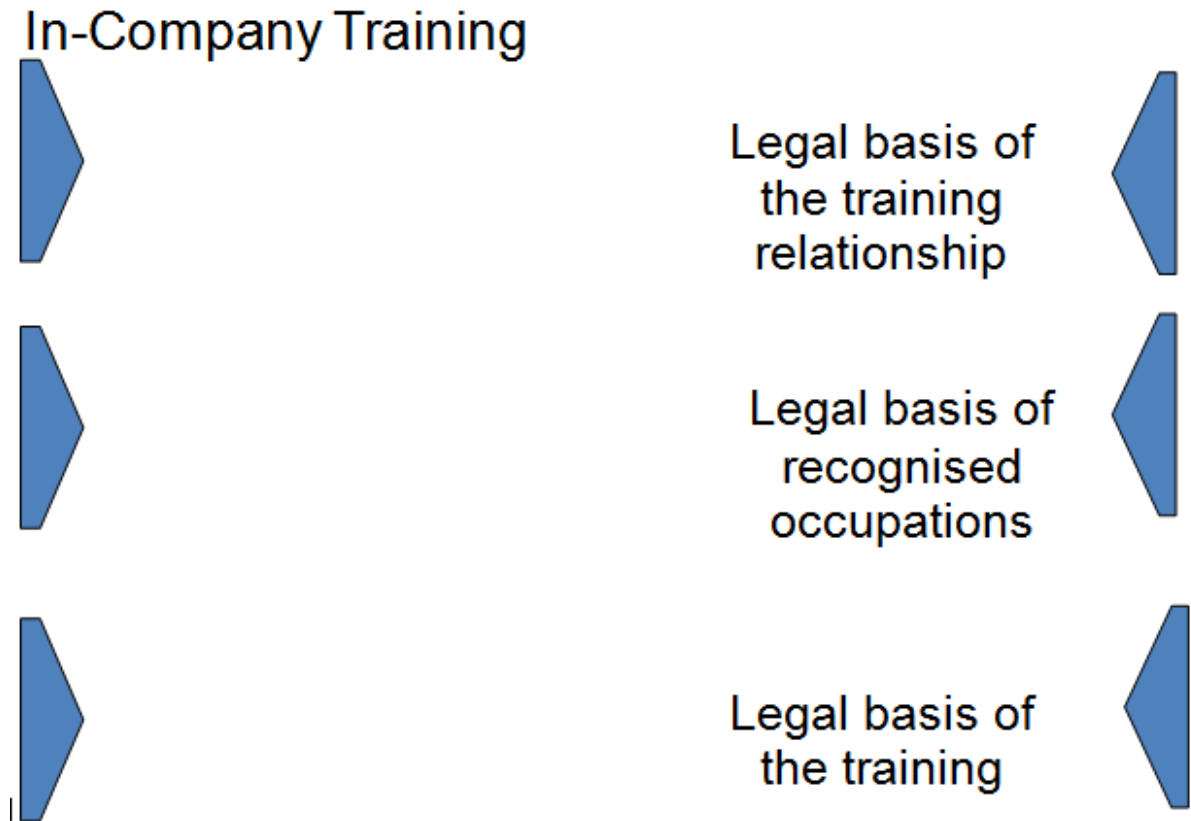


Fig. 2

In order to make the system work in practice, financial resources are required and people taking to maintain the system. How this is organized, can be seen in Figure 3:

