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Regulation and deregulation: the development and modernisation of the German dual system

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1. Introduction and keynote themes

The German form of vocational training, known as the 'dual system', enjoys universal respect. However, the term is somewhat misleading. Today we are faced with a 'plurality' of learning locations and combinations of location, including workplaces and training workshops, group training centres and vocational schools. The system is no longer regulated only by the government and the market, the school and the enterprise, but the regulations cover the diversity of interests of employers' organisations, trade unions and professional associations through a complex process of negotiation. In the past, the 'regulated plurality' of the dual system was an essential factor contributing to the relatively flexible adaptation of vocational training to the continually changing demands of the labour market, whilst maintaining the combination of occupational theory and practice through 'regulated training courses'. This paper focuses on one particular aspect of modernising the dual system: the organisation of diversity and plurality in the training system (see also Kutscha, 1999). This emphasis should not be misunderstood. It is not a question of diversity and plurality as an alternative to the dual system, but of developing the potential for the modernisation of its diversity and plurality and at the same time ensuring the system is accessible to all who wish to take advantage of initial vocational training. Putting this goal into effect is the test of the effectiveness and quality of the dual system as the 'German system' of initial vocational training, which should be accessible to more than just a privileged cohort of young people. Public responsibility for the occupational training of the next generation is a key principle. On this basis the key features of the dual system are examined and compared with the innovative practices of selected EU Member States. The approach to modernisation advanced in this chapter is based on the five keynote themes outlined in the following section.

According to the Vocational Training Act (1969), vocational training should prepare young people for the 'practice of a qualified occupation'. The future of the dual system depends directly on, among other things, the future of skilled employment as a basis for absorbing trained skilled workers into the labour market. If vocational training within the dual system is to remain oriented towards the demands of qualified employment, new potential skilled occupations must be created, especially in the service sector requiring a sufficiently large and differentiated supply of qualified skilled workers. This leads to the first keynote theme concerning the **interdependence of active training and employment policies**.

Secondly, as part of the 'social market economy', the dual system is founded on principles of market efficiency, equal opportunities, competition and solidarity. A continuous process of negotiation between the social partners and government bodies is necessary to maintain the balance between these competing principles and to make them concrete, and to meet the demand for public responsibility for vocational training. This aligns with the second keynote theme: the **public responsibility for vocational training within the framework of a social market economy**.

Thirdly, the potential for innovation within the dual system is far from exhausted. This includes the possibility of creating new training occupations and training places (for example, within co-operatives), as well as improving the quality and flexibility of training. A comparison with other European training systems shows no reason to depart from the dual system. However, great efforts are needed to modernise the dual system in such a way that in future all young people who desire vocational training and who are suitable candidates can be offered a skilled training place. The experience of other EU countries could be profitably exploited to develop the dual system without adopting the structures of their systems. The transfer of systems is not under discussion, but rather the exchange of experience on 'learning systems' and their adaptation to their changing environments, because, for example, of the economic globalisation, the dynamic of Information and Communication Technologies trends and demographic changes. The third keynote theme therefore recognises the importance of the dual system as a 'development model'.

Fourthly, is important to base modernisation of the dual training system on the principles of occupation, duality, and consensus. If these are to remain the defining principles in the future, they must be examined for ways of adapting them to changed conditions in employment. This includes the development of a modular system, whilst maintaining the system of regulated occupations, and moving from a dual to a plural system of learning environments. Its also includes reinforcing regional responsibilities and infrastructures as a complement to the principle of consensus at the centralised, national level. Those in positions of public responsibility for the vocational training of young people must pay particular attention to avoiding unpredictable risks and disadvantages for young people as a result of making the dual system more flexible. The fourth keynote theme concerns the need for **increased flexibility of the dual system as a modernisation strategy**.

