The present situation of the vocational education system*

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1. Importance of vocational education for the society

Education – whether general or vocationally oriented – is a necessary „infrastructure contribution“ for the integration of the coming-up generations into society. It is essential for the society’s survival and development. As a basis for shaping society, it is a necessary but not sufficient condition for the transition and mediation in between the generations, for democratic developments in society. Education shall – independently from its professional and social utilisation – promote personal development and a satisfying lifestyle, and enable active participation in the political and cultural life.

Education alone will not solve all the individual and social problems, but it supports the construction and continuation of social living and change, and it promotes the realization of individual life plans and critical reflection. Education is one of the most important – and certainly most disputed – tasks of social responsibility.

Vocational education has both an individual and a collective function: on the one hand vocational education guarantees material living, social responsibility and individual identification, and on the other hand it contributes to securing the nation’s economic strength. Thus vocational education always structurally mediates between the individual and the social system.

Besides these tasks of vocational education oriented towards the connection between individual and society and the needs of economy, another function of vocational education should also be stressed: its relevance for the individual personal development, and as a qualification for participating in the modelling of society. Wolfgang Lempert has pointed out already in the seventies that vocational education shall not be merely considered as a technical training, a preparation for fulfilling given demands. Any reform of vocational education cannot be only pushed in the sense of a technocratic increase of efficiency. In all such reformatory approaches, he says, there should also be considered the political dimension of professional learning, so that it may contribute to the realisation of the democratic rights of equality.
Regarding the access to education, the democratic principle is valid that every young man or woman has the right of a (promising) education, as it is embodied in the Basic Law in the imperative of the free option of profession. Basically all youth should have the same opportunities of lifestyle during their training and in their access to the job market.

The right of vocational education must be ensured in the present situation, because a fundamental vocational training is becoming an indispensable condition for entering the employment system. In view of social processes of change and modified individualized perspectives of life, of qualification and professions within the society, a qualified vocational education and continued training is getting more and more important. It becomes the necessary condition for coming through society, it is an absolutely essential basis for one’s own social integration and security.

Realising the right of a high-quality vocational education for all social groups is very important – not least against the background that it constitutes an important contribution for social peace and sustainability.

Describing the status of vocational education, we may also raise questions in terms of which the suitability of the present system may be assessed:

■ Regarding the collective function: Does the vocational education system produce a sufficient amount of qualified new blood for all working fields needed in economy and society?

■ Regarding the individual function: Is the right of free option of profession secured; does the educational system equip the graduates with the best qualification for a responsible participation in the society, and does it contribute to the development of personality?

■ Regarding the aspect of equal opportunities: How can vocational education contribute to an elimination of the given situations of segmentation and cemented inequality within the system of vocational education, and also enable groups at a disadvantage to find access to education?

2. The dual system as the central pillar of the German system of vocational education

2.1 Advantages of the dual system
The German dual education system has some specific strong points, notwithstanding the present signs of crisis. One of those features is the fit between the systems of vocational training and employment. The following advantages of the dual system can be underlined:

■ The dual training interlocks theory and practice, it enables a connection between systematic and case-centred learning, and ensures proximity between the real needs of economy and the curricular contents in the training.

■ The dual training aims at full qualification according to the principle of a profession. It thus guarantees a generally binding orientation at national standards, what means a high degree of confidence in the training courses and their usability for both youth and employing enterprises. The dual training imparts a well-founded qualification outside the academic study fields, thus reducing the quote of unskilled workers risking unemployment, and contributes to the social integration of the young people.
The dual system has essentially contributed to the fact that unemployment among youth in Germany is – despite all problems inherent in international comparisons – inferior related to other European countries. Of course the transition from the training into employment has never been automatic – it always kept open other professional options, both on the side of the training company and of the trainee. Nonetheless, the young people were by their dual training more or less already integrated into the employment system. It is this fact what makes the dual training so attractive with young people – besides the payment of a traineeship salary. Employers who have invested into training are willing to later use the qualifications imparted and thus tend to further employ the young person after the training. Even if problems have increased now at the second threshold, this close link to the job marked certainly remains an advantage of the dual training system.

The young people receive a pay during their traineeship – though in very variable amounts. This aspect is very important for youth from weaker families; often this traineeship pay just enables them to complete a training course at all. If this financial compensation would be dropped many of them would have to renounce to a training and try to get into the working life as semi-skilled or unskilled workers.

The ruling so-called principle of consensus wants the social partners (employers and trade unions) to reach a consensus on new vocational training courses and their regulation, so that unionist participation and qualitative minimum standards are both being guaranteed. This prevents that training courses are conceived too specifically for one company only and merely according to usability interests in the economy. This participation is a very essential part of the German system of co-determination: in the fields of school and university the trade unions have no similar possibilities of participation.