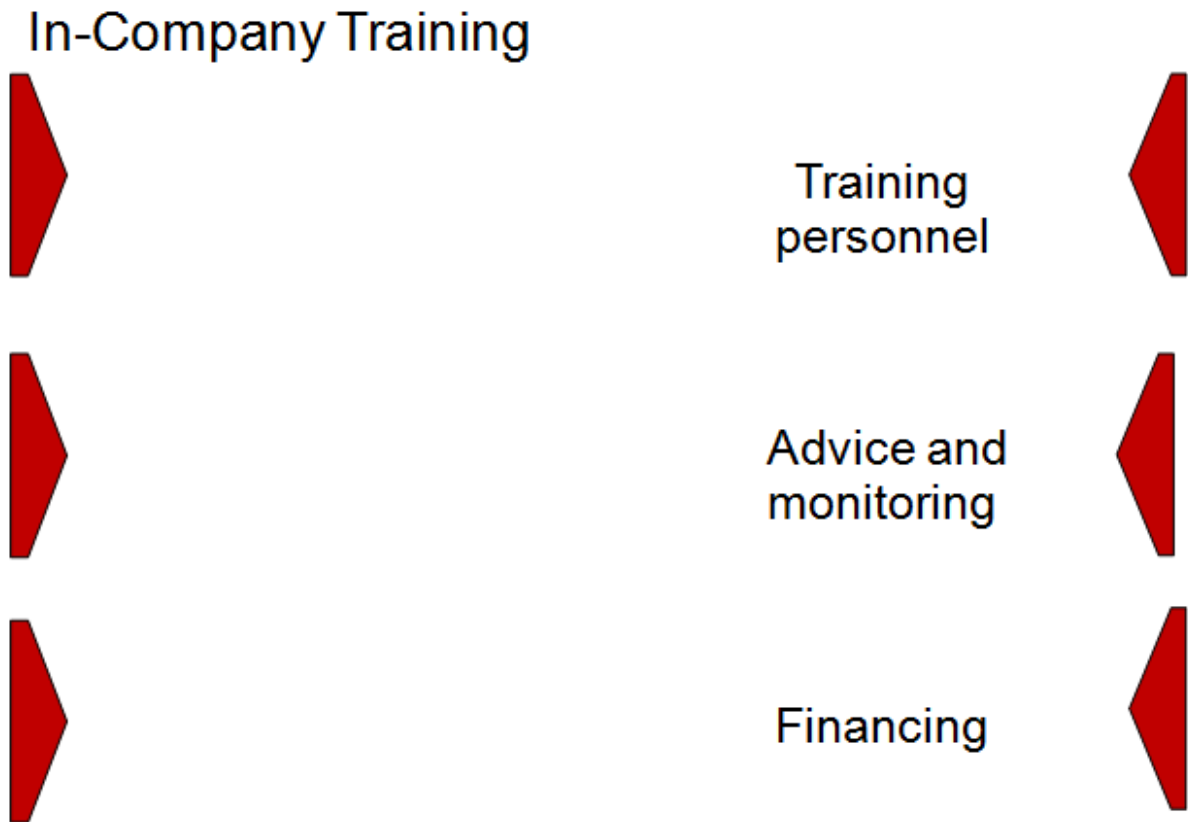


Fig. 3

Trainers are practitioners working within firms, as a rule not only employed in order to train apprentices, but also contribute directly to production and/or service (mostly as heads of departments, masters [Meister]). They carry out in-company training on the job, supplemented by in-house workshops or laboratories to practice or learn particular skills.

Vocational school teachers (having completed an academic programme of study) teach students within school-based training/education. As mentioned above, lessons deal partially with generic content, partially with profession-oriented content. According to the skeleton curricula designed within the last decades, this part of training is becoming more and more work scenario based. This opens perspectives for a stronger linkage between training within enterprises and lessons of vocational schools.

Chambers of commerce and industry, craft, agriculture give advice to enterprises and monitor training. They *carry out examinations, leading to certificates that are publicly recognized*. This strong position is based on the role defined by the Vocational Act where chambers are appointed to do this on behalf of the state. In this context, it should not be forgotten that enterprises in Germany are obliged by law to be members of chambers.

Regional institutions and Länder ministries control vocational schools. Training is financed partially by enterprises, partially by the Länder (by funding of vocational schools as a part of compulsory education)

3. Main features of the German system of initial VET

1. It should not surprise that stakeholders all over the world declare that they want to make VET productive for economic development[†]; if we consider the *general objective* of German IVET, this does not make the difference. The distinctive feature becomes visible if we have a look at the *specification of the relationship between VET and the world of work, formulated as an individual ability* in the Vocational Act:

(3) Initial training shall, through a systematic training programme, impart the vocational skills, knowledge and qualifications (vocational competence) necessary to engage in a form of skilled occupational activity in a changing working world. Initial training shall also enable trainees to acquire the necessary occupational experience.[‡]

Key terms are *in a changing world* and to *acquire the necessary occupational experience*: It is understood that *vocational competence* must include the ability to adapt one's work procedures to *changes (of state of the art and conditions of work)*, and that *initial training should already produce occupational experience* and not only prepare for it.