Finally, young people with learning difficulties or other disadvantages in the employment market need extra support and, if necessary, special protection in vocational training institutions which can guarantee social counselling and teaching, and psychological support and specialist supervision. The eventual aim should be for these young people to join the dual system. The combination of theory and practice in training and the occupational principle is a medium for developing skills and a personal and social identity. The fifth keynote highlights the value of the dual system as the main system of vocational training for the qualification of disadvantaged groups.

2. The dual system – developing future employment in the information and service society

2.1. Occupational concept, dual *learning locations*, principle of consensus – structural features of the dual system in a structural crisis?

In the past the attractiveness and stability of the dual system of vocational training in the Federal Republic of Germany were associated with three main structural features: the concept of occupation (*Beruf*), dual learning locations and consensual decision making (Kutscha, 1997).

Firstly, occupational training (*Berufsförmigkeit*) was regarded as crucial to, if not actually guaranteeing, a relatively stable working life. It offered employees and employers a system of occupational guidance for the labour market; it reduced the cost for enterprises in recruiting skilled workers and provided workers with a secure income based on collective wage agreements and social protection of their status. Access to vocational training was a prerequisite, guaranteeing the individual an economic and social 'subsistence level' in a social order which centred on his or her occupation, quite apart from its importance for personal identity and character development.

Secondly, the *duality* of on-the-job practical experience and school-based learning was a major achievement of the German system of training. The combination of working and learning in an enterprise and school is an outstanding feature of the dual vocational training system compared with mono-structured systems, both in terms of qualification and social integration through occupations. Although the duality of learning locations has not satisfied the needs of the training regulations in many areas since the Vocational Training Act came into effect, and external workshops and training centres are also needed, nevertheless the argument remains valid.

Finally, the regulation of the dual system on the basis of *consensus between the social partners*, in the form of tripartite corporate arrangements (state, employer associations and trade unions), played a significant part in limiting polarisation between employer associations and trade unions. It also limited the risks of market and government errors, and facilitated networking of information resources, overcoming barriers to implementing decisions on vocational training policy in company training. The system of state-corporate vocational training planning sets the framework for the involvement of enterprises in training, for example by establishing national training regulations, and providing structures for training contracts. In the past, it has contributed significantly to balancing advantages to individual enterprises with the needs of the economy as a whole, through the influence of employer associations, trade unions and the chambers on policy makers and planners in the public and private sector. Without this complex arrangement of state, corporate and market-economy players in its regulation, the system of training, organised through occupations and financed to a considerable extent by private enterprise, would probably have long ago run aground.

However, the key structural features of occupational concept, duality of learning locations and corporate regulatory organisation have been subject to a process of erosion for some years (Baethge, Baethge-Kinsky and Henrich, 1996). The present state of the dual system is worrying, not because of the threat to any single component but because the system itself in a number of regions and economic sectors is threatened with collapse, affecting the system as a whole. In many fields, the concept of training occupations can no longer keep pace with the dynamics of change in qualifications and qualification structures. The duality of learning locations is jeopardised by a continuing lack of training places, and the stabilising function of industrial relations in vocational training policies is declining with the loss of negotiating strength of the employer associations and trade unions.

Appeals to the goodwill of those concerned are not a way out, any more than transitional or emergency measures, useful and indispensable as the latter may be. Transitional measures designed to compensate for market forces are a typical way for the welfare state to deal with structural change. However, this demands the ability and the willingness of the private sector to deal with problems in the economic system. If we do not regard this as a socially acceptable solution to structural problems, but recognise the advantages of decentralised regulation of economic decisions by market forces, we have to look for regulatory instruments which allow us to combine regulation and flexibility with the demands of a social market economy (Kutscha, 1996).

In a social market economy, vocational training is necessarily dependent on market and social compatibility and thus on the balance of economic and social interests between public and private interests and responsibilities. Any attempt to use flexibility against the interests of employees is as short sighted and risky as ignoring the need for flexibility of an export based economy, strongly affected by internationalisation of industry and trade. The relationship between regulation and individual responsibility must be reconsidered and renegotiated for vocational training. Problem-solving approaches must be re-grouped into 'negotiation packages' capable of facilitating compromise and permitting options which transcend traditional barriers, for example both by increasing the flexibility of initial vocational training and by providing a stronger regulation of continuing training.

