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Innovation and Reform in College-based VET Contexts: An outline of research in England and Germany

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Editor's Foreword

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Abstract

This paper provides an overview of a research project on the impact of reforms on teaching and learning in college-based VET (vocational education and training) contexts. Using a comparative perspective, the project examines how far VET reforms lead to innovative teaching practice at vocational colleges (*Berufsschulen*) in Germany and FE (Further Education) Colleges in England. The paper provides some background to ongoing reforms of college-based training in the two countries. It also looks at the degree to which administrative and leadership structures at colleges enable and prepare lecturers to embrace changes and how far these structures result in a reactive or proactive stance regarding educational innovation. It is concluded that the comparatively stable situation at German vocational colleges seems to allow lecturers to reflect more freely on innovative practice in general. In contrast, innovative activities of FE College lecturers are often limited to decisions regarding the management of content in teaching a constantly changing portfolio of qualifications offered by their College. This difference has a profound impact on the notions of professionalism expressed by the two groups of lecturers.

Introduction: Innovation as a Topic of VET Research

In 1970, the German Education Council introduced 'Innovation' as one of the five main elements in the professional profile of teachers, the other tasks being teaching, educating, assessing and advising. In its influential 'Structural Plan for Education' (Strukturplan für das Bildungswesen), the Council tasked teachers with developing and implementing innovative teaching and learning in schools. Teachers were regarded as the key actors of continuous reform and improvement processes in schools and in the system of education generally (Deutscher Bildungsrat, 1970, pp. 217-220).

This visionary notion sparked widespread research interest in the 1970s, when studies on the impact of reforms on daily life in schools blossomed. These studies mainly looked at the role of teachers in innovation processes at primary and secondary schools. To a certain extent, the collective work of teachers on innovation projects and the institutional context in which these innovations were developed and carried out at school level were analysed, using the rather unspecific term 'Schulreform' (school reform) as an all-comprising catch-phrase (see for instance Kaplan, 1976; Schwab, 1978; Dann et al., 1978). The sector of initial vocational education in Germany, although its college-based part is formally an element of the upper secondary sector, was not subject to this kind of research. However, the interest in innovation at schools all but died out in the late 1980s and 1990s.

At the same time, the cyclical occurrence of shortages of training places caused increasing pressures for reform of German vocational education and training (VET), a development that resulted in wide-ranging changes in college-based training from the mid-1990s onwards, with the introduction of a new curriculum, the so-called learning area curriculum, being arguably the most important of these changes. Research into the implementation of these new curricula has shown that the role of lecturers is decisive for the way new curricula guidelines affect teaching and learning processes and, therefore, ultimately for the success of curriculum innovation (cf. Kremer and Sloane, 2000, 2001; Ertl and Sloane, 2003, 2004a). Hence, the impact of reforms on training has become a topic for research again.

From an international point of view, reforms in VET seem to be a widespread and ongoing phenomenon in most European countries (Maastricht Consortium, 2004). The dynamics of change are considered the only constant feature of information and

technology driven societies. VET systems are directly affected by these dynamics and policy-makers in most European countries have reacted with reform initiatives. In the UK, for instance, the Foster Report has set the tone for the expected impact of reforms: '... a comprehensive set of reforms across the whole of the FE (Further Education) system ... will provide the basis for a progressive enhancement in FE' (Foster Report, 2005, p. 8). The envisaged improvements in VET as a result of reforms of the framework for training have become a topic in the academic discourse in a number of countries (cf. Green et al., 1999). This is to a certain degree also true for the impact of reforms on the work of teachers and lecturers in the system. For the Swiss context, for instance, Dubs observed that the 'preparedness of teaching staff to initiate innovation has significantly reduced ("not yet again something new to deal with")' (Dubs, 2003, p. 3).

There are at least two interlinked levels of analysis in research on the development and impact of innovation in college-based VET. On the one hand, the focus can be on the individual's role in innovation processes. This focus looks at the ways in which individuals interact with these processes, which part they play in these processes, and which skills and competences they need to interact in certain ways. This aspect includes what is referred to as 'innovation competence' in some of the relevant literature (see for instance Schönknecht, 1997).

On the other hand, research focuses on the institutional framework in which innovation takes place. This focus refers to questions about facilitating vs. hindering factors for innovation, the reshaping of institutional mechanisms and rules by innovation processes, and the question of how knowledge flows need to be structured in order to allow for effective innovation. This latter aspect is closely related to some of the discourse on knowledge management in organisations.

Willke (1998, p. 66) brings together these two emphases in researching innovation processes when arguing that '… knowledge management generates the two fundamental qualities of an intelligent organisation: the ability to learn and the competence to innovate'.[1] Looked at from a slightly different angle this means that a wider notion of 'innovation competence' combines the personal attributes of individuals, such as knowledge and skills, with organisational elements of an institution, such as institutional regulations and hierarchies. This connection is

[1] All quotes in German used in this paper are translated by the current authors.

reflected in the discourse on knowledge management in concepts such as 'innovation mentality' of managers (see Munzert, 2001 and 2002). Some of the relevant discourse in this area has also been developed in the literature on the learning organisation (see for instance Senge, 1992).

However, this contribution does not follow the tradition in the literature on the learning organisation, which is mainly concerned with questions of how far organisations can develop competences in their members. Instead, the assumption that competence development is always linked to an organisational context is taken as a starting point for investigating the interdependent nature of 'innovation competence' and 'knowledge management'. More specifically the aim is to examine the connections between college-based VET arrangements (organisational context in which knowledge management might or might not be utilised) and the development of innovation competence of teaching staff within this organisational context.

