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Learning Environment at Work: Dilemmas Facing Professional Employees

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Abstract:

In an effort to increase efficiency and democracy, the modernisation of the public sector has involved an increase in market and user control; an increased application of technology; a decentralisation of responsibilities and competences, and more management and personnel development initiatives. The concept of 'modernisation' signals a novel use of language and related concepts such as decentralisation, self-management, self-government, de-bureaucratisation, quality control and user influence. These terms may sound positive on an intuitive level but constitute a source of uncertainty as to what is actually taking place. The article analyses the learning environment in two governmental worksites in Denmark and shows how professional employees respond to the dilemmas posed by modernization at work.

Introduction

During recent years, political parties, employer organizations and trade unions have come to agree on viewing learning within public as well as private organizations as an important key to the growth in societal wealth and welfare as well as to the survival of companies in the global competition. Moreover, they perceive learning to be the key to the professional and personal development of employees. The fundamental consensus has increased the need for *analytic knowledge* concerning factors that either promote or impede opportunities for learning in work life as well as for *prescriptive knowledge* regarding ways to develop learning opportunities and make these opportunities more efficient. The political trend has a counterpart in educational and learning research, where the focus in the past decades has been expanded from primarily covering formalised education to include learning in other aspects of daily life. This development has brought

about a pronounced research interest into organizations and work places as learning environments; an interest that also forms the background of this article.

The study that we present in this article is based on the project 'Learning environments in the workplace' 1. We draw on the example of how modernization affects the learning environments of professional staff at governmental worksites in Denmark. The article gives a comparative analysis of two of the four cases in the project. The first case deals with an educational institution, the second case with a public administrative body.

New Public Management and Human Resource Management inspire the public modernization policies. In general the goals of the modernization policies focus on "creating value for money", i.e. the focus is directed towards cost reduction, optimisation of efficiency and increasing the quality of the services. Further more, the modernization policies aim to develop the public institutions in order to establish enabling learning environments that support the professional identities of the employees.

The main questions of the article are:

- On the one hand the public institutions are subject to uniform demands from the
 public modernization policies. On the other hand the institutions internal and
 external conditions for fulfilling the demands are diverse. How does this affect the
 development of the public institutions?
- What kind of opportunities does this development set for the political ambition of creating enabling learning environments in the public institutions that offers good possibilities for the employees to develop their professional identities?

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¹ The project was initiated and funded by The Graduate Supplementary Training Committee, a part of The Centre for Development of Human Resources and Quality Management (SCKK).

We begin the article with the theoretical and methodological foundation for the project.

This presentation is followed by an account of our choice of case studies and research method. We introduce some crucial features of the modernization of the public sector that sets the context for the case analyses. This is followed by analyses of the learning environments in the two case organizations. Finally we compare the case studies in order to answer our main questions.

Learning and learning environments in institutions

Work with key concepts such as 'learning' and 'learning environment' has been conducted at the Department of Educational Studies, Roskilde University, Denmark, in continuation of the development of learning theory (Illeris 2004; Olesen 1996; Weber 1995; Andersen 1996). We generally define *learning* as changes in the subjectivity and capacity of the individual (analytic differentiation). The concept of the subject refers to the internal configuration that in any given time denotes who the individual person is. Capacity refers to the potential of the individual in relation to material, social and symbolic practice; that is, what the individual may be capable of – including the development of his/her subjectivity and capacity in specific ways. Inspired by Etienne Wenger we define subjectivity and capacity that are recognized in social communities of practice as identity and competence (Wenger 1998). Our point of departure for understanding learning is the concept of *practice*. Practice is an activity where knowing is connected to doing. Practice comprises both the mental and the material and is a term for the creation of the world as much as a term for the result of this process, that is, the world created in any given time. Much learning in practice goes on below the threshold of

consciousness and much conscious learning is incorporated as part of the 'life world'.

'Life-world' is defined as the culturally shaped, not-conscious routine patterns of comprehension, emotion and action. These are necessary preconditions for social interaction in a complex world. At the same time, practice always contains a *reflexive dimension*. People always generate presentations of what they do as a part of what they do (Chouliarki & Fairclough, 1999). Reflection creates a distance between subject and object in contrast to the routinised being and form of consciousness that characterise the life world (Gherardi & Nicolini 2003).

We define *learning environment* as the socio-material and cultural conditions of learning processes in social practice. The concept thus refers to the societal conditions for learning processes; that is, the contradictory action, interaction and experience contexts, which the individual moves through in daily life (horizontally) and throughout the life course (vertically). It also refers to the particular people who interact in these contexts (for a complimentary usage of the term 'learning space', see Illeris 2004; Warring & Jørgensen 2002). The concept has a situated meaning in that it is attached to local social practice. It has a societal meaning because learning environments are co-constituted by the society's material, social and cultural development.

Work organizations are viewed as specific learning environments. They are founded on memberships; they have borders; they define roles and qualifications; they distribute authority; they establish predictable relations by the use of contracts, standards and assessment systems; and they provide a repertoire of procedures and policies for the members of the organization (Wenger 1998). As our starting point, we presume that work

organizations do not exist in a static, unambiguous field with no conflicts. In order to ensure their survival, the organizations are forced to continually develop new models for interpretation of the outside world as well as for an internal adaptation to external demands. The changes in the surrounding world may encompass changes in values; in economic basic conditions; in the market; changes in institutional conditions and in technological visions and systems. The changes may be perceived as opportunities or as threats and they may stimulate different reactions within organizations. The organizations are thus faced with the challenge that in order to function with new and altered conditions, they must continually interpret changes and decide upon their significance for practical action.