I will go now further into some of those specific strengths of the dual training system:

**Modelling at the professional principle**

One specificity of both the structure of vocational training in the dual system and its material didactic realisation is the modelling at the principle of a profession. Even if the “profession for a life-time” has largely lost its significance as a model, given today’s earning biographies as marked by varying professions and jobs, the fact to learn and carry out a profession still has an important reference function for most young people in their development of an independent life design. The profession as the leading category of vocational (basic) training combines at least three main strong points of the dual system until today:

- A profession prepares not only for one single but for a whole range of connected activities oriented towards qualification standards.

- Training courses geared towards the professional concept impart technical competences linked with interdisciplinary skills, as well as social and methodical competences, and thus lay essential foundations for professionally competent action.

- Professions mark the social orientation and identity of youth – even though to a lower degree now – and thus contribute to social integration.

This orientation at the professional concept is stable because its is tripartite and census-oriented.
Private contribution to financing the training system
As an essential advantage of vocational education in the dual system, not least in the European comparison, is seen the statutory contribution of the private economy to financing education. Part of this are the expenses of the training companies for the workshop part of the dual training, as well as the expenditure by associations and welfare organisations for extra-industrial training supplies, as far as those expenses are not being refinanced by public subsidy. A critical point however is the fact that even private households and individuals have to contribute to the financing of education, by the costs of textbooks and teaching material and fees. To a large degree tuition fees are taken for vocational training in full-time institutions of private bodies.

Private business firms also contribute partly to a reduction of the social costs with their payment of the apprenticeship salary what considerably relieves parents from their share in the costs of education.

It is impossible to exactly quantify the amount of the total expenditure for vocational education and its distribution onto public and private educational budgets. But the private part is rather considerable in the dual system, easing the burden for the public budget – in contrast with a fully national financing of vocational education in other countries.

A large part of the training costs in the dual system is compensated during the traineeship by productive work from the trainees themselves, at least in a segment of the training businesses, particularly in the craft, and this is shown not only in studies on educational costs but even in the hard debate on the second day to be spent in the vocational schools.

Involvement of the social parties in shaping the training
In the dual system of vocational training the social parties are extensively involved in the regulation of training issues.

The cooperation of the Federal Government as the body responsible for regulating the area of the vocational education in the industry, and of the Federal States with their responsibility for the vocational schools, has been legally institutionalized in a cooperation of the economy with its organisations of self-administration under public law. This is a specific quality of the dual system in Germany, what means a legal protection of the participation of workers and employers on all levels (federal level, state, region and company). The inclusion of the social partners is concretised by: the representation in the Committee of the Federal Institute for Vocational Training, the decisive cooperation in the reform of professional models, the representation in the committees for vocational training on state level, as well as in the regional economic organisations of self-administration (chambers), which have great responsibility for the regional implementation of the dual training, and last but not least by the right of participation and co-determination of company spokespersons in planning and realization of vocational training in the plant.

2.2 Signs of crisis in the dual system
Signs of crisis in the dual system may primarily be seen in the following points:

- The problem of quantity, that means the central issue of a qualitative critique must be seen in the lack of conformity between offer and demand of traineeships; this shows the critical dependency of an education sector from decisions in the private economy.
The varying quality and value of the training and its diploma, according to the company and nature of training, is also connected with this principal problem of dependency from a single company. At present we can observe a tendency to neglect quality issues, as a consequence of the shortage in apprenticeships.

In view of the structural change in the economic sectors, a growing discrepancy between the systems of education and of employment is visible. Part of this is the high degree of specialisation in most of the training regulations: the professional models often are over-specialized and separated too strictly from each other. They often neither corresponds to the latest technological development.

Cooperation and coordination among the learning places factory (and external training centres) and vocational schools never has functioned optimally, despite all attempts of improvement with respective model studies. The delimitation of the pedagogical functions (practical learning in the workshop and factory and theoretical teaching in the school) is questionable. A central issue of critique is the fact that the vocational school never was an equal partner within the dual system, it is not even a subject of regulation in the Vocational Education Act. An institutionally ensured and continuous coordination among training regulations and skeleton curricula is not guaranteed sufficiently.

Another unsolved problem is the insufficient capability of the training system (works and school organisation) to correspond to the applicants’ heterogeneity, and to supply them with accordingly differentiated training offers. This critique becomes especially concrete in the group of young people at a disadvantage, which is much growing in the present crisis because all subjects at a disadvantage in any market are practically counted therein.