Innovation in College-based VET: An Exploratory Study

Against this background, an exploratory study in Germany conducted by the authors in 2002 – 2004 aimed at developing an understanding of what innovation means for lecturers at vocational colleges in practice, whether developing innovative practice is part of their professional identity and how 'innovative competence' can be achieved.[2] The study had two main research foci (see Figure 1), (1) a structured review of the relevant literature and (2) a series of interviews with experts in the field and lecturers. Research questions included the following:

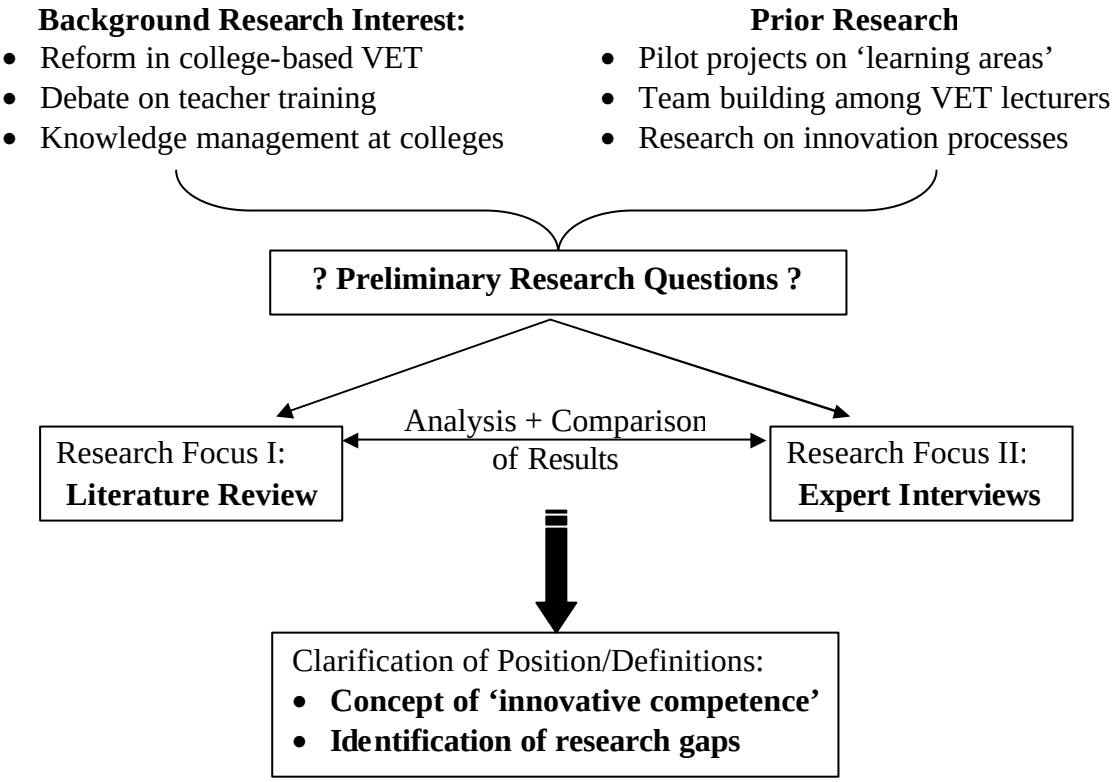
- What constitutes innovative activity of lecturers at vocational colleges?
- What role does innovation play in the day-to-day work of lecturers?
- What knowledge, abilities, skills and expertise are necessary for innovative competence?
- What is the connection between innovative competence and lecturers' professionalism?
- How can innovative competence be developed?

The results of the two research foci were analysed to achieve a clearer view of the concept of 'innovative competence' of lecturers at vocational colleges in Germany. However, the study also identified a number of gaps in the research. One of

[2] This exploratory study was funded by a research grant from the research development committee at the University of Paderborn.

these gaps, the lack of relevant comparisons of innovation in college-based VET with other countries, led to the conception of a similar study in England (see below).

Figure 1: Research design



The organisational context: vocational colleges in Germany

Structures

The main role of vocational colleges (*berufliche Schulen*) within the German education and training system is to cover the college-based part of training in the dual system. Put in a simple way, trainees spend about three or four days a week on in-company training (covering the practical training elements) and up to two days a week in vocational colleges, covering more theoretical and general elements. The continuation of general education[3] in vocational training can be seen as a vital contribution to the 'overall and harmonious development of the personality' aimed for by training in the dual system (MPI, 1994, p. 577; cf. also Autsch, 1995, p. 16). This

[3] It is important to point out that 'general education' in this study is used in the sense of education that should in principle be 'available for all'. This definition follows the usage of 'general education' in most European countries. This is in stark contrast to usage in England where 'general' implies 'lack of depth' and is often regarded as inappropriate for the brightest students (Young, 1999, pp. 2f.).

is one of the reasons why vocational colleges form part of the upper secondary school system in Germany.

Attendance at vocational college is compulsory for all young people not attending a course in other (mainly academically-oriented) types of schools of secondary education up to the age of 18 or until they have completed their vocational training. Instruction is part-time on one or two days per week or in connected time segments (block instruction). In contrast to in-company provision of training in the dual system, college-based training falls under the jurisdiction of the 16 German federal states (*Länder*).

In most federal states, vocational colleges are organised in five groups of occupational fields: industry, commerce, home economics, agriculture and miscellaneous occupations. Vocational colleges are jointly financed by the municipalities or districts (equipment and materials) and the federal states (personnel). Classes are organised according to individual occupations or groups of occupations. On average, vocational content makes up about 60 per cent of the courses, general education about 40 per cent (see Ertl, 2002).