The question is not whether the dual system has a future, but rather, which features it needs to develop in view of the current and future demands of the labour market, the influence of international economic relations and competition with European vocational training systems. The discussion must take into consideration not only economic interests, but also social and cultural challenges in view of the transformation of the employment landscape and changing attitudes, inclinations and individual interests of participants with regard to their own professional and personal plans.

Throughout Europe, developing national qualifications strategies are typified by the attempt to balance competing regulatory principles while pluralising institutional, organisational and curricular structures. Previously full-time school training systems, for example in France, are being supplemented and enriched by forms of alternating learning. A diversified range of

alternative training paths (Koch & Reuling, 1997) confront market-oriented forms of enterprise training, for example in the UK. All countries of the EU are, to a greater or lesser extent, differentiating and restructuring VET systems and teaching and learning provision. The centralisation and decentralisation of policy making, the regulation and deregulation of training processes, the differentiation and integration of learning locations, and the development of systematic learning and practical experience are all part of a complex relationship which cannot be reduced to a one-dimensional, technologically determinist pattern.

2.2. What is to be done? Tasks for the modernisation of the dual system

The social model put forward by the European Union as a key objective for 'Living and Working in the Information Society' is based on both competition and solidarity. This key objective demands effective vocational training and opportunities for all young people to develop their skills for working life, irrespective of the economic cycle and regional peculiarities. The framework of the German dual system is laid down by training standards in the form of open occupational profiles centrally agreed by the state in co-operation with the unions and management. Within this framework, standards are implemented on a decentralised basis with the support of all training stakeholders in a region.

Opting for the right to certified occupational skills 'for everyone' demands sustained activities at different levels. First of all there must be a consensus within society on the undeniable right to vocational education and training, irrespective of prevailing economic conditions or regional circumstances. However, there remain a number of issues open for discussion.

The first concerns the development of a new occupational concept of 'occupational categories' (*Beruflichkeit*), founded on broad-based core occupations, with modular structures for developing occupational skills and the option of acquiring additional qualifications. The second relates to the reduction of central VET planning and policies and the development of a framework to promote training, with increased regional responsibility for guaranteeing adequate provision of learning places and environments, increased co-operation between regional actors and the development of new forms of quality assurance and control at grass-roots level.

The third issue is the extension of the dual system into a plural system of linked learning locations combined with the promotion of independent learning and improved regional infrastructures for guidance, information etc. The fourth involves the promotion of continuing vocational training, linked to initial vocational training, and the certification of informal learning and work experience within the employment system. The fifth is the development of appropriate, user-friendly systems for financing initial and continuing vocational training, with both supply and demand sides incentives. The final issue concerns the opening up of VET provision for new employment opportunities in Europe.

In dealing with these problems, the experiences of other EU Member States should considered and examined for their applicability to VET reform in Germany. However, vocational training systems cannot be imported or exported wholesale. Rather it is useful to follow and learn from developments in other countries. The 1992 Maastricht Treaty assigns the European Union a subordinate function for supporting and supplementing national VET policies. Harmonisation of legal and administrative regulations for initial and continuing vocational training in the Member States is explicitly ruled out. European Commission initiatives, the main driving force for stronger integration of national vocational training systems, have met with resistance and often been unsuccessful. The historical diversity of national vocational training systems to a large extent remains. However, the EU Commission has helped to broaden the political and academic discourse on guidelines and principles for structuring VET institutions and training; and in this way it has contributed to transnational cooperation. The dynamic of integration generated 'from the bottom up' (Koch, 1998) points to a sensible 'middle way' among the diverse national VET paths within the framework of European unity (Cedefop, 1999). Learning processes between the systems can be further developed and exploited constructively for the development of each country's own system.