The poor ability to follow the European development is expressed a.o. by the fact that the German graduates of dual training are, compared with the French trainees, at a disadvantage in the European evaluation and recognition; they are classified in the second lowest grade of the EU-scale.

Finally there is a decisive defect to be seen in the poor interlocking of basic education and continuing training. Basic education in Germany has mostly a dead end character; further training is not integrated into an overall system of vocational education, and there are no regulations regarding access, the general set-up and finance for assisting in further training. I will mention some of those crisis phenomena in detail:

Quantitative problems
The development of offer and demand in traineeships has since decades shown repeated crises in supplying the youth with high-quality traineeships. The problem of missing apprenticeships concerns the whole federal territory, being however particularly acute in the eastern German states, on grounds of the missing conditions in the works structures.

The number of apprenticeships is clearly declining. According to the Report on Vocational Training from 1999, companies’ contribution to training includes on average only one third of all enterprises, being a bit higher in the old federal states than in the new ones. In the old states, a loss of about a quarter million of traineeships was stated since 1984. This negative development mainly concerns the traditional training professions of the dual system, e.g. commercial professions in industry, trade and technical professions, traditional service professions etc. There is an inconsistent development among the different craft branches in
their participation in training. During the past years there were both cuts and positive tendencies.

**Discrepancy between the systems of vocational training and employment**

The transition from the dual training into the employment system was never given automatically, but until some years ago it was rather easily possible – not least by frequent changes of trainees into other professions. But resulting from the negative development on the job markets, there is an increasing discrepancy between the systems of training and employment. Since 1993, unemployment after the training period increased dramatically. The Vocational Training Report of 1999 estimates the increase of unemployment at about 27 % in total after having successfully completed dual training in the year 1997. This dramatic figure even surpasses the peaks in the middle of the eighties. Professional changes, an entering into work below the acquired qualification level, or unemployment are today no longer exceptional phenomena but a normal case for many young adults after their training. The difficulties at the second threshold have clearly increased.

The fact that the completion of a professional training obviously leads less and less into the learnt profession raises fundamental problems regarding vocational training in the dual system, and clearly challenges one of the traditional legitimating models.

This discrepancy between the training and employment systems reflects a.o. a functional loss of the dual education in favour of a revaluation of on-the-job further training. Against this background, measures of professional further training receive a repairing character, since the basic education regularly (seems) to stay behind the structural change in the employment system. This again shows the poor interlocking between basic education and further training.

Baethge a.o. see another prove “for a fundamental functional and structural problem of the dual system” in the persisting “structural discrepancies between training and employment systems”, concerning mainly the poor ability to train in the future-oriented professions. Until today and despite the development of new professional models, the dual system did not manage to re-enact the tertiary model of the value-creating and employment structures conferring dominance to service activities since the end of the seventies already. The historical focus of the dual system onto production-centred professions is no longer adequate for the needs of the present development into a service and knowledge society.

**Deficits in flexibility and mobility; poor connection to the European development**

The said discrepancy between the training and employment systems also touches on the flexibility of the vocational education system. This can no longer only be guaranteed on a national level, but is should also involve the aspect of European mobility, in order to really exploit the enlarged opportunities for the workers offered by the European Single Market. If not only the freedom of movement for goods and money flows shall be guaranteed, but the voluntary mobility of workers as well, qualification systems in Europe must become comparable beyond the national context. This also concerns the inclusion of a European dimension into all training courses.

Rauner therefore calls for a shaping of vocational training by “open, dynamic professions”, i.e. for a widening of the professional system, with the goal to reach a compromise between stability on the one hand and flexibility and mobility on the other hand.

Experts question whether the traditional “dual system” is still adapted qualitatively and structurally to the present situation and the job marked requirements, or whether it only
presents a good training model for the trade and some special economic fields. The explosiveness of this subject shows in a series of expert’s opinions and conferences in the last two years that focused on the need of reform for the vocational training system in Germany.

**Poor cooperation between school and factory**

Though the vocational school and companies cooperate in the training, as both are legally embodied as equal learning places of vocational education, a stable cooperation between school and factory has only evolved in exceptional circumstances. The school is dependent from the companies, both in time significance and in structure. This also reflects in the fact the trainees’ school assessment remains without consequences for the final examination. The minority of the vocational school is problematic, because the separation between theory and practice is less and less realistic. On top of that, the theoretical requirements in the vocational training, particularly in the new training rules, have constantly grown. These are qualifications to be better taught in a school and are hardly imparted by many businesses, particularly the small ones.