Teachers at vocational colleges usually have civil servant status and hold a university degree, which combines their subject specialism and pedagogical studies. After obtaining a university degree, qualified teachers attend a two-year in-college training phase, during which they conduct teaching under the supervision of a qualified and experienced teacher-trainer, slowly increasing teaching hours over time.

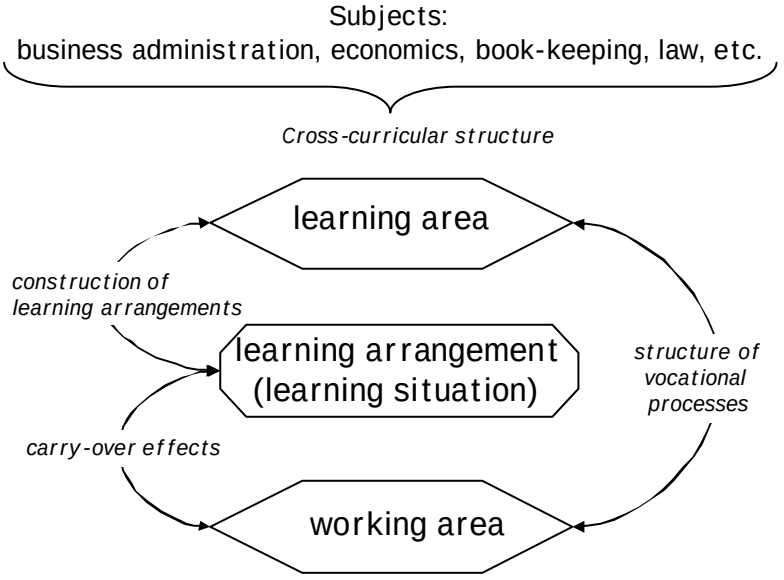
Reform agenda

The current debate on vocational training in Germany is dominated by the continuing perception of a training crisis. The most striking indication of this crisis is the lack of training places offered by training companies (*Ausbildungsplatzkrise*) in the dual system. As a reaction to this crisis, a host of reforms have been suggested by various actors in recent years. At the same time, questions regarding the quality and role of college-based vocational education have been raised, and new pedagogic approaches suggested in order to improve learning processes at vocational colleges. The so-called *'Lernfeldkonzept'* arguably represents the most important reform in this context. The term *Lernfelder* can be roughly translated as 'learning areas'. The concept was formally introduced by a decision of the Standing Conference of Ministers of Culture and Education (*Kultusministerkonferenz*, KMK) in 1999 (KMK 1996, 1999, 2000). It

applies notions of didactic innovations such as activity-oriented and comprehensive learning to the context of vocational colleges (see Ertl and Sloane, 2004b).

The main idea of this concept is the reconstruction and/or simulation of vocational processes at vocational colleges. Tasks and activities the trainees are typically confronted with when working at training companies (the 'working area') are the basis for the construction of 'learning arrangements' at vocational colleges (the 'learning area') (Sloane, 2002). Learning areas also draw on the knowledge that is contained in conventional school or college subjects. However, traditional subjects are placed within a cross-curricular structure in which comprehensive tasks have to be fulfilled, and real-life problems solved by the trainees. Learning areas are vocational processes, derived from actual work contexts, which have been pedagogically adapted and enriched (Kremer and Sloane 2000, p. 73). The connections between learning and working areas, and the ways in which learning arrangements are constructed, are illustrated in Figure 2.

Figure 2: Connections between learning areas and work contexts (cf. Kremer & Sloane, 2000, p. 74)



Despite the potential of learning areas to make the training offered by vocational colleges more relevant to work at training companies, there is a wide-ranging and controversial debate surrounding the concept (Reinisch, 2003). As well as certain institutional and organisational reservations about learning areas, some

opponents have doubts as to whether the concept can make teaching and learning processes more responsive to the challenges of the world of work (Gerdsmeier, 1999; Huisinga, 1999). In other words, there are doubts as to whether newly-structured curricula can really change the way teaching and learning is organised and conducted at vocational colleges.

From a research perspective, the question is how learning areas are implemented at colleges and whether they improve teaching and learning processes. From this point of view, the innovation is not the introduction of the concept of learning areas into college curricula, but the restructuring of teaching and learning processes at vocational colleges. The research outlined in this paper investigates this restructuring and the potential for innovation involved.

Innovation competence at German vocational colleges

Focus 1: literature review

The literature review was conducted through a structured search of relevant databases and online sources. In addition, the last ten years of three major academic journals in VET were hand-searched.[4] It became clear that there have been a number of investigations of particular areas of innovation in education, such as innovation and IT, and the implementation of new curricula. However, there are only few studies that look at the meaning of innovation in colleges in more general or conceptual terms. There were also a number of projects looking at the impact of college leadership on change processes in primary and secondary schools in general, but only a few studies focused on VET contexts (Ertl and Kremer, 2005a). A further area that has been covered is that of the innovation potential of pilot projects and problems related to the transfer of the findings derived from pilot projects to the wider context. Most of these studies focused on the introduction of IT at schools and colleges. Overall, most of the research on innovation in schools and colleges discussed in the German literature was conducted in the UK or in the USA; relevant research in the German context is rare in comparison. Also, it became clear from the literature review that the research findings have not made a substantial impact on school and college practice. This is particularly the case for research on innovation in other fields than education. For a detailed report

[4] This search included *Zeitschrift für Berufs- und Wirtschaftspädagogik*, *Berufsbildung in Wissenschaft und Praxis*, *Wirtschaft und Erziehung*.