The relation between organizations and the outside world is mediated through the internal constellation of communities of practice that exists at any given time within the organization (Wenger 1998). The mutual influence of communities of practice is seldom direct, because it depends on the negotiation processes within and between the individual communities. This means that separate communities within an organization sometimes respond differently to changes in the outside world, and that their negotiations may be based on diverse external phenomena. The literature on 'learning within organizations' points at a particular tension field regarding the foundation for the negotiations between management and employees; a tension field, which is distinctively influential in transformation processes. The tension field is characterised by a contradiction between everyday rationality (substantial rationality) and instrumental rationality (formal rationality). Learning founded on everyday rationality takes place on the basis of

experience. It is the form of learning that goes on at all times, every day, within the different communities of an organization. This type of learning cannot automatically be brought into concord with the instrumental rationality; in the way, the latter is put into practice in strategic aims as well as the control instruments, which the organization attempts to develop in order to meet the altered conditions in the outside world. The instrumental rationality may result in unintended consequences because it does not consider the way in which learning is based on experience and on existing cultures within the organization (Child & Heavens 2003).

The learning environments of organizations are embedded in power relations and they always contain the production and reproduction of power. When analysing learning environments, one therefore has to keep in mind that the interaction in the everyday life of an organization is permeated with power. Through symbolic production, power sustains differentiation and hierarchies. Negotiations of social meaning therefore always contain a simultaneous re-negotiation of existing power relations. The access to the negotiation of social meaning is crucial to the level of participation and influence obtained by different communities of practice within the organization. It is furthermore crucial to the degree of participation and influence available to the individual participant. The negotiation of social meaning is therefore not only of importance on a collective level, rather it also has a significant bearing on the individual's opportunities for positioning and identity formation. The negotiations of social meaning are informed by aims, interests and perspectives distributed in the social space and they are based upon the resources and potentials mobilised by the individual communities of practice (Buch

2002). This is particularly pronounced in relation to 'work organizations', that is, a type of organization characterised by fundamentally asymmetrical power and control relations.

The above presentation is in many ways contradictory to the conceptualisation of learning formulated within paradigms oriented towards improving management. The research approaches in the work-life-paradigm can roughly be divided into harmonizing and conflictual approaches. The harmonizing approach includes the paradigm of "The Learning Organization" (e.g. Senge 1994; van Hauen et al. 1995), that is prescriptive, and the paradigm "Organizational Learning" (e.g. Argyris 2001), that primarily has an analytic ambition.

Within these harmonizing paradigms, there is an implicit normativity where learning is equated with the companies' ability to survive (Elkjaer & Wahlgren 2006; Senge 1994). However, if learning in work life is understood exclusively as the individual employee's ability to develop in accordance with the needs of the company, and if the survival of the organization forms the principal criterion for the analysis of the learning environment, one forgets that learning processes also represent and reproduce power relations (Foucault 1994). What from one perspective may be seen as conditions for learning that may ensure the progress and survival of the organization may from another perspective be understood as conditions that promote new means of intensifying the work, new means of discipline or new ways of selection amongst employees (Andersen et al. 2001 a) and b). Likewise, resistance towards particular forms of learning may be perceived as absence of learning; however, in a different light it may be viewed as an expression of defence: that the employees have discovered strategies to defend their work and their

employment situations and/or defend the functionality of their work. In other words, they defend their opportunities to make their work function despite an inadequate organization of the work (Andersen et al. 2001 a). The conflictual approach includes the paradigm of "The Enabling Work" (e.g. Børsting & Bruvik 1999) and "The Good Work" (e.g. Hvid 1999) that are prescriptive and developed mainly within the Danish and Swedish trade unions, and the paradigm "Workplace Learning" that primarily has an analytic ambition (e.g. Bottrup 2001, Jørgensen 2002, Andersen et al. 2001 a), Andersen & Trojaborg 2005). Within this domain our project can be classified as analytic and conflictual.

Methodology – Critical Hermeneutics

The general methodological basis of our analysis is critical hermeneutics. When applying a critical hermeneutic approach, the analysis focuses on the mediation between the external and internal aspects of cultural practice. We define the cultural aspect of practice as the unity of pre-reflective and reflective knowledge. In using the concept of culture, we focus on the tension field between 'life-world' and 'discourse', where discourse, as Habermas puts it, contains the reflective problematising of validity demands in conversation (communicative, referential, normative and expressive) (Habermas 1981). An important source of inspiration is Gadamer's existential hermeneutics (Alvesson & Sköldberg 1994). Gadamer emphasizes that understanding is a universal aspect of human being in the world, that all understanding is based on pre-understanding and that understanding always takes place within a horizon of societal produced social meaning (Gadamer 1965; see also Palmer 1969; Radnitzsky 1970; Andersen 1996). The aim of a hermeneutic analysis is to gain a broad understanding of the ways in which people

construct their immediate and more distant life contexts, their mutual relations, themselves and each other. This 'understanding from within' is a necessary but not sufficient precondition for the understanding of learning phenomena. Giddens and Habermas have made the point that when analyzing social reality, one has to pay attention to the fact that people never have knowledge of all relevant conditions of action and consequences of action. Furthermore, these authors agree on the fact that people are not fully capable of comprehending the mechanisms in the cultural production of meaning as well as the consequences of this (Giddens 1982; Habermas 1981). In our opinion, a learning analytical consequence of this is that scientific understanding must transcend the premises of everyday understanding in two ways: On the one hand, one has to develop an independent social scientific pre-understanding. This understanding should encompass a social scientific analysis of the socio-material and the reified symbolic aspects of cultural practice (Alvesson 1993; Casey 1995). On the other hand, one has to apply a critical perspective in relation to the understanding that is produced through hermeneutic interpretation.