**Problems of teacher training for vocational schools**

Vocational schools have a special training assignment. The vocational school shall give the pupils a basic and technical education for the profession, and widen their general education previously acquired, and thus systematize the business practice theoretically. “It wants to enable for a fulfilment of the professional tasks and for a shaping both the business world and society in a social and ecological responsibility.” There are doubts however whether the present education and further training of vocational teachers really is adequate for this task, and particularly for the multiple new requirements resulting from both transformed training structures and new social demands of teachers’ pedagogical competences. In connection with reforms of the vocational training system, there are other requirements for the teachers as the central figures here that necessarily will have effects on the training itself. The concretisation of a vocational training reform needs also a reconsideration of innovative concepts of teacher training to impart the relating competences.

**Qualitative problems**

Another problematic aspect is the dependency of the training quality from the individual company. When young people shall learn to critically reflect the connection between profession and society and to think about alternatives, when the relationship between techniques and human being as well as the interplay of technological conditions and working structure is on stage, they also should get to know some alternatives in their vocational training, e.g. different forms of works organisation, branches and business dimensions. This is not always and everywhere possible today. Solutions may come from the supra-industrial organisation of training (in the trade) practiced since many years, from combined traineeships, and a modified training structure as it is now embodied in some newly regulated training courses.

The companies’ ability to ensure a high-quality vocational training is rather varied. Especially in a period of a scarcity of traineeships, quality often is pushed to the back in the attempts to acquire an apprenticeship. But this means a very unequal distribution of the youth’s opportunities for a promising qualification within one and the same vocational training system.

The reality in the trade supra-industrial training centres also proves that several businesses never had been capable to fully conduct the training in their own responsibility, and therefore complimentary institutions had to be established (not to forget: financed by public means).
It remains an issue, whether we can renounce to the basic principle of alternating learning at several places, between the field of theory and practice, what is still rated as a central quality of the dual training system. Or whether other forms of vocational training can be found that would integrate that “learning place of a factory” getting so rare.

3. Schools and other vocational training

In view of the German vocational education system, it is often neglected that there is - besides the classical dual form of education - even a greater segment of schools and other vocational training courses. Besides the “pure” dual training, there is not only an extra- and supra-industrial training as a completion of the intern training, but there is combined training and even substitute training in schools. And there is a series of educational courses not classifiable into the dual system, even if they partly maintain the dual principle. Among these rank all full-time or part-time school vocational trainings, the training courses not covered by the Vocational Training Act, and the Craft Rules (e.g. schools for health care) but even vocational training and study courses in vocational institutes, technical colleges and universities. We only include here the non-academic full-time training courses in a school.

An important segment within the vocational training system are full-time training courses in schools outside the dual education. The school vocational training differs considerably from the dual system in its structural and financial set-up, and in the educational and career perspectives. It is often seen as the inferior solution, compared with the dual education, particularly when it is set-up as a substitute for the poor supply in apprenticeships. At this point it is particularly clear that the benchmark for an evaluation of school training forms still remains the “dual education”, reflected in the poor opportunities to find a job for youth trained in a school, as compared with those from the dual education. This is connected with the fact that there is no differentiation between school training courses with and without a professional qualification diploma.

Ranking among the measures that aren’t or only poorly qualifying for a profession, there are in particular the preparatory year and certain regional specific training courses, as well as all so-called reception measures offered at vocational schools for those who could not begin a traineeship but still must go to school. After completion of this measure no qualification in the sense of a recognized vocational training is being acquired, at best there is a time credit for the period of training; often it is only a waiting period.

Besides this so-called substitute supply, there is an entire segment of training courses than can only be completed in school form. They have never been organised in a “dual” form according to the steering model. These professions (over 100) are mainly settled in the areas of health care, education and nursing, but even in technical and data processing fields. The training courses at vocational colleges partly have a long tradition originated from specific regional economic circumstances. In the coming decades, an increasing significance of social, medical-nursing, commercial and counselling services is to be expected, which not only requires the extension of dual training professions, but of school training courses granting full qualification as well.

Women are represented over-proportionately in the school training courses. 79 % of all participants of school vocational trainings, both within the framework of training according to the Vocational Training Act and in vocational colleges and in special health care schools, are of female sex. This fact is also responsible for the gender-specific segmentation of the job market to the disadvantage to women.
The most unfavourable feature in these vocational training courses is not their quality – which in some cases is really good - , but the missing generalisation and transparency on grounds of the regional state responsibility. Some training courses are ruled by the Vocational Training Act, most of the others follow regional state regulations. The various legal set-ups are problematic, insofar as they make any comparability difficult. National uniform standards would give security to the youth about their training course and its job marked usability. And in some professional fields, the training courses are not regulated at all or only ineffectively. This regards for instance the foreign language professions, particularly at private schools.