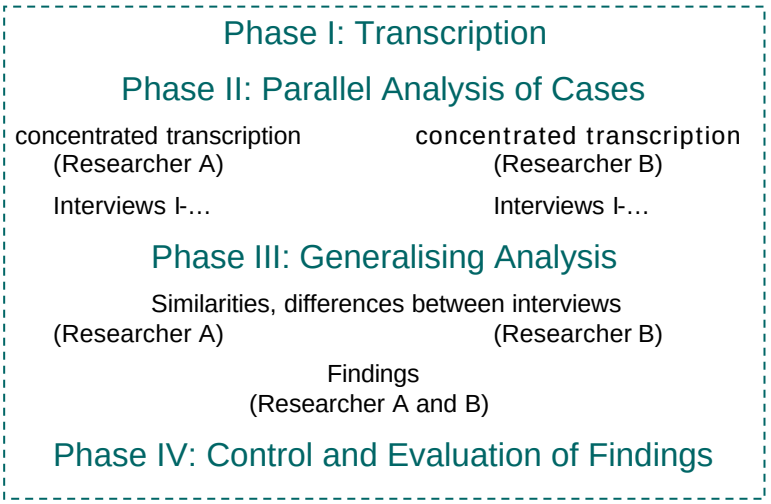
on the methodology and findings of the literature review, including some findings from the 'non-educational' literature, see Ertl and Kremer (2005b).

Focus 2: interviews

On the basis of the literature review and previous work undertaken in this area, questions for a series of semi-structured interviews were developed. The interviews comprised seven interviewees, including lecturers at vocational colleges, experts from VET research institutes and lecturers involved in teacher training. The interviews focused on the questions in three main areas:

1. the perception of innovation by lecturers (lecturers and innovation),
2. the connection between innovative practice and lecturers' competence (competence and innovation),
3. the pre-conditions for innovative practice at colleges (supporting and hindering factors of innovation).

Figure 3: Analytical framework



For analysing the data, a hermeneutically-oriented concept developed by Lamnek (1995) was used as a starting point. The concept uses several rounds of analysing interview transcripts and tapes to identify main themes, topics and open questions. After developing an initial understanding of themes, topics and open questions for each interview, clarifications and conceptualisations are sought by comparing concentrated versions of different interviews and identifying similarities and differences between interviews. The authors further developed Lamnek's analytical concept by systematically making use of the authors' different perspectives

of the interviews. This was achieved by analysing and comparing concentrated transcripts of the interviews independently before jointly discussing differences and similarities between the different interviews. The analytical concept used to analyse the interview data can be summarised in Figure 3 (see also Ertl and Kremer, 2005a).

Lecturers and innovation

Innovation was perceived by the interviewees as an important element in the work of lecturers at vocational colleges. This general statement is supported by the opinion that most lecturers are motivated to learn new things and to employ them fruitfully in their teaching. They are generally happy to contribute to pilot projects, experiments and other innovative activities. The improvement of teaching processes is seen as a 'continuous and central task of lecturers'.[5] However, if probed further, the interviewed lecturers made it clear that this positive stance mainly covers subject knowledge, for which 'keeping up-to-date' is regarded as essential. Rethinking teaching methods, ways of providing students with advice and improving teamwork between lecturers is not at the forefront of lecturers' agendas. Therefore, it can be concluded that innovation is a relevant topic for lecturers, and an issue that has a strong impact on their day-to-day work but only in certain areas of practice.

Innovation and competence

In the interviews a variety of attitudes and skills were pointed out as being important for teachers' abilities to deal with and to initiate innovation. These included openness, willingness to change, reflection, communication, teamwork and the ability to work in projects. The concept of 'innovative competence' was mentioned by several interviewees who stressed that this competence requires a number of other elements such as communicative competence, learning to learn competence and social competence. Therefore, innovative competence was regarded as a complex 'meta-competence', incorporating other competences. Some interviewees developed a complex map of constituent elements of innovation competence and the connections between these elements. However, the interviewed lecturers stressed that up-to-date knowledge about the subject is at the heart of innovative competence.

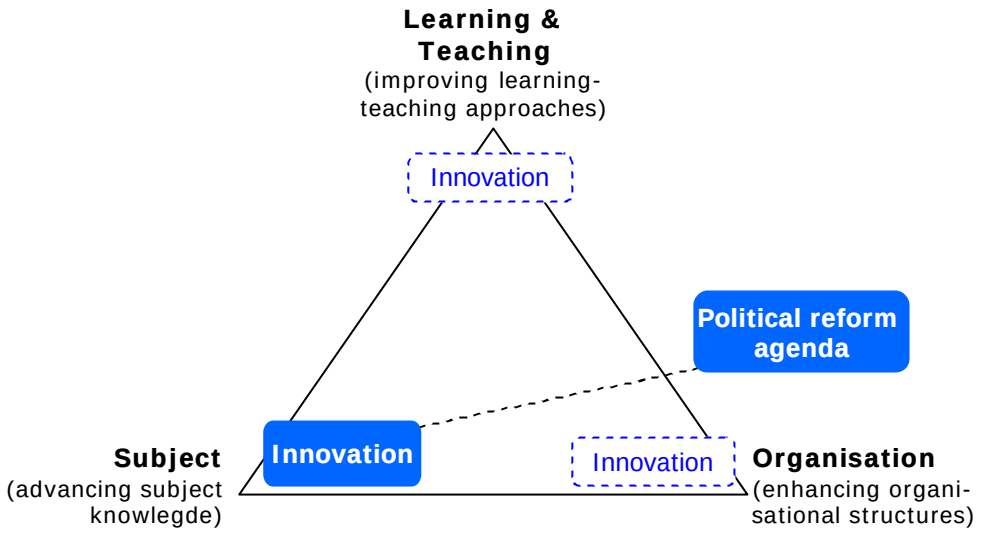
[5] Direct quotes in this and the following sections are taken from the expert interviews.

