»Danish Dynamite –
on the Implementation Process of Autonomous Schools
in the German Vocational Education System«

Prof. Dr. habil. Volker Bank
Berufs- und Wirtschaftspädagogik
Philosophische Fakultät
Technische Universität Chemnitz
Reichenhainer Str. 41
09126 Chemnitz
volker.bank@phil.tu-chemnitz.de
Abstract

In the late nineties, the German foundation “Bertelsmann-Stiftung” launched a project on the question which vocational training system was presumably ‘the best system of vocational education and training (VET) in the world’. In the final report, the Danish system was awarded this title (Bertelsmann-Stiftung 1999; 2000). This initiated a program of revision of the vocational schools in a number of Bundesländer, most notably in the northernmost federal member state, Schleswig-Holstein, to which the focus of attention shall be drawn. Following the Danish example, the schools shall be given a greater autonomy in exchange to an enlarged responsibility.

The question which arises from these changes is in which manner the German states follow the Danish example. This includes the recognition of different cultural contexts, the given status of law in Germany and the way in which German authorities avoid the problems which have shown up in the Danish example. All in all, the study of achievements and shortcomings in the implementation process can illuminate how processes of reciprocal learning within Europe might be developed.
1 Introduction

This paper is about reporting the change process within German schools of vocational or professional education. For there are 16 Bundesländer (federal member states), each of them undergoing a different development, this report will be basically oriented at the northernmost Bundesland, the state of Schleswig-Holstein which is situated right south of the Danish border. As the ongoing changes are initiated by the influence of the neighbouring Danish VET system, it seems to be worthwhile to be looked on more closely.

As it is quite typical for the political but also scientific discourse, the main interest of this report will be directed to the question of organisation of learning, much less to the learning itself (as it just has been criticised by Graham Attwell, 2005). Despite of many probably more relevant aspects as seen from a didactical and pedagogical point of view: In terms of competitiveness, institutional autonomy and in respect of concrete developments at a decentralised level (decentralisation to the regions) it clearly can be stated, that the Danish system has developed to a model system (cf. in this sense also Bertelsmann-Stiftung 1999; 2000). It excellently fits to the neo-liberal issues put forward in the European Research Agenda: efficiency, reduction of cost, readiness to short innovation cycles (cf. Tom Leney’s summary 2005).

This paper is to work out two closely connected purposes, first of them getting acquainted with the Danish model, second learning about the way of getting adapted to this model under the conditions of the German VET system. Therefore, the Danish vocational schools shall be sketched out briefly, and a short description of the German schools and their latest changes shall be given. Then a comparison will be made concerning the most important common and different traits. Finally the focus will be shifted to some evaluative remarks on the implementation process of the Danish features to German schools, not at least in respect of how and under which conditions European countries can learn mutually from one another. The guidelines of this analysis will be given by systems theory and an historical view on the specific philosophical backgrounds.

2 On the Danish ‘Prototype’

The description of the relevant traits of the Danish VET system shall be limited to merchant schools/ colleges (see also fig. 1). Most of these traits are shared by the technical schools/ colleges. Anyway, many mergers of merchant and technical schools have occurred since the beginning of the reform process in Denmark.

2.1 The Danish ‘handelsskole’ (merchant school)

After the nine-year common schooling at the folkeskole (a comprehensive primary and lower secondary school), the young people in Denmark have to decide whether to go on with their schooling or to change to the VET-system, unless they decide to enter directly a non-qualified employment. The apprenticeship takes four years time, the first two years being consecrated to formal learning at school. The second half of the apprenticeship contains alternating sequences at work in a company and at school. In the following the report shall be limited to the merchant school (or: college) – handelsskole – for the technical colleges are situated in a more or less identical frame (see also fig.1; which has been largely inspired by Niels Thyssen, Århus Handelsskole).