Training forms in schools are seen at a disadvantage regarding the second threshold, compared with the dual system. Graduates from the dual system may easier pass from education into employment, since they aren’t confronted by the specific structural barriers hindering school leaving pupils. A study by Gisela Feller (Federal Institute for Vocational Training) from the year 1995 showed however, that transition processes of graduates from vocational colleges in West Germany at the second threshold are only slightly worse than for those coming from the dual system. It is uncontested that school professions have worse earning expectations and poor professional promotion prospects. Also, the access is often regulated by age limits, and they cost – if privately organized – tuition fees. That means that professions outside the dual system require much more individual investment than training courses in the dual system. And this hits mainly women.

On the other hand there is a growing gab of supply in the dual system, particularly in the eastern German states, and this sheds light on the advantages of vocational training in schools. One point is the independence from both economic trends and single company interests. This independence makes it possible to accept youth to a continued or even increased degree, and to offer them a qualified basic education. A faster and more flexible reaction to modified demands among youth and in the job market is possible, thus counterworking the so-called supply crisis. On principle, a quicker adaptation to changing social, technical and economic requirements is possible here.

Fulltime school training courses also contain development prospects for the future of vocational education. An extension of school training courses may open new professional fields, such as assistance in information and communication technology, as well as the largely unregulated area of the language professions.

4. Problems of equal opportunity in vocational education

A vocational training system in social justice must prevent that it produces handicaps for certain social groups regarding access and participation. The present system of vocational education however holds various inequalities. They exist not only between the sexes, but even between young people from different social backgrounds, from various ethnic groups etc. The vocational training system only partly corresponds to the democratic claim of equal opportunities. The principle of a “qualified education for all youth” is not yet realised in practice, for the following reasons:

Groups at a disadvantage in society often are also marginalized groups in the general and vocational education system; they need special encouragement. Among the persons at a disadvantage in vocational training we may count a.o. foreign youth, maladjusted young people with learning problems, with disabilities, youth without or with a bad school leaving certificate. In the past years, another problem of edging out youth with lower or middle school
leaving certificates came up by the increased intake of high school graduates into the dual system. Foreign youth are considerably at a disadvantage in vocational education: only ca. 38 % of the young foreigners complete a dual traineeship (Germans: ca. 2/3); nearly 33 % of foreigners aged 20-29 remain without a vocational qualification (Germans of the same age: 8.1 %).

Regarding gender-specific criteria, we may state that our vocational training system does not compensate the inequality between the sexes inherent in the employment system. Men are over-proportionate in the company-based training. Even in view of quality, women often are the losers in the training system, as they are mainly represented in such professions characterized by a lower income and less social respect, less influence and worse employment security or professional promotion prospects. To the contrary, men are more represented in professions with higher qualification. On top of that, vocational training research show very clearly that even with the same departure situation regarding education, men are already a step higher than women at three years after completion of the training.

One decisive problem of inequality is based in the fact that the various segments of the vocational training system are not equal. That means that for instance a qualification in vocational colleges does not grant the same opportunities to young people as a training in the dual system. An inequality of opportunities also results from the fact that companies as private institutions and sole responsible bodies for the access to the dual education can select from among the applicants, primarily under recruiting aspects, i.e. company interests of usability. The result is a permanent risk for weaker groups of exclusion from the system of vocational education.

Another deficit of the vocational training system is the unequal financial support of youth, according to different training forms. In order to attain a far-reaching equality of young people in vocational colleges with youth in company traineeship, a special instrument of promotion should be developed.

Since youth at the beginning of their education are not very flexible in the space, regional conditions clearly influence the chances to find a traineeship. This not only concerns the question: “traineeship – yes or no”, but also the structure and quality of the offers at disposal. In this respect, even the region works as a hindrance factor in vocational education, and causes unequal opportunities for the young people.

Another problem area is the unclear relationship between vocational and academic training courses. The missing equality of vocational diplomas for entering the university system has been an unsolved problem since the first realisation of the dual education. Today, the value of a vocational training for beginning higher studies is still not recognized. The long obsolete separation between dual education equivalent to apprenticeship, and secondary school equivalent to preparation for higher learning, is still fixed in the unregulated access possibilities for vocational graduates into a university study course. There are considerable differences in the various federal states.

5. The special situation in East German states

In the new federal states there is still a very problematic situation regarding the offer-demand relationship of apprenticeships, compared with the old federal states. The slow economic consolidation in East Germany has striking consequences for the capability and possibility of companies to offer apprenticeships. This causes the need to set different accents in education
policy. There are new relationships between a company-based, public and private responsibility for education, that clearly challenge the primary training responsibilities of business firms.