Pre-conditions for innovation

The results in this area of investigation show, *inter alia*, a strong reluctance of teachers regarding the implementation of external reform initiatives, but also positive attitudes and a high degree of engagement towards reform when it leaves sufficient freedom to determine the direction the reform takes at their college. In this latter case, teachers become the driving force of the development of innovative teaching practices. On the other hand, 'bureaucratic, hierarchical structures', 'rigid organisational patters at colleges', 'top-down reforms' and 'lack of time' were mentioned as hindering factors of innovation. One interviewee encapsulated the ever-increasing pace of change and reform in the phrase 'innovation avalanche', which has a detrimental effect on lecturers' motivation and can even lead to 'resistance to innovation'. In contrast, 'external impulses' (pilot projects, co-operation with training companies, etc.), 'reduction of the number of teaching hours', 'feedback and advice structures' and 'communication tools' were mentioned as factors supporting innovative practice. Overall, the role of college leadership in initiating, supporting and sustaining innovative practice was stressed. Co-operation between teachers seems to be a prerequisite for implementing educational reform. This teamwork between teachers was described as 'in need of improvement' by most interviewees. Therefore, further research has to focus on the behaviour of groups of teachers.

In summary, the findings from the German study show that innovation at vocational colleges is regarded as an important topic, but is actively taken on by lecturers mainly in the areas of subject knowledge and improving teaching practice. Organisational and teaching issues, which are important areas of reform in VET at the moment, are not at the forefront of lecturers' agendas. In a triangle constructed by the dimensions of subject knowledge, organisational set-up and teaching concept, the reception of innovations by lecturers at German vocational colleges seems to be firmly located in the corner of subject knowledge. In other words, the political reform agenda is interpreted mainly as having an impact on the way lecturers deal with their knowledge about their subject area. This constitutes a tension with educational reforms, at the macro level, whose implementation require far-reaching changes in the organisational structure of colleges and in the concepts of instructions applied by lecturers (see Figure 4).

Figure 4: Dimensions of reform and innovation at German vocational colleges



Innovation at College-based Training in a Comparative Perspective

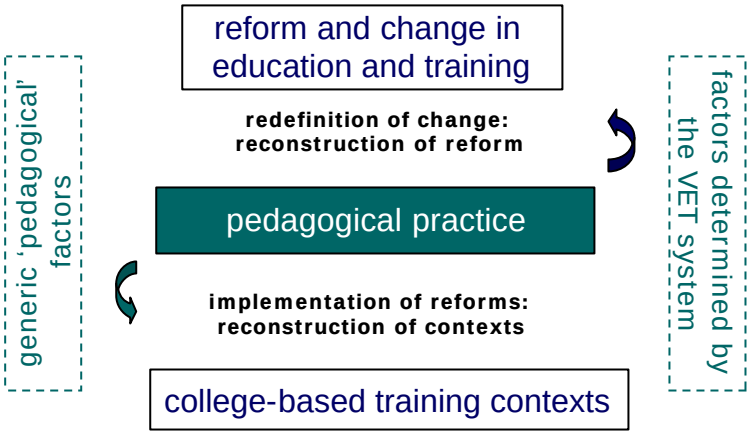
Rationale

The ultimate aim of our research is to develop a better understanding of the implementation of reform processes in college-based VET contexts and to suggest ways in which innovative processes at colleges can be initiated. The underlying assumption is that educational reforms are either implemented in or redefined by pedagogical practice. In the former case, reforms ultimately change the context in which teaching and learning takes place. In the latter case, reforms are revised and the change takes place at the level at which reforms were conceived.

The exploratory study in the German context outlined here was designed around the concept of innovative competence of teachers at vocational colleges. On the basis of the experiences in and findings of this study, a project was developed that looks at similar issues in the English context.[6] The aim of this project is to produce comparable data in another national context in order to assess how far the findings in Germany are determined by the particularities of VET in Germany and how far innovative processes in college-based VET contexts are generic and can be found in a similar way in a different system (see Figure 5).

[6] This project is supported by the ESRC Centre on Skills, Knowledge and Organisational Performance (SKOPE).