3. Learning from Europe: alternative structures for modernisation

3.1. Modularisation within the framework of occupation – the German way

The dual system in Germany can point to considerable success in comparison with other European countries, both with regard to guaranteeing a high level of qualification for the employment system and in providing comprehensive training places for the next generation. The unifying social force of an occupation as part of socialisation *par excellence* still has considerable weight (Konietzka and Lempert, 1998). Critics of the dual system of training see a danger that it may not be able to adapt to the challenges of the labour market, given the pressure of internationalisation. However, we should not rush to draw too hasty, scientifically unfounded conclusions as to any loss of professionalism due to modularisation of training. The potentially negative consequences of moving away from the occupational principle are much more serious for the individual than the putative benefits. Nevertheless, searching for a sensible way to handle 'modularisation within the framework of the occupational concept' should not be taboo.

The fundamental starting points for defining modules within the framework of the occupational concept are as follows:

An occupational qualification consists of a combination of partial competences (modules) which are essential to overall occupational competence. In this context, modules can be regarded as parts of a whole.

Modules describe the (desired) result of the learning process in the form of competences or outcomes.

Modules require national standards (for example through training regulations), ensuring transparency and comparability. (Kloas, 1998)

The definition of modules formulated by Kloas (1998) does not allow approaches which, whilst describing partial qualifications at the level of outcome or competence, examine and certify them individually, without assessing the overall qualification. Such an approach, which is based on the English modular concept, would render ineffective national standards for occupations. Vocational training should provide a broad range of activities and include interdisciplinary social and methodological skills, transcending the restricted needs of a particular enterprise. Because the overall aim of training (occupational competence) is more than the sum of the individual parts (modules), a final examination is indispensable and a fragmentary modular design is unacceptable.

Modules should be developed to provide standardised partial competences, suitable for use in different areas at both horizontal and vertical levels, thus reinforcing the links between initial and continuing training. In this way training can be organised more flexibly and the tangle of continuing training reduced - by 'mid-level systematisation' (Faulstich, 1995). Each module can be used in multiple ways for different training courses and provides a chance to utilise abilities developed elsewhere, for example during initial training or spare time, for continuing training purposes. Kloas (1998) justly emphasises that continuing training modules should be regarded as assisting innovative restructuring processes in training and provide a regulatory policy link between initial and continuing training. Modules in demand in the continuing training sector provide valuable directions for new occupational fields not yet covered by initial training or at the very least offer a valid indicator for their early recognition.

In conclusion to this section, modularisation of initial vocational training could make an important contribution to developing differentiated training for different groups, especially for supporting for the exceptionally able and disadvantaged trainees. Modules, as defined in this context, provide a high level of standardised quality, not limited to a particular provider, while at the same time offering an extended range of options and avoiding arbitrary provision or a reduction in the standard of training. Secondly, modularisation of continuing training could contribute significantly to improving the quality and transparency of provision, without abandoning the flexibility indispensable to this sector and without developing excessively taxing legal regulatory instruments. Furthermore, modularisation is a necessary prerequisite for linking initial and continuing training. Modules contributing to multiple occupational profiles could also promote horizontal permeability between occupations and help integrate previously separate training paths, for example in the engineering trade and in the commercial sector. Finally, the potential of modularisation for recovering missed formal occupational qualifications is hardly controversial (Davids, 1998).