The hard scarcity in traineeships has special consequences here. The “rare good” of a company-based learning place is entered not only by youth coming from the school, but also by grown-up re-trainers, and participants from other qualification measures. In order to reduce the still great supply gap, the extra-industrial training offers were much extended. This was possible, because in the old GDR-combines there were given bodies for education well equipped to offer vocational qualification measures.

The transfer of the Vocational Training Act onto East Germany during the Reunification met with an economic infrastructure where the core of the West German training system, the individual training company, was barely present. This basic problem is still valid today.

There is the need to correct this situation and offer special traineeships in the eastern German states. A variety of job programs to create additional supply was developed, since the company offers of apprenticeships are insufficient in to compensate the gap. The following measures may be mentioned: annual apprenticeship programmes for the East, financial support from federal and regional programmes and ESF-funds, the Regional Programs, the encouragement program for handicapped persons according to the Social Code III (SGB III), and the immediate program for cutting youth unemployment of November 1998 (re-enacted from 1 December 1999). According to the Vocational Training Report of 1999, this led to the fact that about 70 % of the new industrial apprenticeship contracts are being supported by the state. We can no longer talk of a primary responsibility of the industry for vocational training. Some education politicians think that there will be a demographic relief in the traineeship marked after five to seven years, on grounds of the fallen birth rate, but this doesn’t mean that the training structures will have basically changed, and the industrial offers of traineeships would be sufficient.

In the new states, there was a training landscape created that is formally still covered by the Vocational Training Act, but no longer follows the traditional principles of the dual education. The fact that education policy still maintains the dual system as the dominant model even in the East has clearly negative effects for the youth in the new states being trained in the respective substitute courses. Their opportunities of passing into a job after completion of the training are much inferior to those trained in a company, because they carry the stigma of a stopgap solution.

Despite the difficult situation, the East German young people aspire a training in the dual system to a much higher, recently even increased part, than in the western states. As a result of this discrepancy between the wish for education and the supply gap, the readiness of East German youth to travel for an apprenticeship is more marked than amongst youth in West Germany.

All in all, a pluralistic structure of supply in various organisational forms of vocational training has originated in the new federal states, which by no means offers all young people the same promising prospects of education. In view of the great pressure in supply, the aspect of quantity was prevalent to the claims for quality in a good education. The quality problem in training, visible in the old federal states, is even more accentuated in the East. A reliable quality assessment of the various supplementary training courses and of the extra-industrial institutions in East Germany is particularly complicated by the fact that detailed evaluations have so far not yet taken place. The respective offers are mostly assessed according to the
whereabouts at the second threshold, taking only a partial aspect, without enabling a statement about the quality of the training as such.

Despite this negative situation in the new federal states, there is also the chance to analyse the different and very heterogeneous training regulations in terms of various strong points. We may check whether the model of a combined training first developed in the new states might not be especially sustainable to impart to the youth a broad range of professional tasks, qualification requirements and works organisations, better than it might be possible in the single company. Even the extra-industrial and school training courses must be examined in terms of their strengths, regarding the teaching of training requirements independently from any production. This again is important in terms of the increased theoretical requirements in many vocational training courses.

Such considerations however are dependent from the fact that one refrains from the idea of the sole existence of the dual vocational training system, and sees the newly created training landscape as a plural mixed system to be analysed in terms of its future perspectives, in its specific strengths and weaknesses.

6. Reform examples at vocational training systems in European neighbour states

The flexibility of the German vocational training model is also being challenged by a new general set-up in the course of the European unification process. The efficiency and further development of the various education systems in the countries of the European Union are an important element of political and economic integration in Europe.

Generally, the Maastricht Unification Treaty in its articles 126 and 127 leaves the regulation and organisation of schools and vocational education within the competence of the single states in the European Union. In search of sustainable development paths within the respective systems, some European countries have tested a range of renovations during the past years. So far, in Germany the responsible bodies renounced to integrate international experiences to a larger degree in their modernizing attempts for vocational education.

Independently from the country-specific context in the direction of vocational training systems in European neighbour states, there is everywhere a general trend to pluralizing the ways of qualification. Primary full-time school education systems – like in France – are being complemented by alternative elements, whilst the deciders in market-oriented modular systems – like in England – work for a stronger regulation of final diplomas. In the French vocational full-time schools, a combination of basic training in the professional field with an upper general level have proved relatively successful.

In this connection, a glance across national borders is valuable, despite many difficulties in the European comparison, especially in the “transfer” of models or reforms of vocational training. We can see here that vocational training according to the professional principle will only persist in the future, if the education is broadly based, concentrated on key qualifications, and if transition into other continuing school forms by a recognition of already rendered achievements is the “normal case”.