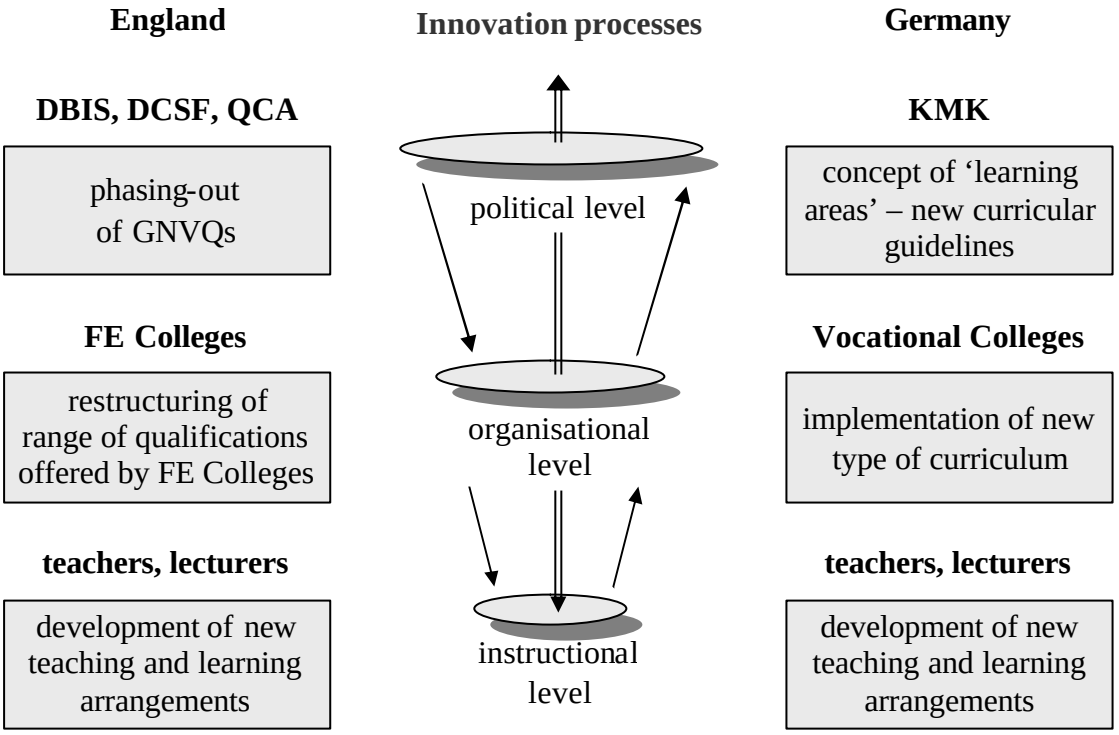
Figure 5: Innovation and reform in VET



An important assumption for the project in England is that innovative processes are subject to changes at different levels connected to the work at colleges. For instance, at the political level, decisions on the introduction of new qualifications and curricula are made. Key players at this level are the Department for Business Innovation and Skills (DBIS), the Department for Children, Schools and Families (DCSF), and the Qualification and Curriculum Authority (QCA) in England and the Standing Conference of Ministers of Culture and Education (*Kultusministerkonferenz*, KMK) which regulates the college-based part of the dual system of training in Germany. At the instructional level, new teaching and learning arrangements are developed, used and tested by teachers and lecturers on the basis of new qualifications and curricula.

Between the political and the instructional levels, an organisational level can be identified at which the results of political negotiations and prescriptions are transferred to the level of the educational institution; for our project this means vocational colleges in Germany and FE Colleges in England. At this level, organisational preconditions for the development of instructional designs are determined, for instance the resources (time, material, staff, etc.) available for implementing new qualifications and curricula into actual teaching and learning processes. It is important to note that decisions made at one level have an influence on the work at the other two levels and that successful innovation processes usually occur when there are negotiations across the levels. In Figure 6, the phasing out of GNVQs is used as an example of structural reforms that impact on the work of lecturers at FE Colleges in England.

Figure 6: Levels of reform and innovation



Background and questions in the English context

Our comparative research project investigated the development of innovations in teaching and learning in the context of educational reforms. As a basis for the work proposed here, the authors organised a workshop on the topic of 'Innovation in college-based contexts: starting points for the lifelong learning of teachers' at the congress of the German Educational Research Association (*DGFE*) in 2004 (Ertl and Kremer 2005a).[7] The project was aimed at generating insights into different types of innovations in vocational education, the ways in which these innovations are developed and the problems associated with this process. This contributes to qualitatively-oriented social science research in the field of vocational education. On this basis, it will be possible to make recommendations for the development of innovations in the context of curricular reforms.

The English part of our research was aimed at investigating how the wide-ranging reforms in the FE sector influence the work of Colleges and teaching personnel. From an institutional perspective, it examines how far the administrative

and leadership structures of Colleges are prepared to embrace changes and how far these structures result in a reactive or proactive stance regarding educational innovation. From a personnel perspective, the lecturers' attitudes towards change have been investigated. Their perceptions of current reforms have been examined as well as the connection between reforms and their translation into educational innovation. The ultimate aim of the research is to develop a better understanding of the implementation of reform processes in FE and to suggest ways in which innovative processes at Colleges can be initiated.

From 2002 onwards, the then Department of Education and Skills put increased emphasis on the reform of FE provisions in England. This can be regarded as the latest in a long line of attempts of structural and organisational reform in the FE sector in recent decades (Lucas, 2004). Nevertheless, the far-reaching aims of the report entitled *Success for All – Reforming Further Education and Training* and the accompanying consultation process signalled an ongoing reform agenda for the years to come. The suggestions in the 2005 White Paper concerning the introduction of Diplomas as a new type of qualification has given the reform process a further impetus and to a certain extent a new direction. The Leitch Review (2006) and the subsequent White Paper *Further Education: Raising Skills, Improving Life Chances* (DfES, 2006) predicted a rapidly rising demand for skills and attributed a key role to FE Colleges in providing opportunities for skill development. In order to achieve the skills aims, a whole host of reforms affecting 14-19 education in general, and the FE sector in particular, has been set out at the political level (for an overview see Hayward et al., 2006).

It is in this situation that the question of the viability of reform becomes an issue. The insight that teachers and lecturers are at the heart of reform processes that result in sustainable innovations in school and college contexts has been described in the relevant literature (cf. for instance Fullan, 1998). However, this has not yet been translated into corresponding research programmes in the English FE sector.

This part of our research aims to compare the ways reforms are implemented in vocational college contexts in England and Germany. On the basis of a substantial understanding of how German lecturers perceive and influence institutional and

[7] Innovationen in schulischen Kontexten: Ansatzpunkte für berufsbegleitende Lernprozesse bei Lehrkräften", see website http://www.paed-kongress04.unizh.ch/veranstaltungen/arbeitsgruppen/ag7.html.

pedagogic innovation, the particularities of English FE Colleges in terms of their capacity to embrace change are investigated.

Research questions include the following:

- What are the contexts and agendas of reform in college-based vocational education in England and Germany?
- What are the perceptions of FE lecturers regarding the reform of the FE sector?
- Are reforms being translated into innovative educational practice?
- What are the main supporting and hindering factors in the development of innovative educational practice in both systems?
- What kinds of working environments are necessary for the implementation of new learning forms?