Choice of cases and method

As mentioned previously our main ambition in the project has been to illuminate the consequences of the modernization policies in the public institutions and how these changes have affected the learning environments of the institutions and the professional identities of the employees. The general criterion of our choice of cases has been maximum variation. We have tried to obtain a maximum of dispersal in relation to job tasks and institutional characteristics. The four cases are respectively: a claim processing

unit, a ministerial department, a research institution and an educational institution.

Among the four cases we have chosen the two most diverse institutions as the empirical

basis of this article.

The first case study concerns a Danish vocational centre that provides general and

technical education to students in their last three years of High School (HTX). The study

aims to uncover the social learning environment in an organization marked by extensive

organizational and pedagogical transformation processes. The second case study draws

on the example of a state office handling workers compensation. It focuses on the work

of lawyers and examines how changes in the information technology systems allow

decisions making and rules to be embedded in the ICT system. AUTHOR: Please state

what the letters ICT mean

Agreements about the content, progression and uses of the projects results have been

made with both the management and the employees. The research is based on interviews

with managers and employees – individual interviews and group interviews, observations

and participation in specially arranged sessions. We continuously had access to materials

and documents in order to learn more about the intentions and ideas of the managers as

well as the experiences and views of the employees. We have been in continuous

interaction with the institutions over one year coordinated through contact persons in the

institutions.

Context: The modernization of the public sector

From a historical perspective the Danish public sector is a product of the Social Democratic Party and the labour movement's vision of a welfare society. Its development gathered speed during the 1960s and 1970s but from the end of the 1970s, however, the welfare model was already criticized for being too expensive, bureaucratic and inefficient. An extensive restructuring process entitled *modernization* was therefore initiated with the purpose of rationalizing and increasing the efficiency of the public service production. The term *modernization* is what discursive theorists refer to as a floating signifier. The concept of modernization encompasses positive connotations pointing forward as well as indicating innovative thinking and thus stands in contrast to terms such as "inflexibility" and "the past". The concept of modernization furthermore implies a necessary and up-to-date development project that everyone should be in accordance with – or at least find difficult to renounce. The content of the public modernization process is, however, ambiguous and complex and the process constitutes a broad arena for political fights over aims and means in the Danish welfare model as well as working conditions for the staff in the public sector². Initiatives are implemented based on broader societal processes of change; according to the motives of changing governments; via different (and sometimes conflicting) development and management concepts; as well as on the basis of negotiations between public employers and labour organizations. Despite the political complexity in terms of aims and means inherent in the modernization process, it is possible to point at various inspirational sources that thoroughly mark the initiatives. This entails in part "severe" control concepts such as the so-called New Public Management concept (NPM), which to a large extent has

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² In this article, the concept of modernisation comprises both new ways of thinking, new statements and bills, novel forms of organization and financial control as well as changes in collective agreements with a modernisation oriented perspective.

characterized the transitions within the public modernization. The reasoning and recommendations of this concept are characterized by the attempt to implement institutional, management and salary policies that stem from the private sector. It also involves the influence of more "soft" development oriented concepts such as the Human Resource Management tradition (HRM). This encompasses a management approach, where the aim is to develop and intensify the use of human resources possessed by the work force. The access to these resources is sought through novel organizations of work and through strategic staff policies in order to advance employees' sense of responsibility as well as identification with the work place (Andersen & Gleerup 2005). The Ministry of Finance has proposed a number of initiatives in relation to the digitalization of the public sector including the implementation of systems of Electronic Handling of Cases and Documents (ESDH) and a strategy of e-government. This means that all public authorities and institutions within the state, the counties and municipalities are encouraged to send and to demand to receive letters, documents and other types of information in an electronic form such as e-post (e-mail) and via web-sites.

A crucial objective of the modernization processes is to transform the public institutions to learning organizations (compare with the section: 'Learning, Learning Environment and Learning Organizations'). 'The learning organization' has become a kind of collective term for development strategies that at the level of the organization try to create coherence between individual development of competence and the development of enterprises and institutions. This is a relatively unclear concept which (as a rule) describes a management-initiated development strategy. In this management thinking,

learning and organizational development are regarded as a process which to a large extent can be controlled and organized in harmony between staff interests and the development of the enterprise. In descriptions of "The learning organization" the focus is on the development of internal communication and the development of forms of co-operation in the organization, for example organization in teams, project groups and the like. The fundamental view of the staff members is that they are in possession of resources, knowledge and experience that the institution needs. For the institution, it is a matter of mobilizing and developing the staff's "human resources". Furthermore, the staff is to take responsibility for and continuously contribute to developing their own work and the institution to make it flexible and efficient and in order for high quality work to be performed. In resent years the Centre for Development of Human Resources and Quality Management (SCKK) in Denmark has established a range of initiatives in order to afford the development of learning environments and the professional identities of the employees in public.

Case analyses

In the following, we aim to take a closer look at the learning environments within two institutions. In both cases, we shortly present the development that has taken place in relation to economy, technology, management and new demands directed at the employees. Hereafter, we elucidate some central characteristics concerning the learning environments within the two institutions.