At the end of their apprenticeship, apprentices are entitled to enter short undergraduate studies (korte videregående uddannelser, KVU) which already form a part of the tertiary educational sector (see a short overview on KVU by Pedersen 2006).
2.2 Special features of the ‘handelsskole’

As observed from an outside position, among the features of the handelsskole the following seem in particular remarkable. They are at first sight mainly organisational, however, for the organisation of a school always sets the frame of action for teaching and learning, they can also be considered to be macro-didactical features (cf. Brauckmann 1993):

1. The nearly continuous integration of students of different provenience. The apprenticeship is started with school-leavers of the folkeskole, at the beginning of the second year older students (above 25 years of age) are added. They are considered to have already some professional experience. Holders of the Danish ‘A-level’ follow half a year later and receive an intensive training to catch up with the content. This training, however, does not seem necessary to the holders of the højere handelsexamen (HHX), which is also a certificate permitting the attendance of a university on the basis of a curriculum directed towards mercantile contents.

2. The intensive consulting or even coaching of the students. The schools do not only spend a lot of time in finding suitable courses for their students but also in finding an adequate business for practical and informal learning within the apprenticeship.

3. The officially declared task of raising funds. The schools do so by selling curricula (e.g. to third-world-countries, to transformation states in Eastern Europe) or especially by offering further vocational education.

4. The expenses on the other hand can be reduced by the option of dismissing the teaching staff. Teachers have lost the former status of civil servants. This is particularly given in the case of lacking teacher’s efficiency. But not only the individual can perish – the school itself is at risk to be overtaken by neighbouring schools and under the peril of bankruptcy – of which the Bertelsmann foundation’s laureate school has given an excellent example, too.

5. The ongoing integration and formal acknowledgement of informal education (called re-alkompetencer) and formal education (called meritter). In this aspect they realise the EU’s
political desire of the mutual recognition of informal and formal learning, expressed also in the concept of the EUROPASS in a paradigmatical way.

On the background of the first and the fifth trait, it becomes obvious, that one of the principal aims is efficiency: No one shall stay longer in the system as necessary; as by going twice through the same topic. This leads in combination with (3) to

(6) The ongoing process of modularization of teaching and learning. A course on a specific topic will be visited not only by the students of a given year of the apprenticeship, but by anyone to whom it is expected to be helpful, even if it is somebody from outside of the school, pursuing an interest in further VET. The complete integration of initial and further VET, both by staff, by topic and by students is possibly the most important change in the Danish system of VET.

(7) The process of change is supported by an integration of the school to the regional economy. Any curricular decision that is regarded necessary to support the development of local enterprises can be taken and implemented by the school itself.

(8) Finally there is a methodical or didactical change towards self-directed learning (realised in Open Learning Centres) and by a re-structuring of curricula by processes (called authentical problems) instead of structured topics.

It has to be mentioned that the architectural conditions and the teaching equipment have largely been adopted to this new way of organising of vocational schools.

3 Towards more autonomy: The RBZ (Regionales Berufsbildungszentrum)

In Schleswig-Holstein, ahead of other federal states, an irreversible process of imitating the Danish model has been launched some five years ago. The schedule is foreseeing an implementation of major changes in the respective law by January 2007.

As widely known, there is the so-called ‘dual system’ at the heart of the German VET system (cf. fig. 2). Didactically its main trait lies in different learning approaches, one directed towards experience learning (in-company), the other one directed towards theory learning (Berufsschule, vocational school). Juridically it is characterised by a mixed system of private (in-company training) and public (vocational school teaching) responsibilities. The two sides have their common focus, didactically in the individual apprentice, from the juridical point of view they are linked only by the contract between the respective company and the individual apprentice who is in most cases bound to attend teaching at vocational school.

The ‘dual system’s’ central role will persist, even though recently a reform of the federal law on VET (Berufsbildungsgesetz: BBiG) has re-valuated full-time schooling. Formally diploma acquired at school (Berufsfachschule: BFS) and in the frame of the ‘dual system’ are equal. This change in law had been suggested under the impression of a certain lack of posts for applicants for an apprenticeship. It can be easily predicted, however, that the number of job offers to professional novices will not be increased by this formal change. Other forms of full-time schooling offer upper secondary vocational schooling (Berufsoberschule: BOS; Fachgymnasium: FG) in preparation for academic studies.