The foregoing discussion shows that several objectives are pursued by means of modularisation within the occupational framework. In this context, modularisation and the occupational concept are not regarded as opposites, but as a form of internal differentiation that encourages learning and increases efficiency. How, and to what extent, a moderate form of 'modularisation within the framework of the occupational concept' will prove politically acceptable remains to be seen. There is a clear consensus between the social partners and government representatives in the 'Alliance for Labour, Training and Competitiveness' that the occupational concept will continue to form the basis of future structural development in dual vocational training (Presse- und Informationsamt der Bundesregierung 2000, pp. 47 ff.). The alternative of transforming initial vocational training into partial qualifications, acquired step by step, was rejected decisively. The term 'module' was consistently avoided in connection with the structuring of training regulations. 'Compulsory option elements' and 'additional qualifications' were favoured as the way to make training more flexible. Compulsory options remain an obligatory part of training in a recognised training occupation; they are intended for internal differentiation according to the requirements of different training occupations and form part of the final examination.

Additional qualifications supplement occupational training and as additional achievements are not included in the final examination. Additional qualifications can include elements of continuing vocational training, forming bridges between the two stages of training. Additional qualifications in the form of certified elements are - in the international meaning of the term - 'modules'. However, they are not an integral part of initial vocational training, but supplement it. With regard to initial vocational training itself, the trade unions and employers and the regulatory authorities (the federal ministry) believe that 'occupational competence' (*Berufsfähigkeit*) should be accredited by public final examinations at the end of the period of training. Modularisation has no place within the framework of this understanding of the occupational concept. The publications of the 'Initial and Continuing Training' working group of the 'Alliance for Labour, Training and Competitiveness' state categorically: 'Comprehensive competence can only be established in total and not in gradual steps' (*Presse- und Informationsamt der Bundesregierung 2000*, p. 52).

Modularisation as part of the preparation for training has a special role. During preparation for training, adolescents and young adults in difficult personal circumstances receive the assistance they need to enter initial vocational training. In the proposals of the working group preparation for training is intended to facilitate the transition to enterprise-based vocational training, and should not in principle exceed 12 months. The concept of 'training-related qualification elements' is recommended for training preparation. Behind this cumbersome expression is nothing more or less than what is internationally known as a 'module'. Qualification elements are defined as learning units comprised of separate sequences of predetermined content and length, and are certified as partial qualifications. Or, to be more accurate, the certifying training provider must document what qualifications have been acquired as part of a recognised vocational training course and how this has been established. The working group has asked the Board of the Federal Institute for Vocational Training to

draft recommendations for the certification of qualifications acquired during vocational preparation, during incomplete training courses or on-the-job. These recommendations will form the basis for the certification of qualification modules.

Since 'occupation-related qualification modules' are related in principle to activities which are part of recognised vocational training, it is quite justifiable to speak of 'modularisation within the framework of the occupational concept'. However, this concept is intended exclusively for the support of disadvantaged young people and not as an alternative to the occupational concept. The occupational concept remains the frame of reference for the identification of partial qualifications, which are accredited in subsequent training in state-recognised, training occupations. Viewed in this way, 'modularisation within the framework of the occupational concept' will serve to strengthen the occupational concept of the dual system in Germany rather than undermining it. On the one hand, the potential for flexibility of the dual system should be exploited to the full, while on the other, occupational quality standards should be enforced in those areas where the system – as in the case of vocational and training preparation – is still comparatively unregulated.

This applies particularly to key qualifications as a focus for the modernisation of the dual system. The labour market expressly demands key qualifications. Disadvantaged young people, in particular, can hardly afford to ignore these demands. For this reason it makes sense to relate vocational and training preparation to qualifications which are the object of initial vocational training and at the same time to take the existing resources of the young people concerned into account by ensuring that the acquisition of these qualifications in the form of occupation-related qualification modules remains transparent for the trainees themselves and is experienced as motivating and achievable. 'The existing resources of the young people must not be adversely compared with the ideal of key qualifications. The methods applied must take the resources of the target group as their starting point, then proceed to develop the young people's competence in a holistic approach' (Kunert, 1999, p. 9).