Case 1: Education in the HTX – Organizational and pedagogical change

The first case study concerns the social learning environment amongst teachers at HTX, a Danish vocational institution that provides general and technical education to students in their last three years of High School (general upper secondary education). Due to its status as a state educational institution, the case organization is subjected to a number of public modernisation policies. In general, Danish state educational institutions have become semi autonomous foundations with boards of directors, employees and managers. Meanwhile, new financing procedures have been introduced whereby the amount of students enrolled at the institution and the number of these that complete their school leaving examinations encompass the deciding parameter for the distribution of state subsidies (called 'taximeter'). One consequence is that the institutions have become increasingly dependent on their abilities to attract students in competition with many other institutions. Furthermore, their economies have become directly dependent upon the number of students who complete the education. In the area of quality, the Danish state has introduced a combination of centrally instigated evaluations of the institutions and in addition, it demands that the institutions evaluate their own programs and implement quality surveillance and control. To some extent, the schools are free to choose the quality systems they deem suitable, however, they are compelled to make the average grades of their students publicly available. State educational institutions are moreover required to render the managerial functions professional. This involves demands and recommendations in relation to a systematic and strategic management based on analyses of possibilities and risks in the outside world as well as strengths and weaknesses within the organizations. The demands and recommendations pertaining to strategic management, which are provided by the state, entail a series of sub areas including: the

formulation of common values, visions, missions, aims and activity plans for the school premises and equipment; the development of the vertical as well as the horizontal organizational structures; control of resources and quality; the development of efficient administrative procedures and finally, marketing strategies. Furthermore, the educational institutions are required to renew their pedagogical and educational approaches. On the basis of our fundamental theoretical understanding, we perceive the development of the case organization to be a result of the mediation between the aforementioned demands from the outside world and the internal development within the organization. The case organization holds a past marked by financial problems. The new management has attended to these problems and has put forward a number of initiatives aimed at: A. Economic and administrative efficiency. B. Centralisation of the managerial structure and increased coordination of the management work. C. The introduction of strategic planning including the formulation of the institution's Missions, Visions and Values and of strategic and operational action plans. D. Self-evaluation and development of quality. The former includes assessments levels of satisfaction among students and employees. E. The establishment of a team structure that aims at enhancing self-management and multidisciplinary planning of the teaching. F. Staff and competence development, which encompasses institutional policies for the recruitment, development and sacking of employees as well as for payment, professional recognition and job satisfaction. The focus point of the development of competences comprises of appraisal interviews, meetings and supervision as well as the implementation of an intranet. G. The introduction of the aim that traditional teaching methods be replaced by a study culture. The teachers must increasingly take on the role of tutors and the students are to take

responsibility for their own learning. These pedagogical aims are reflected in the architectural layout of the school.

Regarding the HTX teachers, this development has in particular raised the demand for change in the following areas:

- Altered forms of collaboration from being a united, independent teacher group
 with the HTX program as the orientation framework towards working in
 decentred teams with an orientation framework comprising of the organization's
 general educational program.
- Changed teaching methods from single-subject, classroom based instruction towards an emphasis on multidisciplinary project work.
- The extension of job functions from pure teaching assignments towards the
 handling of new administrative tasks and the required participation in the strategic
 development work of the organization.

The learning environment of the HTX

The teachers express that the development within the case organization has confronted them with several challenges concerning readjustment and development. These challenges have necessitated adaptive as well as development oriented learning processes. The teachers have continually achieved the qualifications necessary to handle these challenges. This has taken place via formal educational activities, participation in learning directed activities at the work place, close collaboration with colleagues and with persons outside the organization as well as through the individual planning, completion, evaluation and readjustment of activities.

Some of the recent challenges have been positively received while others have been problematised due to teachers' experiences with the teaching job and its premises. Based on our thematic analysis of the learning environment, we have been able to point out some areas of tension within the organization: the differing perspectives of managers and teachers respectively on what constitutes the primary tasks of the teachers and the conditions for performing these; in other words, differing perspectives on the 'what', 'why', 'where to' and 'on what terms' of the learning environment.

It is particularly the teachers with higher seniority, who describe the development in terms of 'before' and 'now'. 'Before', there were no financial problems and the HTX formation was an independent organizational unit with its own (physical) premises, which provided an appropriate frame for the collaboration between teachers as well as the instruction of students. The staff had their own manager who was highly familiar with the working conditions of the teachers. 'Now' comprises the situation after the move to a new building, where architecture and a centralised timetabling have rendered it difficult for the teachers to maintain the informal cooperation on a day-to-day basis. Moreover, the distance to the management has increased, and the managerial structure seems inconsistent. Between 'before' and 'now', a number of crises appear regarding the situation of the school and the collaboration between the HTX teachers and the management: the financial crisis of the school; a crisis concerning the new building, which the teachers feel they have had no influence upon; a crisis surrounding the implementation of the team structure that was supposed to 'give time to' year group based cooperation but in stead 'took time away from' collective and as well as singlesubject collaboration; and finally a crisis when the management expressed a demand for an augmentation in multidisciplinary project work.

Within the framework of this overall interpretation, the HTX teachers express their approval of the fact that the school has survived financially as well as of the buildings and the team structure. The new pedagogical working methods have increased the knowledge of each other's work, a higher degree of collaboration amongst the teachers as well as contributing to a generally more open discussion of the problems encountered by individual teachers in their teaching. The team structure has led to a more formalised and binding cooperation and the teachers have gradually learned to supplement the team structure with other formalised collaborative strategies, in particular through the collective staff meetings and various ad hoc groups. At the same time, however, the teachers criticise the conditions for conducting what they consider to be their main tasks, that is, teaching particular subjects, educating the students, attending to problems regarding individual students and finally, the handling of the new organizational and management structures. The critique emphasises several issues: that the teachers experience numerous problems relating to the frame for conducting their jobs; that the teachers' perception of which main assignments constitute the central priorities differs from the management's; and conclusively, that there are various dilemmas contained in the set of values that are supposed to form the basis for the work of the teachers. In our opinion, the shift from 'before' to 'now' expresses a cultural transformation process. During the 'before' period, the HTX was an autonomous culture, where the learning environment was largely based upon each teacher's individual responsibility for his or her teaching and where progress in their instruction happened mainly via informal,

practical problem-solving on a daily basis, in close contact with the daily manager. In the 'now' situation, the HTX teachers are subjected to external demands relating to economics and quality control; the teachers' cooperation has been formalised; the school management provides new frames for the teaching job; the teachers have a varying degree of influence upon these frames; and the management, students and their parents all demand a higher degree of discursive legitimation and negotiation of the performance of the teachers. The primary learning still takes place in relation to the daily problem solving; however, it is now a demand that the rationales behind decisions and courses of action are made explicit. This request is not only based on the interests of the students and the demands of educational policies but also on the overall situation and premises for the development of the case organization.