The main tools applied are a systematic literature and documentary analysis, a series of interviews with lecturers and management (including heads) of a number of FE Colleges as well as with policy implementers, and a comparative analysis of quantitative and qualitative data derived from the English and the German context.

Preliminary findings and outcomes

Although the investigation in the English context started from a different contextual background and asked slightly different questions, the following sections try to summarise the first findings from the interviews at FE Colleges using the same categories and a framework similar to the one employed for data analysis in the German context. The findings are presented in comparison with the German results.

Lecturers and innovation

Faced with the concept of innovation lecturers at FE Colleges seemed to be more surprised than their German counterparts by the fact that researchers were asking questions regarding innovative practice and also about the fact that research is conducted in this area at all. The FE lecturers stressed the perception of their work as taking place in a competitive environment, a notion that was not expressed in the German context. Competition with other educational institutions is regarded as a driver for change and improvement, developments which the FE lecturers interviewed described as innovation. While lecturers stressed that the introduction of new qualifications (replacing GNVQs, for instance), is often the starting point for changes in their work, they do not really discuss the wider political reform agenda affecting the FE sector and their own work. For these changes, co-operation with agencies

developing qualifications, awarding bodies and sometimes with industry is important. Within the college, change is instituted in co-operation between lecturers and their programme managers.

Reflections regarding the content of new qualifications offered at the college are central. Therefore, there seems to be a focus on subject knowledge in dealing with changes and reforms on the part of the lecturers – a finding that is in line with the results of the German study. The consequences of new subject knowledge for teaching approaches often become apparent only towards the end of a term or a year and do not seem to represent a primary concern for lecturers.

Overall, lecturers regard work on initiating and carrying out innovation as lying 'at the periphery of the working day'.[8] They stress that their teaching and administrative commitments only allow them to take on initiatives which promise 'immediate benefit'.

Similar to the German context, English lecturers also describe their perceptions of reforms as merely seeming to reinvent previous changes. This usually has an adverse effect on the willingness of particularly more experienced lecturers to engage in change processes ('it does become very weary, you have been there before').

Innovation and competence

As in the German interviews, FE lecturers stressed the importance of learning to learn competence as an important element of developing innovative practice in their work. The examination of new qualifications and curricular guidelines requires the competence to engage with new contents and challenges. Therefore, the dynamic environment of changing qualifications in FE is regarded as the main impetus for change. This was put in the context of professional development for which lecturers regarded innovation as a central element. Most lecturers focused on formal training, college-based courses and in-service teacher training when being asked about measures that were suitable for preparing them for innovative practice. 'Innovative competence' as a concept was not used by the interviewed lecturers; when asked about it they mentioned 'presentation skills', 'IT-skills', 'communication' and 'co-operation' as important elements of such a competence. It is important to notice that

[8] Direct quotes in this and the following sections are taken from the interviews with FE College lecturers.

the comparison in this area is impeded by different notions of competence that dominate the VET discourse in England and Germany (cf. Ertl and Sloane, 2005).

Lecturers frequently mentioned personal attitudes and characteristics as pre-conditions for innovation: 'hunger for research', sharing knowledge with colleagues and external collaboration (because it is much more productive). More than their German counterparts, FE lecturers mentioned 'sharing ideas with colleagues from other colleges' as both a pre-condition and valuable means of implementing innovation. It appeared that inter-college co-operation is institutionalised at some Colleges via working groups or project collaboration. The experience shows that such co-operation across colleges requires a great deal of co-ordination of the shared work as well as measures to build trust between colleagues from different Colleges.

Pre-conditions for innovation

FE lecturers placed greater emphasis than their German colleagues on lack of time as the main hindering factor for innovative practice. The increase in teaching hours and increased administrative burdens were mentioned as the main factors that have limited the opportunities and motivation of lecturers to engage in change processes and to try out new things in recent years. Some lecturers mentioned the need for dedicated 'research time' in order take innovative initiatives forward. In contrast to the interviews in Germany, FE lecturers compared their situation with that of lecturers in HE, who – in the eyes of FE lecturers – have more room for innovative activities.

Hindering factors that played a minor role in the German study were mentioned frequently in the interviews at FE colleges: lack of equipment and suitable rooms, inefficient communication and information processes with qualification developers, and fluctuation of teaching staff. This takes on added significance in view of the fact that 'co-operation with other lecturers and programme managers' featured strongly among supporting factors for innovation in the English interviews.

Interestingly, the role of the college leadership was not mentioned as a factor affecting innovation at colleges by FE lecturers. Rather there is a sense of isolation from the college leadership: 'As long as you deliver bread and butter you are left undisturbed'. Some of the interviewees do not perceive it as the role of the leadership to positively initiate innovation, instead 'they [college leadership] tend to react more to negative things'. This leads to a situation in which lecturers 'are left to deliver

courses with freedom, which is great', but in which they also feel to be '[…] left on [their] own, without direction'.