Against this background it becomes understandable what the sense of the two IVET pillars is: *work-based learning*, based on the regulations valid for enterprises and equivalent organisations, is more than only to provide for a set of knowledge and skills related to the current situation of work. It implies *development of an attitude to work*: The approach to consider work tasks as to be fulfilled and to find solutions for problems that might arise, and not only to look at work as an area where already available, mainly technically describable skills have to be applied. This can include, of course, that one has to update knowledge and skills according to new requirements, only driven by the insight that otherwise work cannot be carried out properly.

In the light of these considerations, also the second pillar, *vocational education carried out at vocational schools*, gets a specific function: Delivering access to more generic knowledge about subjects of professional relevance, lessons at vocational schools can lay the foundation for seeking, identifying, and finding practice relevant knowledge in the future. Apart from that, lessons at vocational schools dealing with non-professional topics can provide for a broader view on life and thereby help to strengthen the societal position of professional work.[§]

2. Set-up and maintenance of the dual IVET system is based on a significant *network of stakeholders' collaboration* that is not only relevant at a level where representatives negotiate in order to achieve agreements. Cooperation of public and private stakeholders concerns the process of setting up profiles as well as the "maintenance" of the system via carrying out training and education and assessing it in the framework of examinations: Representatives of very different organisations (as employees of public bodies, industry associations, trade unions) have to do with each other at various levels – from meetings of commissions where regulations are drafted to common participation in examination boards at local level.

This requires a lot of resources, in terms of personnel, but, of course, also in terms of funding. These resources are available: Public money spent by the responsible bodies, private money delivered by the social partners, chambers, and the enterprises paying the apprentices' wages, and finally the huge number of people who have to be *experts* in their specific field.

This kind of network is a public-private partnership that deserves the name; it is not a structure which has more or less a governmental character since private organisations only play the role of consultants. Initiatives for changes

[†] This seems to be the overall ratio of VET, but this does not say anything about the practical meaning of VET all over the world: There might be countries where VET, although defined this way, only plays a marginal role in terms of the reasons of economic success.

[‡] See [3] Part I, p. 931

[§] In this context, it should not be forgotten that education at vocational schools basically belongs to compulsory education according to the age of students. This supports "automatically" the position of more "society oriented" subjects.

normally come from the private side who remains the driver: Public bodies provide only for the legal framework by providing regulations concerning the content of IVET and the procedures of collaboration.

4. Strengths and weaknesses of the dual system

For *individuals* to be trained, advantages are obvious: They are trained not only in a practice-oriented ways, but take part in real, not simulated, professional work, and although this always means that the apprentice has to deal with the specific work needs of a company, the training matches the requirements of a *standard* which means that the apprentice is not only entitled, but indeed capable to fulfil the requirements of work places of various enterprises. At the same time, apprentices are able to check if they have a right picture of the work they are expected to carry out in the framework of their supposed future profession, and they are possibly able to modify their career pathways at a very early stage.

For *enterprises*, IVET training delivers a cost-effective opportunity to recruit employees: Their activities can be observed during the training period which should lead to decisions about hiring that are based on more provable reasons than a mere interview. And if things are developing positively, the apprentice can already be introduced into the work processes that are specific for the enterprise and exceed those that are standard. In the best case, they can autonomously work on tasks that have to be fulfilled anyway, and if this is accompanied by the overall monitoring of an experienced trainer, this might even lead to better results as if this work is carried out by somebody who has routine, but has lost the interest in work.

However, the success of the dual system of IVET is dependent on certain *conditions*, and at this stage it turns out that one of the strengths of this approach – the close linkage to the world of work – can also turn out to be one of its weaknesses in some situations. The willingness to offer apprenticeships is influenced by *economic factors*. In times of crisis for example, enterprises might not be interested in costly investments, including the costs for hiring future workforce. Moreover, it can exceed the potential of an enterprise if it has to compensate for *lack of general abilities* (such as the adequate command of German or the ability to do necessary maths) which should normally be outcomes of general education, but were not achieved.