At the same time, the teachers call attention to some of the conditions for their instruction that complicate their work on a more concrete level. This pertains to, for instance:

A. The school premises do not provide an optimal framework for instruction and teacher collaboration.. B. Several of the tasks expected to be handled in teams, are experienced as administrative assignments and they take time away from what the teachers perceive to be their main object, namely the teaching of subjects. C. A centralised timetabling renders it difficult to plan the instruction in long-term and multidisciplinary courses.

Moreover, it may involve that the students have too many classes in one day or too many free lessons, with the result that they may be tempted to leave the school. D. The school does not adequately enforce the accepted rules and sanctions. This makes it difficult for the teachers to maintain the order necessary for educational learning processes. E. The management structure and 'lines of command' at the level of middle managers seem to be

ambiguous and constitute a cause of confusion and inconsistent communication.

Furthermore, there appears to be a 'vacuum' between the HTX teacher group and the management due to, for instance, the replacement of pedagogical managers and a limited dialogue between the teachers and the top management.

From the teachers' perspective, the common feature of these conditions is that they have not been defined on the basis of the teachers' experiences. They are thus not a result of their intended learning processes. Rather, the learning they permit is partly adaptively oriented and evasive, it utilises creativity and it is negotiating. The learning is *adaptively oriented* in terms of learning to perform the job as well as possible on the given conditions. It is *evasive* concerning the attempt to teach according to own rationales and getting around the given conditions, for instance, by conducting traditional class based instruction for a longer period of time than permitted or by prioritising the operation of the institution over the development in the team work. It also involves the *utilisation of creativity* in the establishment of ad hoc groups that handle team tasks or by mutually agreeing on particular rules and sanctions. Finally, the learning encompasses *negotiation*, for instance, when the teachers demand that the management alters the physical frames for the teaching.

While the teachers – although reluctant - have mediated the above conditions for the teaching in their daily practice, the management's proposition that a larger part of the instruction is organised as multidisciplinary project work has been rejected. The argument is mainly that with the students' qualifications in mind, it is impossible to fulfil the demands of the Ministry of Education executive order without spending a large proportion of time on single-subject instruction. In addition to this, the demand for

multidisciplinary teaching contests the teachers' professional identity as 'specialist teachers'. In contrast to the pedagogical aim of the school, the teachers seem to define themselves as 'private practitioners' rather than 'team players'. This does not mean that the teachers refuse to conduct multidisciplinary teaching. Some subjects are defined as multidisciplinary in the executive order, which also dictates different forms of collaboration between certain single-subjects. In other words, the teachers do not reject to engage in a multidisciplinary approach. Rather, they reject to expand the multidisciplinary instruction on the basis of their own experiences and evaluations of teaching a certain student group.

Our consideration of the empirical material indicates that the teachers use a great deal of psychological energy on relating to the types of demands made of them: to adapt, evade, creatively use, negotiate and reject. The common feature seems to be a reactive and defensive behaviour amongst the teachers, and thus to learning processes that are more reactive and defensive rather than proactive and offensive. From the school's perspective, this deadlock situation entails that the teachers manage the education satisfactorily; however, they may be difficult to involve in the strategic, organizational and pedagogical visions of the school. From the teachers' perspective, the situation means that it is difficult for them to establish a foundation for a collective, offensive articulation of aims and means for the HTX education; an articulation, which is based on their individual as well as collective experiences. This probably results in a certain loss of energy and resignation in relation to making a proactive effort. There appears to be an additional, significant problem associated with the ambiguity expressed by the teachers regarding what they fundamentally see as their criteria of success: To professionally help as many

as possible to achieve their school leaving examinations with as good and fair grades as possible and to counsel students, who do not have the qualifications to complete the HTX, in order for them to seek alternative educations or vocations. The ambiguity stems from the implementation of financial control by the Ministry of Education. This involves completion taximeters and the demand for publication of average exam grades. In both cases, the demands are financially important on a very concrete, cash-in-hand level. The completion taximeter is of direct importance to the funding of the school and thus for the security of employment for the teachers. The publication of the average exam grades is of an indirect but still central financial importance. The background is that the average exam grades may be a decisive parameter for the amount of students applying to the school. The two 'criteria of success' are partly in conflict with each other and evoke a dilemma amongst the teachers between letting all the students attend the exams – including those not deemed to hold the necessary qualifications, or in stead ensuring the highest possible average grades for each individual class. The teachers' descriptions indicate that the dilemma may lead to an instrumental relationship with the students. The teachers may, for instance, refrain from making an effort with the apparently 'weak' students as these are not expected to make a positive contribution to the average exam grades; they may choose to examine as many as possible in order to ensure a high completion taximeter; or they may focus their instruction on the so-called 'strong' students in order for their exam grades to counterbalance the grades of the 'weak' students in the computation of the average class grades.