There has been no further education in the frame of vocational schools up to now, with the only exception of Fachschule (FS; School of Further VET). These schools offer a closed curriculum of two years time (full-time schooling), e.g. for bachelors preparing for their mastery in craftsmanship.
1. The most central change of a vocational school becoming a Regional Centre for Vocational Education (RBZ) is probably the institutional integration of further VET. The urging lack of money in the public households makes politicians hope that schools may earn some of the required resources of their own.

2. The RBZ will be allowed more formal autonomy from central administration. This refers not only to the right of obtaining resources of their own by offering further education on the free market, but also in the right of concluding contracts. This altogether requires a new accounting system, and, along with this many new management functions formerly allocated in the central governmental administration. The advantage of this increased autonomy lies in a greater flexibility of schools to react to regional and local particularities.

3. The methodical or didactical approach is undergoing changes, too. Like in Denmark the autentiske problemstillinger have led to a didactical orientation on the processes instead of content structure, in Germany Lernfelder have been introduced on the same purpose. A Lernfeld is derived from a practical problem (Handlungsfelder, fields of action) and methodically implemented by a number of Lernsituationen (learning situations; cf. Bader 2000). There is admittedly no causal link to the transformation process vocational school/RBZ, for the initial decree concerning the implementation of Lernfelder was given in 1996 (KMK 1996, last release: 15. 09. 2000). Nowadays it is common exercise in the vocational education in many different professions and to different degrees in all federal member states.

4 A brief comparison of the Danish Prototype and its German adaptation

There is quite obviously a number of parallels between the new Danish and the forthcoming German (or rather: Schleswig-Holsteinian) system of VET. The most striking is the advance in regionalisation. Nevertheless, a large number of differences will remain (cf. fig. 3).
1. The probably most important difference appears to be the didactical segregation of first and further VET in German vocational schools. In this point, the Danish reformers have shown much more neo-liberal spirit of short term economic efficiency. It can not be judged on a general basis, whether common teaching of adults and of adolescents on one topic is didactically an opportunity or a nuisance. It is to the challenge of the single teacher in a specific situation to make teaching to a non-homogenous group fruitful. Notwithstanding there might be arguments, that teaching a homogenous group is easier to some degree. It is clear, on the other side, that the cost of teaching can be sensibly reduced by filling up the courses in basic VET with participants in further VET and vice versa.

2. Danish reformers have gone much further in taking away the status of civil servant form teachers. This will not happen in Germany in the next future; up to now, every attempt in this direction has failed.

3. Under the new RBZ way of organisation, equal to the current state, the holders of a vocational degree obtained at school will start their apprenticeship at zero, just as every other freshman. In Denmark, contrarily to this, the holders of HHX enter the apprenticeship only at the beginning of its third year. Others are introduces at different other stages according to their previous knowledge and aptitude.

4. The regulative instance between RBZ will be far less quasi-markets than it is the case in Denmark. Danish vocational schools have undergone a huge wave of mergers throughout the last decade. Schools also went bankrupt. This will not happen in Schleswig-Holstein. The final financial responsibility will remain on the side of the local governments. If the CEO of the RBZ should also buy too expensive paintings in order to create a nice learning atmosphere, this will finally be the unavoidable problem of the taxpayer.

5. Interestingly, the Danish system remains in one central respect less liberal than the German system. The contract between the future employer of the apprentice is prepared, organised and approved by the school. It is up to the German apprentice alone to prepare and conclude a contract of apprenticeship. According to the novel federal law (Berufsbildungsgesetz BBiG), the function of approval keeps being confided to the hands of the Chambers of Industry and Commerce or the other respective organisations (‘zuständige
In Denmark there is a clear preference for ‘no informal education’ compared to ‘bad informal education’. In Germany, too, schools were able to tell very well about the (few, however existing) companies which abuse their apprentices for repetitive or boring work or just for boiling coffee for the other employees.

5 Conjectures grounded on systems theory on the implementation process

The orientation of the RBZ towards the Danish prototype, as shown above, is far away from a 1:1 copy – one could even say that it has just been inspired by some details. Nonetheless many teachers and representatives of other public and private institutions in Schleswig-Holstein have given expression of a deep scepticism; obviously the forthcoming changes are being regarded as a threat. This observation gives way to an investigation on the reasons for the problems of learning from education systems in different countries (melioristic function of comparative educational research, as discussed for instance by Lauterbach 1999, VGL-129 f.).