The significance of vocational education and further training will be more and more subject to the conditions of mobility and competition in the European job market. If education policy wants to take influence within this development, the trans-national recognition of diplomas is
an important precondition for international mobility. There is already now the problem in Europe, on grounds of the various organisational structures and certifications of vocational training, of how to determine equivalence of vocational diplomas. The need is to work towards the goal

■ that the qualification actually acquired shall not be neglected vis-à-vis the orientation upon formal diplomas, and

■ that transparency of the systems shall be improved.

The following modernisation targets may be identified within the different reform attempts in the vocational training systems in Europe:

■ increase of the gainfully employed population with a recognized qualification, a better adaptation of vocational training to job market requirements;

■ development of various ways of vocational education with equivalent diplomas, e.g. apprenticeship and full-time vocational school;

■ contribution of business firms to the financing of vocational education;

■ inclusion of the social partners in the processes of development and realisation of qualifications in vocational training;

■ promotion of equal recognition of general and vocational education;

■ coordination of tasks between the learning places;

■ claim to open more options of professional further qualification;

■ improvement of access to external and vocational education for unemployed adults.

Particularly the new regulation of the vocational training systems in Denmark, in the Netherlands, in Austria and in Switzerland hold approaches that might be interesting for the reform process in Germany. In those four countries, new modes of financing, of the determination of learning places, of modularisation and certification – still maintaining the professional concept – are being practiced with various accentuation. Denmark for instance has successfully developed its system of vocational training, that in many points shows similarities to the German structures:

■ In order to make easier the transition from the compulsory school (after grade 9) into a vocational basic education, the first year of training may be initiated both in a company and in a vocational school.

■ The present 300 training professions were classified into 85 professions with 200 fields of specialty.

■ Parallel to the reduction of professions, the teaching of a broad general and vocational knowledge including several professional fields was enforced.
The upper vocational full-time schools (vocational colleges) are open for “suitable” applicants from the compulsory school, and apprentices from the first year of training. Pupils at the vocational colleges can change into a vocational training without prejudices. The commercial and technical secondary schools terminate with a double qualification.

In the open system of vocational further training, the vocational schools will assume an important assignment as regional learning centres.

The coordination of the vocational curriculum by integration of school and industrial teaching contents in a training regulation seems optimally solved in Denmark. The training is structured by lessons in the sandwich or bloc system at the vocational schools, and with industrial training periods.

This solution indirectly refers to the problems relevant in the German debate, namely the differentiation among the teachers, not justified by the contents taught. Danish teachers in the vocational schools (better: vocational centres) are training in a way to know both the professional theory and the professional practice. Such a self-image in a holistic qualification concept not only prevents the separation into teachers of theory and masters in the workshop, but also the separation of training in professional theory and professional practice, today no longer justifiable in terms of technology.

The basis for these reform steps in Denmark is the historically grown high mutual estimation of vocational schools and companies, as well as the stronger regional competence of decision for the education administration.

Besides these structural reforms of professional training described at the example of Denmark, there are some other impulses to the drawn from other European countries for the necessary modernisation of the German system. This regards mainly the subjects:

a) competing ways in the basic education and further training;
b) financing;
c) interlocking of general and vocational education.

To a:
The lack of traineeships can easier be eliminated in those systems that present competing ways. A plurality of ways in vocational training means competing systems of vocational basic education, and the combination of basic education and further training.

In Austria for example, the apprenticeship (dual system) and the middle and upper vocational full-time schools are competing with each other. In a situation of missing industrial apprenticeships, a compensation by the highly recognized ways of vocational full-time schools is possible.

In the same way, there are alternatives in Denmark for youth without a traineeship, for their transfer into the training and job market. They complete a kind of vocational basic training in the first year. From the second year on, an industrial apprenticeship must be presented.

In the Netherlands young people can choose between a vocational full-time school and the apprenticeship, the alternative of regional training centres having a key role here. Partial qualification (modules) are mutually recognized in the case of a change. By the mutual acceptance, the apprenticeship here has met a social revaluation, and the combination of basic education and further training is easier.

To b:
In most European countries, the vocational education is financed by the public authorities. Nonetheless, the contribution of businesses to the costs of vocational basic education and further training (e.g. finance funds) remains an important topic in the European Union, since they profit in all countries from an optimal qualification of their employees. A contribution by the companies is everywhere seen as important, in order to be able to offer a practice-oriented vocational training for the next generation.

In Denmark, financing of vocational training is done by a collective fund equally administrated by employers and trade unions. It bears the expenses for extra-industrial vocational education, and compensates costs between companies that offer training and the others.

In the Netherlands, financing is a public task. Here the means are distributed according to efficiency, as the vocational full-time schools and the industrial apprenticeships are standing in a systemic competition. The bodies responsible for vocational education also compete with one another, since in the future financing will be granted according to the number of pupils/apprentices acquired by the individual institution.