The teachers believe that the school administers rules and sanction with a view to allow as many as possible to attend the exams. The teachers are left with the task of ensuring

the highest possible average grade, despite the fact that some students have relatively poor qualifications. This leads to a more or less direct criticism of the management for thinking more about finances than people. At the same time, the teachers recognise the fact that the financial conditions for the education also influence their own judgments. In the end, it is a matter of job security. On the basis of this, the so-called 'weak' students may become the object of an ambivalent reaction. On the one hand, this reaction may involve care, because the teachers have traditionally seen it as their duty to attend to the interests of all their students. On the other hand, it may involve latent anger, because the 'weak' students complicate the job and may hinder the achievement of aims that are decisive in relation to the school's financial situation. The dilemma is probably solved differently by different teachers due to their different pedagogical experiences and attitudes to the job. For some teachers, it may be a painful readjustment of their subjective relation to the work and their professional identity; for others, it involves a development, which is adjusted more easily because their relation to the work is already characterised by emotional distance.

The analysis implies that it is difficult for the members of the organization to constructively handle the differences in perspectives. In other words, the organization has failed in turning the breadth of attitudes and experiences into raw material and potential for a strategic development. The 'power game' between the management and the teachers produces plenty of learning. Both parties reflect upon and argue in favour of their positions and viewpoints, however, the absence of trust, openness and mutual respect hinders a close collaboration on the development of the learning environment within the

organization. The costs of this power game are great regarding learning aspects, since it is not presently possible to reach an agreement on which competences that are necessary in order for the teachers to handle the instruction. In relation to this, the staff members state that they feel unable to make use of their experiences. This results in feelings of powerlessness and reinforces the conflictual relationship with the management. The consequence is to a large extent demotivation and resistance as well as a defensive attitude to the management. In many ways, this inhibits a constructive collaboration regarding organizational and pedagogical innovations.

Case 2: A State Workers Compensation Office

The second case draws on the example of a state office handling workers compensation. The organization of the administrative body is mainly focused on production. On a yearly basis the administrative body processes a large quantity of claims. The administrative body also includes a fairly large number of professionals. Claims processors with a juridical university degree constitute approximately 50 percent of the employed personnel. The administrative body has – as every other institution in the public sector over the last 10-15 years – participated in the public modernization process. When the Danish government shifted from a social democratic regime to a neo liberal regime in November 2001 this process was influenced by further dimensions. It was a proclaimed goal for the new government to cut down public expenses considerably and to boost efficiency in public services. The consequence of this ambition has caused close downs, fusions or general reductions in the activities of the public sector. Employees have been dismissed or transferred to other jobs and a general recruitment stop in specific sectors has been introduced. This development has had a major impact on most administrative

bodies, but in contrast to others, the workload and staff members have increased in this administrative body. The future goal of the administrative body is to decrease the production time further by an increase in efficiency and by developing the co-operation between the administrative body and other institutions that take part in the administrative claims production. In this regard the government's ambition to digitalize administrative processes plays an important role.

In particular, the analysis focuses on the work of lawyers and examines how changes in ICT allow decisions making and rules to be embedded in the ICT system. AUTHOR: Please remind the reader what the letters ICT mean These changes lead to a reconfiguration of the skill requirements of jobs. On the one hand, lower skilled workers can now do the work previously done by lawyers. On the other hand, the skill requirements for lawyers have expanded to include communication and negotiation with a wide range of stakeholders, including citizens, doctors, other lawyers, and other government agencies etc. This poses dilemmas for traditionally trained lawyers whose education consists of technical and legal procedural knowledge rather than broader skills. Moreover, it focuses on the way in which this sets a new frame for the learning environment. Previously, the administration body was divided into a number of departments, each managed by a departmental manager. The manager handled the daily management and directed, distributed, approved and criticised the work. The employees took care of their own cases, defined in terms of the competence area of the given department as well as the individual competences of each employee. The case proceeding was relatively slow and to a large extent tied to paper as a physical medium.

The administration body was severely criticised from the political side and in the media, which led to a demand for increased efficiency. This was communicated specifically from the administration body's superior authority in the state hierarchy during continual negotiations on result contracts, management contracts etc. The management of the administration body has responded to the demands for efficiency by implementing a number of initiatives such as:

A. Electronic handling of cases and documents³. B. Decentralisation of the casework into teams. C. An electronically based centralisation of the management and control of quality and efficiency. D.A value based management approach (Mission, Vision and Common Values). E. Appraisal interviews. F. Self-evaluation and quality control including assessment of job satisfaction. G. Staff policies that render it possible to make use of flextime and to work from home several times a week and staff development and adjustment through management coaching.

The current aim is to a further decrease the proceeding of casework by internally increasing productivity and by enhancing the collaboration with the other administration bodies involved in the casework proceedings.

Regarding the professional caseworkers in the administration body, the changes have particularly resulted in new conditions in the following areas:

A. Alterations in the application of ICT through implementing systems of Electronic Handling of Cases and Documents (ESDH), that gives the possibilities of electronic monitoring of all aspects of the casework and the productivity of each employee.

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³ The government's digitalisation strategy plays an important role here (see "Context: The modernization of the public sector".

B. Changes in the management structure from a visible and personal management to electronically based control and management information systems invisible to the staff members.

C. Changes in the job and collaboration construction. From employees working on their own cases under the supervision of a departmental manager to a decentralized team structure, where the team is responsible for planning, prioritising and performing the work. Establishing a new job function that involves keeping in contact with clients, collaboration partners etc. will entail demands for new competences.