Therefore the dual system needs *supplementary measures* to be successful (such as preparatory courses for those who are not yet able to take part in Initial VET and trans-organisational training centres for organisations which cannot afford apprenticeship training in their own firm).

5. Transfer of the dual system to other countries: Possible obstacles and realistic perspectives

It is certainly not by chance that the attractiveness of the German IVET system is currently increasing. Compared with a number of other countries, Germany is in a strong economic position, and it is often perceived that the way in which future employees are qualified is one of the reasons for this. This kind of argumentation is, of course, popular among policy makers since it appears simple yet significant, and can therefore be easily communicated to potential voters. It is therefore not surprising that bilateral agreements concerning the introduction of the dual system of IVET were set up between the German government and the governments of Greece, Italy, Latvia, Portugal, Slovakia, and Spain in recent years.

However, the coincidence between positive economic data and a certain way to educate future employees does not necessarily say that German IVET is the reason for the positive economic development. In light of the remarks made above, one could also claim that it is just the other way round: Economic success is the condition for the application of the dual system. But in this case it would appear as some kind of luxury that Germany can afford – there must be

reasons for using this system that can be described in terms of economic success. The consequence of this would be to find out *how and to what extent the dual system of IVET supports the development of the German economy*:

1. The starting point of this research should be the *product* of IVET in Germany: *vocational competence* as described in the Vocational Training Act^{**}. This fits perfectly to all kinds of work which require *flexibility* and therefore the ability to make *autonomous decisions*. This is especially important for all enterprises focussing on *services* which require bespoke solutions for clients. If the enterprise is large enough, it can afford training apprentices, and if a sufficient number of this kind of enterprise is available in a country, the dual system of IVET can contribute to economic success. In order to be capable of organising training and paying apprenticeship wages, these enterprises should be, as a rule, at least *medium-sized* (which is the case in Germany); if there is a gap between numerous small-sized enterprises and few large enterprises, mostly coming from abroad and able to work on the basis of their own professional standards, the introduction of IVET according to the German model will fail, unless it is combined with an initiative of supporting the development of medium-sized companies or creating networks of collaboration among such enterprises.
2. It is obvious that the German IVET system is based on a network of players which cannot be exactly duplicated in other countries. If comparable stakeholders exist in the country where the dual system should be introduced, they most likely have a different societal position as in Germany. So it makes no sense to only formally adopt ideas which are known from the German IVET system, in particular the “social partnership in the area of VET”. It should be considered what this implies: a *consensus* of all involved parties that the requirements of education for work are basically to be considered as *subject-determined* and differences in terms of interests therefore have to play a secondary role^{††}. Otherwise it would make no sense to specify the roles for the social partners from local to national level since this is only possible if a *general common understanding of IVET requirements* exists; if this is not the case, the players involved would not trust *experts* to make sure that things function properly.

If there is the intention to introduce an IVET system comparable to the German one, the following factors need therefore to be taken into consideration:

- What is the structure of the national economy in terms of enterprise types?
- How far does a system like German IVET help to support this economy?
- Which players are currently available which currently support VET?
- Which players could support properly a system comparable to the German one in the future?
- How is it possible to get them on board as soon as possible, in order to avoid a mere reactive behaviour from their side, and to make sure that players understand the new way of IVET training as *their* system?

^{**} See above

^{††} This does not mean that interest-led differences cannot appear whilst VET settings are discussed; however, these do normally not concern the actual content of VET, but - certainly also very important, but nevertheless accidental - issues as the duration of training measures.

Acknowledgements

G.T. thanks to Prof. Georg Spöttl, University of Bremen and University of Kuala Lumpur, who had a look at the manuscript before submission, and to Dr. Ed Mahood, DEKRA Akademie Germany, who extensively commented the manuscript

References

- [1] Bundesinstitut für Berufsbildung (Ed.), (2013) *Ausbildungsordnungen und wie sie entstehen*, <http://www.bibb.de>
- [2] Project *EQF-adapted educational key elements in a predictable framework of change (EQF Predict)*, <http://www.project-predict.eu>
- [3] *Vocational Training Act (Berufsbildungsgesetz, BBiG) of 23 March 2005(Federal Law Gazette [BGBl.]*