3.2. Modularisation in the UK and the Netherlands - a comparison

In comparing European systems of vocational education and training, the German occupational concept is often seen as the opposite of the English modular National Vocational Qualifications (NVQ) in terms of regulation and policy. In the Netherlands a third way is emerging between the two extremes: modularisation within the framework of a new qualification structure, which – similarly to Germany – is based on national occupational profiles, but in contrast to the German training system is differentiated by stages to which occupational qualifications and partial qualifications are assigned.

In the modular English NVQ system only the desired outcomes are specified and certified. They are achieved through standardised modules and qualifications (Deissinger, 1996; Reuling, 1996; 1998). The proponents of this concept claim that one of the particular advantages of modular qualifications is that a person can acquire partial or full modules

separately and prove competence in different institutions of learning in different situations. However, the potential theoretical flexibility in acquiring modules and qualifications is often restricted in practice (Reuling, 1996). For example, workplaces where the learning opportunities needed for NVQ certification can be acquired may be relatively restricted and the candidate may not have access to the full range of work situations. This impedes the flexible accumulation of higher-level modules and restricts access. There have been some positive results with skilled workers without formal qualifications, whose work experience could be certified through the NVQ system. The qualifications acquired are comparable with German training occupations.

A constructive alternative to the English modular NVQ system and the inflexibility of the occupationally oriented dual system in Germany is emerging in the Netherlands. The Adult Education and Vocational Training Act (Wet Educatie en Beroepsonderwijs – WEB) (Frommberger, 1999; van Lieshout, 1997) came into effect in early 1996. It aims to give coherence to the different forms of vocational and adult education. WEB is conceived as a self-regulating system, in which the different actors counter-balance each other, and is supported by an outcomes based financing system from 2000.

There are three main political objectives. They are the provision of initial training for everyone (at European Level 2), customised vocational education and training meeting the needs of the individual trainee and the state and industry, and transparency. In addition to the standardised, national qualifications structure, the 'Regional Training Centres' (ROCs) have a particularly important place in the new WEB. The objective is to integrate institutions and actors in regional development networks for learning and to co-ordinate the content and organisation of training at grass roots level. A national, standard qualification structure for vocational education and training was developed as a framework for these activities, with four levels of qualifications, each with two progression routes. Both progression routes provide dual forms of education and training, with either 60% or more, or 20% to 60% of training being on-the-job.

Level 1 is based on the performance of simple activities, requiring 0.5 to 1 year's training as an assistant. Level 2 is based on the performance of activities requiring 2 to 3 years' basic training. Level 3 is based on self-supervised, skilled work and requires 2 to 4 years' specialised training. Level 4 is based on middle management activities with a broad range of possible applications requiring 3 to 4 years' training, or specialisation requiring1 to 2 years' training. The state views it as a public responsibility to ensure that the principle of 'occupational categories' (*Beruflichkeit*) prevails over the requirements of individual enterprises and that general developments throughout the economy are taken into consideration with the aid of national, sector-based occupational profiles.

3.3 Promoting vocational learning in diverse and varied learning environments

The principle of duality (the combination of theory and practice in learning locations in schools and enterprises), as well as the occupational principle, will continue to be of fundamental importance for identity formation through training and work in the future. However, the search for one's own identity has become more difficult (Baethge, Hantsche, Pelull & Voskamp, 1988). In many fields 'recognised training occupations' can no longer keep up with the dynamic changes in skill and qualification structures. The duality of learning locations, faced with overall decline and a dramatic loss of training opportunities in some regions and sectors, is being tested to the limit. In these circumstances it is important to exploit all possibilities, to make the fullest possible use of regional training resources and to seek innovative forms of and combinations of learning environments.