The learning environment within the state workers compensation office

The administration body constitutes one of the state work places that have come far in the achievement of digitalised work procedures. As early as in the 1990s, they took part in the first attempts regarding tele-based working-from-home. After a while, however, the administration body had to acknowledge that the project contained a number of technical difficulties, which meant that the arrangement did not function satisfactorily. This has changed. Today, all novel cases are set up electronically; cases no longer exist in a physical form; there has been a continual development of the electronic system used in the handling of cases and documents, which in combination with the implementation of electronic report forms and electronic signatures render the case procedures more efficient. Nowadays, many employees within the case organization work from home, attached to the network. a couple of days each week. Along with the implementation of electronic casework, it has become possible to systematise and divide the cases. This means that one caseworker no longer deals with the cases from start to finish; several caseworkers work on the same case. At the same time, other organizational changes have

been introduced including the segregation of the professional legal development work, which used to form part of the work of caseworkers. Now, it is attended to by a smaller group of highly specialised staff members.

The introduction of a team structure has rendered it possible to decentralize parts of the work as the team is supposed to handle a number of functions, previously attended to by the managers. The implementation of teams, where staff members distribute and prioritise the cases between them, has made the casework proceedings even more efficient. Simultaneously, the management and control of the casework proceedings and quality have been centralised. This has not caused a decrease in management; rather, the content and form of the managerial functions have changed. As a result, employees as well as managers are uncertain as to who is responsible for what. This has created a lot of frustration among the staff members; a problem, the organization has tried to solve with the help of various forms of team building activities. The aim has primarily been to improve the functioning of individual teams. However, the team building activities have not focused on solving some of the other problems in the teamwork outlined by staff members. This pertains to ambiguity in the distribution of responsibility, lack of recognition in the work as well as uncertainty towards what constitutes good and bad casework.

The autonomy of the teams is subject to a control system embedded in the electronic casework system, which means that it is not visible to the staff members. The employees do not know the systems and they do not have any influence upon the data that is collected and assessed. This is a daily cause of irritation and frustration and triggers the experience that the main goal is not to provide good casework but rather to *produce*. In

terms of the learning opportunities comprised in the work, staff members express that the important thing is not to qualify the legal casework but to discover what the system requires and how to fulfil the demands even if it goes against their own professional quality standards.

Management information systems could encompass valuable tools in the daily planning and organization of work; however, the caseworkers do not know how to use this information and what further information to request. Few appear to acknowledge the importance of understanding the system. Assessments are frequently reported that allow individual teams and managers to compare their positions to other teams and managers. Some are below, others above the average. This will always be the case regarding estimations of averages, but rather than debating what may constitute an appropriate average or how the positions of teams and managers relate to the aims of the organization, the focus remains entirely on the computed average. The lack of knowledge and insight into the use of assessments, management and control functions seems to have a constraining effect on the learning environment as well as creating uncertainty as to what comprise the significant aspects of the job.

The implementation of the team structure raises novel demands regarding the competences of staff members. It is no longer sufficient to fulfil the professional demands in the casework; rather, the employees must now hold competences in the areas of cooperation, communication and decision making processes as well as taking over parts of the management responsibility such as the planning and prioritising of teamwork. This creates new opportunities for learning at work. However, the staff members query the fact that the management just expects caseworkers to be able to handle the new structure.

They have not learned to cooperate in teams and the daily workload does not allow for the instigation of learning processes with sufficient time to achieve these competences. These conditions imply that the learning opportunities are significantly reduced, which caseworkers perceive as a problem. In their experience, they have been reduced to specialist workers in a 'biscuit factory', and the work has been de-qualified in relation to the traditional legal casework where the involved were expected to answer for their legal professionalism. The shift in the composition of staff members contributes to the problem. Previously, the administration body was known as a transition camp for people who just graduated with a master's degree. It was a place where the graduates could obtain experience in the field of professional casework before they moved on to more interesting jobs. Today, employees are to a large extent bound to the workplace as a result of vast reductions in the public sector. This situation has created an excess of competences that cannot be employed in their actual job assignments. The employees risk losing their unused competences, thus hampering their mobility and transference to assignments of a more challenging nature.

As previously described, the administration body has introduced a closer collaboration with relevant authorities, institutions and citizens. The opportunity for cooperation is enhanced through the electronic communication and is moreover followed up with physical contacts and negotiations with collaboration partners. The citizens become increasingly qualified and they make use of the opportunities for raising demands and asking questions. Furthermore, their desire for information and documentation has increased and they complain if they do not agree with the decisions. This means that the caseworkers gradually are more in contact with the citizens and in particular, citizens and

groups who have the resources, better education or networks to wield power and influence. To improve the exchange of information the administration body has embarked on extending the contact to include all relevant collaboration partners. This demands additional competences, which could lead to the creation of opportunities for development for the staff within the organization. Providing these services effectively presupposes professional knowledge on casework as well as good communication skills. It is important that the collaboration partners experience that they are understood and that the understanding forms the basis for the best possible handling of their case. The problem regarding who is supposed to handle this work within the organization remains an open question. Likewise, it is uncertain whether the caseworkers should volunteer according to their wants and interests, whether there should be a specific group dealing with these assignments or whether one expects all staff members to have the competences necessary to attend to these tasks. The professional competences that are now in demand comprise the ability to overview the situation, the ability to learn, abstract thinking skills as well as communication and collaboration skills. However, one cannot expect the employees to possess these skills prior to their employment. In addition, it may be significant to have a certain authority or at least signal 'equivalence' in terms of the future communication with lawyers, trade unions, doctors, municipal caseworkers etc. Since many of the collaboration partners hold an academic background, this probably primarily encompasses a job function for the professional staff within the organization. However, it is a job function that differs significantly from the relatively standardised legal casework. For some, it may be experienced as a big and insurmountable challenge

while others again may see it as an important opportunity to employ unused competences or develop new competences.