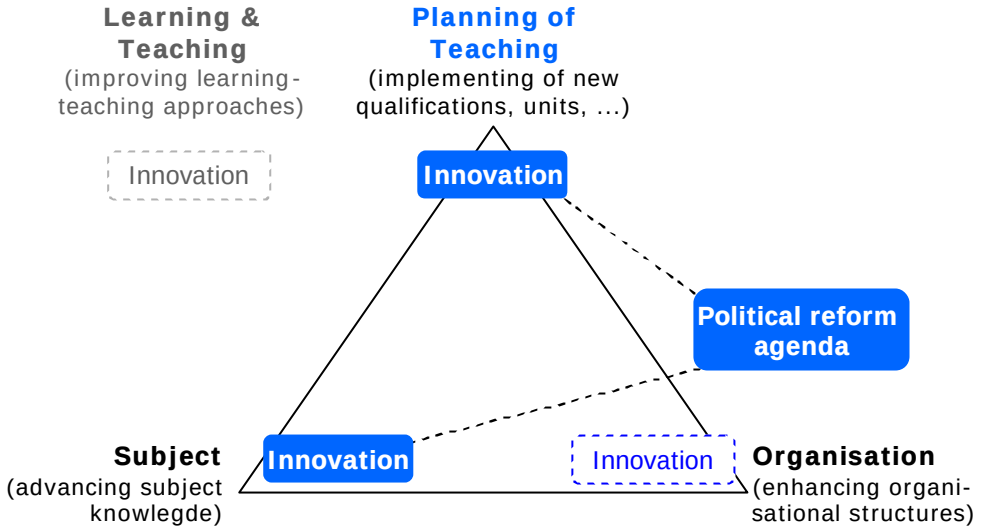
The role of college-based courses and professional development measures is assessed as ambivalent. Some lecturers regard these measures as helpful for innovative activities; others see them mainly as a means of the leadership to control lecturers. Courses on new IT products and developments in the subject are regarded as most valuable.

In summary, it can be argued that FE lecturers mainly emphasised lack of time as the major factor preventing them from engaging in innovative work. Other factors were discussed at some length and some interesting contrasts with the German context arose. The most important difference seemed to be the perceived lack of impetus from the college leadership, which was not emphasised as strongly by lecturers in Germany. This can be regarded at least partly as a consequence of different organisational set-ups of colleges in the two countries.

Like their German counterparts, lecturers at English FE Colleges view innovative practice mainly as impacting on their subject knowledge. Organisational changes and implications for teaching approaches are not discussed to a substantial extent. Using a similar triangle for illustrating the results in the German context, innovation at FE Colleges is also firmly based in the corner of subject knowledge. However, contrary to the German situation, innovative tasks also take place in the process of planning teaching units for new qualifications. This dimension of lecturers' activities can be regarded as one aspect of what German lecturers discuss within a wider concept of improving teaching and learning approaches. The narrower view of conceptualising and innovating learning-teaching approaches that lecturers at English FE Colleges seem to hold, compared with their German colleagues, at vocational colleges probably represents the single most important difference in the professional identity of the two groups.

Similar to the German context, it can be concluded for the FE sector in England that there seems to exist a tension between far-reaching educational reforms at the macro level, whose implementation require substantial changes in the organisational structure of colleges and notions of professionalism held by lecturers, and the specific ways in which reforms are interpreted and implemented at college level (see Figure 7).

Figure 7: Dimensions of reform and innovation at English FE colleges



Conclusions and Further Research

The findings and attempts at comparisons between results derived from the German and the English contexts need to be regarded as tentative and to a certain degree as speculative. As is often the case in qualitative research, limited sample sizes do not allow any generalisations of findings; this is particularly applicable here, as the interviews with FE lecturers had not been completed at the time of writing.

However, even at this early stage of comparison it seems evident that the way in which lecturers talk about innovation is very different in the two countries. Whereas the German lecturers are clearly used to discussing innovation and use the concept of innovation competence frequently, English lecturers needed some introduction to this topic. They then emphasise more than their German counterparts the limitations for innovative practice, which are mainly due to time constraints, the pressures of the competitive environment FE Colleges find themselves in, and due to the ever-changing qualification programmes offered by Colleges. The more stable situation at German vocational colleges seems to allow lecturers to reflect more freely on innovative practice in general.

It may therefore be concluded that innovative activities of FE College lecturers are often limited to decisions regarding the management of contents in the teaching of yet another new qualification. In response to the frequent and far-reaching changes in short periods of time they are faced with, they often react with standardised procedures they develop individually or in teams over time. In contrast,

the work of German lecturers is almost entirely unaffected by competitive pressures and is guided by a comparatively stable structure of established qualifications. In most cases change takes place at the level of curricula, which allows lecturers to make decisions – to some extent – regarding the contents they teach and certainly regarding suitable learning-teaching approaches. It can be argued that German lecturers enjoy a greater degree of pedagogic autonomy in their work, and that overall working conditions allow more space for lecturer-initiated innovation; space that is clearly not always used effectively, particularly in terms of innovation of teaching approaches.

The longer duration of teacher training seems to equip German lecturers with a repertoire of 'pedagogical jargon', which is used to discuss the topic of innovation. However, the influence of more formalised pre-practice teacher training in Germany compared with shorter in-service training in England on innovative competence of lecturers cannot be assessed on the basis of our research because it did not constitute a focus of our investigation.

Despite this limitation, it appears from our interviews that the ways in which the two systems in question develop notions of professionalism of lecturers influence the interpretation of innovation. This is connected with the definitions of roles of lecturers in the two different college systems. Therefore, system-specific factors have a clear influence on how lecturers deal with innovative tasks. A surprisingly similar finding seems to be that in both systems lecturers tend to focus their attention on subject-specific innovation rather than innovation regarding teaching and learning approaches. In both systems, effective ways of developing innovative competence of lecturers still need to be found.

It is hoped that further interviews, accompanied by a review of the relevant literature on FE Colleges, will show whether these first impressions can be substantiated. If this is the case, our research would demonstrate the wide-ranging effects of the respective VET systems, including teacher-training structures, on innovative practice in college-based training in England and Germany.

In order to argue this point convincingly, it will also be necessary to improve the conceptual understanding of what represents 'innovation' in college contexts. The lack of a comprehensive and theorised terminological framework was one of the starting points of this research, which was partly confirmed in the literature analysis. More work on concepts developed in other fields of research might be necessary in this respect.

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