This is particularly true for the changing qualification requirements in the emerging information and service society. More than ever, it is essential that young people learn to live with a variety of learning locations, instead of being trained in a single educational institution. The dual system in Germany already has a number of potential learning environments and combinations of learning locations. This approach is in keeping with the findings of research in learning that diverse and varied learning environments have a beneficial effect on development. The supportive potential of different learning contexts' does, however, depend on the quality of social contact between the different spheres of living, in particular on joint participation, communication and the extent of information on the other relevant fields of activity. Findings from older research on learning locations (Münch, Müller, Oesterle & Scholz, 1981) and more recent studies on co-operation between learning locations in the dual system (Pätzold & Walden, 1995) demonstrate empirically that the potential of combinations of existing learning locations could and should be utilised more efficiently and flexibly than has been the case up to now. This applies both to development of new training places and piloting new forms of combined learning locations with the objective of promoting selfregulation and self-reliance in trainees.

Smaller EU Member States are experimenting with new forms and processes for developing and structuring learning. 'Open learning situations' and 'free choice' form the mission statement for of an 'Upper Secondary School Experiment' in Finland, aimed at empowering young people to choose and use autonomously the potential for different learning locations in the region for their own training programme (Arnman, Kutscha & Young, 1995). High school students, for example, join courses at vocational schools. As part of their training, pupils from vocational schools attend high school (e.g. for language classes) or other vocational education institutions (e.g. to acquire additional or specialised knowledge in information and communications technology not offered by their own school). High school pupils and vocational school trainees can likewise utilise the courses at institutes of higher education. However, it has not proved possible to include on-the-job experience. In this area, Germany's dual training system has advantages that should not be underestimated. However, this privilege should not be closed to majority of young people, or dependant on their social and

educational background or where they live or on sex, nationality or disabilities. In-company training places are a rare commodity that must be shared efficiently and fairly if they are to fulfil their unique function in the plural system of learning locations and in the social market economy. 3.4 Integrated employment and vocational training policies and the 'learning regions in Denmark

In contrast to general education, vocational training in the dual system, for structural reasons, is highly susceptible to regional and sectoral influences and the economic cycle. In past decades, a broad spectrum of special measures was initiated using federal, *Länder* and EU funds to compensate for regional disparities. These efforts had little impact, however. On the contrary, the North-South divide in training provision in the old federal *Länder* was eclipsed by the East-West divide after German unification. The new government's emergency programme and the measures proposed by the Alliance for Labour and Training demand new strategic alliances, not only at the central level, but also especially at grass-roots level. The one does not exclude the other. Only co-ordinated problem-solving strategies at centralised and regional levels promise sustained success. Horizontal and vertical networking between decision-making bodies must be strengthened and made more effective and include all the important training providers in the regions.

Denmark provides a useful case study in this context, especially in the development of structures for local management and regional consultancy and support. Since 1993, when the 'training for everyone' action plan was launched, the main objective of Danish education policies has been to give all young people access to general education and training. The close co-operation between the social partners at local level is characteristic of the Danish system. The social partners define teaching standards, at the same time acting as counsellors to vocational schools. This overcomes the rigid German division of responsibility between enterprises and schools. Structural and organisational flexibility is encouraged by the open co-operation between local actors, and by the use of new quality procedures. Denmark was the first country in the EU to introduce a national programme for quality control for initial and further training. Whilst quality control is mainly the responsibility of the individual vocational schools, from 1999, it has been increasingly supplemented by external experts and benchmarking processes.

Denmark has obviously realised that education strategies and funding based on the economic cycle are no longer appropriate to meet the demands of the information and service society for efficiency and equal opportunities. Initial vocational training is financed partly from public funds, which cover in-school training, and partly by employers, who pay training remuneration. A collective fund administered by unions and employers' associations ensures that costs are shared equally among training and non-training enterprises. The fund also covers expenditure for training workshops. Schools offering initial vocational training are allowed to supplement their budget by local, market-based service provision.

Here, too, it must be emphasised that experience gained in Denmark cannot be transferred automatically to the German VET system, because the two countries are different in many

respects, not least in size and population. Learning from Europe means learning to recognise one's own strengths and weaknesses through comparing different systems and then drawing conclusions for further development of existing potential.