Innovation theory knows very well that there nearly always will be opposition to any kind of innovation (cf. Hauschildt 2004). This is not the topic here. But it cannot be overlooked, that the process of implementation even of the few chosen traits by the school authorities in Schleswig-Holstein is very time consuming (it will officially take from the year 2000 to the end of 2006; in fact first preparatory steps had been undertaken before that).

Systems theory may help enlighten this phenomenon. It can provide explanations, why this process does in fact require such a long time, and which conditions have to be taken into account in order to make the RBZ finally work in Germany, too.

(1) System complexity and rules. Social systems tend to continuously enlarge their complexity. Increasing complexity requires mechanisms of selection (in order to reduce complexity again), as for example the introduction of rules (cf. Luhmann 1987, p. 45 ff.). Two different social systems can in particular be described by different sets of rules, which clearly is the case in comparing different organisational structures.

The probably most innovative point is the integration of further VET into vocational schools. This is closely connected to a completely new concept of autonomy in finance and administration. It is not difficult to predict, and has in fact already been, that this is the moot point in the development of vocational schools to RBZ. The new rules are contested from outside of the school system, perhaps even more than from inside.

In Denmark and in Germany there are fundamentally different conditions in further VET: Whereas the Danish schools traditionally supply a major part of further VET, in Germany VET is provided by private institutions which would find it difficult to compete with publicly funded RBZ (cf. Bank, Jongeblod & Schneider 2003, p. 12). This observation explains a good deal of the criticism from outside the RBZ: The change of rules (public offer instead of no further VET by publicly funded institutions) puts forward a substantial threat to the economic subsistence of a number of social sub-systems (private institutions of further VET).

The new rules have to get adapted to the different situation given in Germany (subsidiarity rule: only if private institutions are unable to offer a certain training, public institutions are allowed to take the opportunity). Then, the private opponents have to be convinced, that this rule will be applied strictly. This is obviously a time-consuming process.

The opposition from inside refers to the same aspect: The best teachers will be transferred to the VET-section, for they will gain additional resources for the RBZ. The regular task within
basic VET will be handed over to less able and eventually less qualified teachers (along with the slogan ‘money instead of posts’; cf. Ministerium 2002 ff.). This erosion process will end up in a generally lower qualification of the new colleges, at a certainly lesser payment, in short: it is an economic threat, too. Convincing the critics from within the RBZ will be even more a time-consuming process.

(2) System hysteresis and cultural history. Social systems tend to be hysteretical, i.e. the actual state of the system (at \( t = 0 \)) depends on a previous state (at \( t = -1 \); cf. Cross 1987, p. 82). Other theorists underline that, once established, specific systems tend to reproduce themselves (Maturana & Varela 1984) or new communication requires connectivity to previous communication (Luhmann 1987, p. 62). If this is right for specific sub-systems like vocational schools, the more it will be right for the reason of their cultural embeddedness.

Thus, different historical traditions at both system levels have a fundamental impact on future changes. History notwithstanding occasionally happens to be discontinuous. This is called ‘revolution’ and means a total de-construction of the previous, with all collateral damages known sufficiently well from numerous historical examples. Revolutionary discontinuities do not seem to offer adequate measures to construct homogeneity across borders.

Although Schleswig-Holstein is the federal member state with the greatest cultural proximity to Denmark, for having shared a long common history, it nevertheless had been fully integrated into the state of Prussia. Concerning the organisation of schooling, there have been two people who have coined two systems in a highly opposed way: In Denmark this was Nicolai Frederic Severin Gundtvig (1783-1872, publicly active around 1810-1870), in Prussia it was Wilhelm von Humboldt (1767-1835, initiator of school reforms in 1809/1810).

They acted in different historical contexts, too: Humboldt was able to realise his liberal reforms only under the external pressure of the Liberation Wars against Napoleon. His first goal was a secularisation of schools. This should go along with a standardisation. Schools were to be controlled by central government, with the help of two instruments: central curricula and a state exam at the end of general schooling (Abitur). Within this frame, teachers were entrusted to act freely. Instead, their professional competence was controlled.