To c:
The promotion of equality of general and vocational training can be reached by an increase of attractiveness of the vocational courses in comparison with the general courses, by diplomas granting a double qualification (professional qualification and aptitude for higher learning). The classical example here is the professional college in Austria, much estimated among youth in their choice of the secondary education.

In Switzerland it is possible that especially efficient apprentices - during their vocational education being exempted for the professional college – can acquire a professional Matura parallel to the apprenticeship.

In France, the baccalauréat professional, granting an upper general education on the basis of a vocational basic education, is meant to extend the “high school level” on about 80 % of an age group. In some other countries of the European Union – especially where general and vocational education in the secondary field are integrated, a similar tendency can be observed.

7. Conclusion: Need of reform for the system of vocational education

In virtue of the social significance of vocational education, we are convinced that vocational education and further training must lay in the public responsibility. This concerns in particular the said functions of vocational education, of their collective, individual and equalizing functions. Insofar the existing systems show considerable problems.

If vocational education is seen, just like the general schools, as a social infrastructure subsidy indispensable for the social integration of the coming generation, this will result in public responsibility for supplying a sufficient amount of vocational training. This not only means a sufficient number of traineeships, but especially even the supply of training quality, of sustainable training professions, and of creating real equality in the access to education.

Reality clearly is different: there is a continuing structural dilemma based on the fact that an important social infrastructure subsidy – vocational education – is placed in the hands of a subsystem, in the present economic system mainly controlled over single economic decisions, while the state more and more returns to the role of a moderator and supplier of various kinds of complementary offers. Even if an essential part of financing and regulatory competence in
Vocational education lays in fact with the state, responsibility for the realisation of the (dual) vocational education remains largely with the single company. Therefore the realisation of the principle that all young people shall have the right to a freely chosen promising vocational education is dependent of single industries’ decisions and thus tendentially limited.

Despite all attempts of policy to move the companies, by appealing at their training responsibility and by easing them the training by a pedagogically questionable flexibilization of the time spent in the vocational school, the problems were not solved. It became clear in the past years that the dual system cannot fulfil the claim of a complete supply for all youth of an age group who want to enter into vocational education. There is the need to find alternative models that help to solve the quantitative and equality problems, and contribute to building the vocational training system into a conclusive pluralistic system of vocational education.

In Germany, many still keep to the idea of a homogeneous closed dual system, and do not see that there is a vocational mixed system with various arrangements of learning places, already existing since some time. This development shows for instance in a large number of extra- and supra-industrial traineeships as a supplement to the industrial traineeships, in combined training courses, or in the increasing quote of school substitute training, particularly in East Germany.

The problems inherent today in this development to be solved by a reform of vocational training do not result from the plurality in fact existing in the training supply, but rather from a lack of transparency and convertibility, as well as from the unequal social valuation of the training efficiency at various offers and learning places. There is the growing pressure to make the national training supply also compatible within the European Union.

In view of the present coexistence of different training forms, the issue of an ability for connection of the various segments in the vocational training systems is getting very important. There is no regulated recognition of partial achievements rendered before, in the various segments of the training system. In terms of both the national economy and the individual perspective, the passing of different training courses often proves a dead end or a detour: an important goal of all reformatory attempts for the vocational training system would be to make the various types of supply mutually creditable, by an establishment of qualitative standards and partial certifications. This is especially valid for the transition from a school education form into a dual one, but also for the reverse way.

Another challenge for the vocational training system is the unclear unequal relation of vocational and academic courses. The recognition of vocational education for the access to the university system must be regulated. This problem needs an urgent solution, if an economic and individual waste of skills, knowledge and learning time should not be fostered here as well.

The further development of training courses granting a double qualification in stage II of secondary education as a regular supply remains an issue of discussion, and here one should take up the corresponding tradition in East Germany. The great number of young people who complete vocational training after their high school leaving, before they want to do academic studies, underlines this request. Even if such an educatory behaviour may we meaningful in the individual case: it leads on the one hand to social edging out mechanisms in the dual system, and on the other hand it results in a very long period of training for the individual.

It is necessary to coordinate and interlock vocational basic education and further training better than in the past, and to rethink the distribution of education periods within the professional career. All this shows that a reform perspective directed towards the overall
system of vocational education and further training is indispensable. On the basis of the given analysis of the strengths and weaknesses of the present system, it will be necessary to develop reform proposals for every partial segment of the vocational training system, that will redirect and develop the training supply and structures - according to the problems - towards a standardisation, differentiation or flexibilization, without however forgetting about the development of the total system.