Discussion

The main objective of this article has been to illuminate the role of public modernization policies in developing learning environments in public institutions and how these policies influence the construction of identities. We have tried to understand organizational change as a dialectic state of affairs between change processes and learning processes. Organizational learning processes should be understood as processes that transform capacity and subjectivity to competencies and identity. Learning environments in the shape of communities of practice constitute the essential framework for learning processes in institutions. The interplay between organizational change, changes within communities of practice and learning processes are influenced by changes in the context and the general preconditions of the participants. We have rejected theoretical positions that try to understand learning processes in institutions without considering the specific context and the general preconditions of the participants. Likewise, learning processes in institutions cannot be understood without an analytical recognition of the power relations, conflicting interests and relations.

Two case studies, an educational institution and an administrative body, demonstrated the advantages of our theoretical approach and answered the main questions of this article..

Both institutions have been subject to the central elements in the public modernization policies. At the same time the two institutions have extremely varied missions, internal

conditions for development and demands from interested parties. The reason for this choice is motivated by our ambition to elucidate the clash between different types of demands – the demand to optimize efficiency, to develop the quality of the services and to develop the framework of the institutions in order to enhance the construction of professional identities among the employees.

Both institutions are subject to a huge demand to evolve and reconvert their productions and services. Some of these demands are related to the public modernization policies.

Other demands have other external preconditions. Both institutions had energetic directions that introduced new measures inspired by public modernization policies.

The similarity of the tools employed by these organizations is remarkable when one takes their differences into account. This pertains to, for instance, strategic management; value based management; strict financial and administrative control; increased efficiency via time reductions; quality control; the establishment of team structures; appraisal interviews and supervision in relation to the development of competences; extended dialogue with users etc. In both cases, the use of these means has ensured the survival of the organizations in situations where both were considerably threatened. Still, the institutions did not succeed to establish enabling learning environments for the employees. On the contrary a number of severe problems in relation to the learning environments and the professional identities of the employees were generated.

In the learning environment of the educational institution, the main problem appears to be that the organization has developed from being a culture, where there used to be a mutual understanding between managers and teachers as to what the main tasks were and the conditions necessary to execute these, towards being a culture where the management and teachers disagree on these central issues. The staff members have established a counter-power position based on their negotiations of the main assignments. Moreover, the management experiences implementation problems in relation to their intentions of organization and pedagogical change. In other words, the conclusion is that the management's strategic, organizational, and pedagogical initiatives are all disproportionate to the rationality characterising the teacher group. Even if the school follows the recommendations from the Ministry of Education and introduces value control, the situation is that the teachers and management differ in their basic perceptions of the work and its conditions. Moreover, there appears to be several obstacles hampering the negotiation of such basic perceptions. In addition, the teachers' relation to the object of their work, i.e. the students, seems to be insidiously instrumentalised. However, the instrumentalisation at the educational institutions differs from that which takes place in the administration body. In the latter, the individual considerations in the casework are set aside due to legal rights as well as work productivity. The educational institution deals directly with people. This work cannot be instrumentalised in the same way. The tendency is, however, present in the sense that the teachers experience a growing conflict because, on the one hand, they have to treat the students as different individuals with different resources and needs and, on the other hand, they experience that the students are reduced to figures in computations of output.

The most important problems regarding the learning environment in the administration body are attached to technology and organization of work. The administration body handles immense workloads, which it has been possible to standardise into casework categories. This standardisation has formed the basis of a thorough electronic, centralised surveillance and control of the casework, which implies that the management may assess the productivity at any given time and act accordingly: Do we follow the thoroughly specified and quantitative production targets or do we deviate from these? The solid increase in productivity is achieved through a division of work as well as a management approach that brings along associations to 'taylorism' and 'fordism' regarding the industrial production. This association is reinforced by the depicted division of work between the small group of 'quality developers', who continually survey the quality of the casework and issue directives to augment the quality, and the many production workers, who attend to the casework on the basis of the prescribed premises. It is furthermore strengthened by the increase in the workload of caseworkers. According to the caseworkers, the experience that their work is increasingly controlled as an industrial production process is a cause of conflict. They are particularly offended when their work place is compared to a biscuit or sausage factory. This goes against their wishes and fantasies of the work as being juridical and professional. At the same time, they experience difficulty with the decentralisation of management responsibility to the individual teams due to the shortage of time, the lack of qualifications, and the contradictions between the different surveillance and control systems. This results in relatively adverse conditions for the learning environment. The management risks that

staff members resign as soon as they have the opportunity to do so. The staff members are at risk of developing a purely instrumental relation to the work, where it is merely perceived as a means of obtaining an income. The distribution of the new assignments to qualified employees is therefore of vital importance.

Conclusion

It may be said that a series of substantial contradictions appear within the organizations in relation to, on the one hand, the means that the management employs in their attempt to trim the organization economically and thus ensure their survival and, on the other hand, the employees' possibilities for developing professional identities. Neither of the institutions succeeded in establishing learning environments. The employees of both institutions stress that their professional standards and competencies – that underpin their professional identities – are undermined by the modernizing processes.

The case studies show that further theoretical development is needed in order to understand the dialectic interplay between changes in contexts, organizational change and the learning processes in the institutions. Furthermore, the case studies show that the theoretical conception of learning at work needs to be further developed in order to capture the dual dimensions of learning in relation to competence development and identity development. Finally, learning must be seen in a perspective that includes contradictions and power relations.

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