Contrarily to this, Grundtvig relied hardly on teacher training. It would suffice to find at least one teacher of a relative mastery in their mother language, as it is commonly spoken and much less like it is to be found in books ("da maa er i det mindste være Een, som, forholdsviis er Mester i Modersmaalet, ikke blot som det findes i Bøgerne, men fremfor Alt, som der lever i Folkemunden ...” Grundtvig 1843/1993, p. 419). There is an incontestable tendency to follow this view in Germany, too. The preparatory service in Germany (Referendariat) has been reduced in many Bundesländer from a duration of two years to 18 months. It has become modularised, and it may finally disappear in the ongoing BA/MA reforms. This, however, is not connected to the implementation of RBZ.

The reforms Gundtvig had on his minds were bound to the mercy of his sovereign, and they were never realised to his satisfaction during lifetime, despite of the accentuated royalism and vivid nationalism of his entreaties. He pleaded for the autonomy of schools, nowadays realised in the VET schools: "Det følger nemlig af sig selv, at i et levende Skolevæsen har Forskrifterne, som i det døde Skolevæsen agtes for Alt, lidet eller intet at betylene ...” (It follows from itself, that in a living school system any regulation, which finds in a dead system the utmost respect, has little or no reason at all; Grundtvig 1847/1993, p. 450).

It would be absurd to centrally control schools which are designed to be autonomous. However, Grundtvig had a deep suspicion against teachers, and against principals, too. They should be regularly evaluated, and – if necessary – get dismissed:
"I Alt hvad der udrettes ved Mennesker er efter mine Tanker ikke Forskrifterne, men Menneskerne selv Hovedsagen, thi hvad de ikke kan, det gør de ikke heller, ... og hvad de ikke vil, det gør de saa slet, som de tør ... " (In anything people shall exercise, in my opinion not regulations are the central point but people themselves, for what someone cannot do, will not be done either, and what someone does not want to do, he will do as badly as he dares to; Grundtvig 1843/1993, p. 417; on the use of a precarious status of the teacher and the principal cf. Grundtvig 1840/1993, p. 397 f.).

There are data hinting on very high leaving rates of newly hired teachers at Danish vocational schools which exceed an average of 4 % p.a. during the first five years (author unnamed [PLS RAMBØLL Management] 2002, p. 7). Also there have been examples, that the whole school management was replaced by order of the advisory board (as reported by Henning Gade, in Wrütz 2002, p. 86).

Humboldt probably did not dare to annoy his king by openly teaching the new elite the ideals of liberal democracy. For this reason (he named others in his written documents, though) he chose to teach on the model of the democracy of hellenic antiquity. This was to be developed in a systematic curriculum which was oriented by the idea of formal ‘bildung’ (which finds some of its roots in Shaftesbury’s ‘inward form’, cf. Horlacher 2004).

Opposed to this, Grundtvig ardently argued against latin schools, which he considered injurious to the Danish national character. Instead he wanted the lessons to be given in the national language. The impetus of his ideas on curricular questions was apart of this rather pragmatic (in the sense of Jamesian pragmatism (1908), oriented at experience learning: ‘what works is true’):

’... thi hvor det gælder om at lære endel Bøger udenad for saa ..., der kan man sagtens forud bestemme, i hvad Orden og under hvilke Former dertil skal arbeides, men hvor Opgaven er at vække og nære Ungdommens ... Opmærksomhed paa Livet, og at veilede dem til en Dannelse og Oplysning, der skal være sin egen Løn, ... der er det Tingen at finde dygtige, livfulde, paa lidelige Redskaber og give dem al mulig Frihed til at prøve deres Kræfter og giøre deres Bedste.” (Whenever the goal is to learn some books by heart, is this the way of predicting well in which order and in which way the work shall be done; but if the task is to awake and nourish the youth’s attention to life, and of leading them towards an education of enlightenment which can be a value in itself, one is in the need of finding excellent reliable tools from the middle of life and give any possible freedom to try out their forces and give all their best; Grundtvig 1843/1993, p. 420).