Modernising the training system requires reform and the opening up of current processes and procedures for negotiation. New partnerships and new negotiation structures are needed based on decentralised networks, in order to provide a new impetus to policy development at national, regional and local levels. Federal and *Länder* vocational education policies must take an active part in the development of regional structures for cooperation and should be open to new regulatory forms at regional level, such as those being tested in Denmark and the Netherlands.

The experience of different *Länder* show that regional structural policies open up new possibilities for the active promotion of VET based on the potential strengths of a region. The recognition of the region as a new arena for policy development and implementation requires developmental activities (Heinze & Voelzkow, 1997). Co-operation should not be limited to labour and management organisations but should also - as in Denmark - include all actors involved in vocational education and training. This also applies to vocational schools developing regional 'service centres', as well as to organisations and agencies providing training for young people. Integrated regional vocational training and innovation management policies designed to link up with the dual system, combined with efficient regional information and support structures (Kutscha, 1998), could provide an effective strategy to combat the fragmentation of local responsibilities and assist the development of co-operative regulatory structures within the framework of regional structural policies. They could also help open up new avenues to a 'society at a standstill' (Heinze, 1998).

4. Developing a comprehensive system of vocational education and training: flexibility and modernisation

If there is one view all comparative VET researchers have in common, despite their differences of opinion regarding the benefits and drawbacks of VET systems, it is an awareness that the structure and function of national qualification systems have an inherently systemic character and cannot be transported from one country to another, even if it was desirable. The reform of the German dual system cannot just abandon structures that have evolved over a long period of time. The discussion must focus on development paths, which provide direction for reform measures (Senatsverwaltung für Arbeit, Berufliche Bildung und Frauen, 1999). There are a number of options for extending the dual system.

Firstly, when applied to the *occupational principle* and the modular concept, pluralisation means linking the advantages of a high degree of freedom at micro and meso levels with the social protection afforded by 'occupational categories' (*Beruflichkeit*) at the macro-level of

our society. Modularisation should not be a taboo subject when employers (in some sectors of the labour market) demand a high degree of flexibility. However, modularisation must be protected against abuse - for example by a compulsory waiting period before undertaking further modules in continuing training. In recognising and promoting the 'occupational category' system of labour, politicians and policy makers have chosen a 'third way' for socially integrating market participants with a weak negotiating position. The conditions of the labour have changed, providing a new starting point for reform based on 'socially acceptable pragmatism'. It should be possible to achieve a regulated, flexible qualification system, under public control. The regulation of continuing training would be a prerequisite for establishing the equivalence of general education and vocational training within an overall system of initial and continuing vocational training and would allow the expansion of access to higher education in a responsible manner (Dybowski, Pütz, Sauter & Schmidt, 1994).

Secondly, we should not forget that the dual system has been developing plural learning locations for decades already, in schools, enterprises and training workshops. Overall there is a plurality of learning locations. The 'duality of learning locations' dogma often impedes thinking about the system as a whole. We need an innovative theory and - even more important - innovative practice of diversified learning-location structures, combinations and co-operation. Educational organisations throughout the world are developing different and varied learning systems with resources, such as multimedia, available simultaneously for different target groups. Pluralism and the simultaneous networking of various systems provide the information infrastructure for flexible and open educational systems. The preservation of existing educational systems is important, but they must be relevant for the education of people living in a world where institutions are undergoing rapid and often radical change. If workers are to become more flexible, the institutions shaping skills and employment must also be made more flexible.

Finally, the modernisation of the training system means reforming and opening up existing negotiating systems; in addition to present structures for co-operation, they require new partnerships and new negotiating for a based on decentralised networks in order to give new impetus to policy development at national level. Centralisation and decentralisation are two sides of the same coin, as are regulation and deregulation, in developing strategies and policies for innovation, vocational education and training and employment. VET and employment policies are inter-linked, and are integral to social policy. The discussion over reform of the dual system affects not only recognised training occupations but also initial and continuing training as a whole and the development of employment policy.

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