Generally speaking, he postulates a lively school, oriented the reality in customs, mother tongue, and practical live. The preponderant interest of school learning must lie in avoiding inert knowledge learnt from books (instead of many other possible references cf. Grundtvig 1847/1993, pp. 431-435). This conception seems to find much correspondence in the method of realistic problems (autentiske problemstillinger) in contemporary vocational schools. A teaching activity in this view is ‘good’, if directed towards a challenge of the pupils experience or skills.

Summarising, it could be said, that the realisation of the ideas of Grundtvig seem to be finally implemented after some 200 years by the latest reforms in the VET schooling since the early nineties. In a number of interviews, however, none of the interviewed Danish experts in VET seemed to be aware of that (cf. Bank 2003, p. 97 f.). Concerning the traits of the Danish model constituting the German RBZ, they are fundamentally breaking up another tradition, equally long to the Danish.
6 Conclusion

All in all, by the observation of the pending processes in Denmark and in Schleswig-Holstein the following suggestions can briefly be concluded:

1. Any attempt of transferring a system as a whole is a revolution. Revolutions tend to produce casualties.

It has been clear from the start, that despite the success of the Danish system at the Carl-Bertelsmann-Award, a simple copy would not work, but provoke extreme resistance against any step towards implementation. A central reformer in Schleswig-Holsteins government habitually replies to this claim: “It cannot be done all at once”.

2. Any process of imitation of a foreign model must in the first place soundly reflected at analytical level (unless the system as a whole will be transferred cf. item 1). Internal criticism of the prototype is taken into consideration.

As there remain a number of unsolved problems (still after five years commission work), for instance concerning the accounting system, this obviously has not been respected sufficiently in the transformation process. The critical points listed up in Bank, Jongeboed & Schreiber 2003 remain unsolved till now. Equally, internal criticism formulated by teachers and responsible from inside of the Danish system concerning the danger of leaving behind the weaker students, of reduced methodical freedom in teaching, of reduced public finance have not been considered sufficiently, if at all. Occasionally, people who are not well informed deny that there were no references to the Danish system at all in the latest developments in Germany. If this assumption were not factually wrong (cf. Marwede 2001), it would be wise to look for references and occasions to learn at least from the errors in the Danish reform process before blindly repeating them.

3. The goals of (partial) changes have to be formulated precisely and communicated well.

The goal in the Kingdom of Denmark has been the implementation of a consistent neo-liberal policy in substantially reducing the influence of the state. A greater efficiency of the schools has been dominating the interests of apprentices/pupils. This does not necessarily mean that those goals are contradictory, and the Danish have proved that to a great measure. The preeminent goal of the government of the federal member states is saving money. This is notwithstanding a hidden goal, for whatever reason. Obviously there is an important danger of failing this goal.

4. Goals will only be shared if they do not put the given cultural system in question.

This might be taken for a corollary of items 1 and 2. Concerning the structure of the sector of further education, concerning the two very different schooling cultures with a long history of 200 years each, this has been absolutely disregarded.

5. The changes will only be accepted, if the instrumental character of the appointed changes is suitably proved.

This means that a model school – in this case a model RBZ – has to be installed under realistic and controlled conditions. In fact there have been experimental RBZ, but their task was an explorative, not an explicative one.

6. The hysteretical character of large social systems requires to provide sufficient time for implementation.

This, perhaps, is the most relevant outcome of this paper. Despite all the critical aspects gathered here, the RBZ will most probably be no failure. Although the analysis of the Danish prototype could have been more profound, more meticulous, more enlightening, better re-
flected and communicated, a viable result will finally be obtained. This viability will be grounded on the success of the prototype model first, and then on the substantial changes it has undergone for implementation in Schleswig-Holstein. It implies the fact that the implementation plan of originally four years was prolonged by another two years. Learning takes time – not only for psycho-physic systems (men) but even the more for social systems.

It should be remembered on this occasion, that the horizon of Grundtvig’s ideas has taken nearly 200 years to be reached. Under this way, their author seemingly was forgotten as a such, although still today Grundtvig is a highly recognised spirit throughout the Danish society.

This, perhaps, is the best we can learn on the topic of mutual learning processes from the chosen example: *Do not hasten - if it is good, you may not live its success, anyway!*

**Bibliography**


