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Employee narratives about a development project
resource for managing organizational change

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Chapter 9

Employees' Narratives about a development project as a resource for managing organizational change

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Introduction

Development projects in health care tend to follow each other and are often unconnected. The long-term consequences of development projects in work organizations are not often studied and thus are poorly understood (Pettigrew, 1995; Engeström, Kerosuo and Kajamaa, 2007). Although management usually sets goals for development projects and pays attention to their design and implementation, resources are seldom directed into follow-ups of these projects.

Complex working environments with constant change are increasingly challenging to manage and develop. Change is complex, multidimensional and comprehensive, and intertwined with its history and environment. Moreover, the contexts in which change occurs are often themselves changing. Change is unforeseeable and cannot be planned or phased in advance (Pettigrew, 1995). Change is locally produced, consisting of small steps and alterations (Orlikowski, 1996).

Evaluations are often carried out immediately after development projects in hospitals by using normative, quantitative techniques. The use of narrow measuring techniques in traditional evaluation studies has not produced very promising results. Studies using those techniques have demonstrated that the effects of carefully defined, short-term change efforts, renewals and innovations have not been sustained and have often failed in organizations (Nocon, 2004). Alternatively, narratives can be used in evaluating and facilitating organizational changes but only a few evaluators have realized the importance of narrative evaluation (Abma, 1999). Neither has there been many studies of the sustainability of developmental projects (Cuban, 2001).

Small actions, initiatives and innovations that are unplanned, unforeseen and unexpected appear in organizations and may have surprisingly large consequences (Weick, 2000). The implicit consequences of change efforts may often have a significant impact on the management and implementation of change and on local work practices. The outcomes of learning may also diffuse

to neighboring activities. Therefore, it is important that the managers recognize, interpret and make use of the long-term consequences of development projects in order to support sustainable development. Our suggestion is that it is possible to study the local consequences, the diffusion of innovations and the sustainability of change efforts only after a period of time has passed. Only slowly do changes become concrete, a process that may take years (Engeström et. al., 2007).

We argue that here is lack of appropriate methods in the field of organization studies for evaluating the long-term consequences of development projects and we suggest that the narrative approach and activity theory, intertwined, can be used to do just that. In this study a new kind of an evaluation approach is created and used in practice. A case study from an internal disease ward at a university hospital is presented. The research question of this study is: “What does an analysis of employees’ narratives reveal about organizational change?” The study conducted included a narrative analysis of the interviewees’ accounts of past change efforts and ethnography of change in the hospital ward. Moreover, the methodological framework of the study combines cultural-historical activity theory, which includes the theory of expansive learning presented by Engeström in 1987, a narrative approach (Mishler, 1986; Czarniawska, 1998; 2004) and ethnographic methods (Hammerslay and Atkinson, 1995; Kerosuo, 2006; Hasu, 2005; Saari, 2003).

As a result, a map of the overall view of the change was created. The analysis was finally extended with conceptual analysis to analyzing the processes of organizational change and learning. The study contributes methodologically to narrative and activity theoretical studies in integrating the two approaches in a novel way and offers practical suggestions for the management of organizational change.

The results of the case study in this chapter illustrate that narratives about a development project and the material “remains” of the project can be used as a resource for evaluating and managing organizational change and learning. The results indicate that the ideas created in the development project have stabilized very slowly. Financial support from the hospital management has played an important role in the maintenance and consolidation of the change efforts. Nevertheless, the employees’ active role in developing their work was the most important element in maintaining the consequences of the development project. The results of the study have served as tools for facilitating and managing organizational change at the ward under study and as a basis for a further developmental project in the university hospital.

Towards an activity theoretically oriented narrative evaluation approach

In narratives, the individual, personality, emotions, social events and organizations are intertwined. By using narrative methods, it is possible for

researchers to gain knowledge about the interface of individuals, stories and organizations (Czarniawska, 1998). Narrative thinking allows for a broader understanding of complex organizations. People's understanding of complex systems and theorizing about complexity will always be grounded in the narratives they construct (Tsoukas and Hatch, 2001). Storytellers' individual, social and professional history affects their remembering (Czarniawska, 2004). Stories that represent culture, history and biography make understanding organizational realities easier and facilitate the comprehension of issues, all of which are preconditions for change (Denning, 2001).

Different voices of the organization are present in narratives (Czarniawska, 2004). Every culture has its repository of standard stories (Bahktin, 1981). Every organization also has its own culturally mediated organizational stories. Stories are not stable; instead they "flow" in organizations. They are produced, consumed, interpreted and criticized, both individually and selectively (Czarniawska, 2004). Narratives guide social behavior. Organizations can be considered socially constructed stories themselves (Czarniawska, 1997; 1998). Knowledge is often mediated through narratives in the organizational world, while remembering as a social action is often carried out in narrative form (Czarniawska-Joerges, 1995). Stories enable reflection on conceptions about an organization and its changes (Boje, 1991). However, it is always complicated to explain past events and challenging to connect real events and stories. The interviewees' memories might be inaccurate and crucial information may be lost; there is also empty time in narratives (Czarniawska, 2000) making it difficult for the researcher to equate the story with the original incidents.

We think that the use of narratives in studying consequences of organizational change efforts and facilitating organizational change is not enough and needs to be supported with other methods. In our study we apply an activity-theoretical approach to change and use ethnographic methods to supplement the narrative data. From our perspective narratives do not carry the truth of what really happened in a development project, but rather are constructions of the interviewees. For us, documents and material artefacts are a partially important resource for studying past development projects.

Cultural-historical activity theory is a developmental theory that seeks to explain and influence qualitative changes in human practices over time (Engeström, 1999). Activity theory is based on a dialectical theory of knowledge and thinking, and focused on the creative potential in human cognition (Davydov, 1988; Ilyenkov, 1977). Activity is understood as deeply contextual and oriented toward understanding historically specific local practices, their objects, mediating artefacts and social organization (Cole and Engeström, 1993). Change and learning does not occur in isolation but is social, collective and bound to cultural context. Expansive transformations are taking place in the reorganization and renegotiation of collaborative practices between and within activity systems (Engeström, 2003). Activity systems often take the

form of institutions and organizations and their practices that have evolved over socio-historical time (Engeström, 1987).

In activity theory, individuals do the remembering in communities of memory and remember collectively (see e.g. Middleton and Edwards, 1990). Collective memory is mediated through social-historically evolved tools or instruments. People not only construct knowledge, they also create their historical realities and collectives in object-oriented activity (Vygotsky, 1978; Engeström, 2000). Knowledge is perceived as socially and historically mediated (Engeström, 2001). Knowledge is intertwined with those things that support memory, such as routines and other fixed procedures that individuals and organizations practice (Engeström, Brown, Engeström and Koistinen, 1990). The narrators' memories are connected through the narration to the activity, actions and operations at work. The narratives are devices for understanding human action. Action and the context of an activity in which the action is carried out are embodied in narratives. Narratives have the potential to be used as a basis for intervention in organizational development (Virkkunen, 1994; also Abma, 2003).

Methodology of the study

The methodology of this study integrates cultural-historical activity theory (Engeström in 1987, 1999), narrative (Mishler, 1986; Czarniawska, 1998; 2004) and ethnographic methods (Hammerslay and Atkinson, 1995; Kerosuo, 2006; Hasu, 2005; Saari, 2003) in studying narrated memories, documents and material artefacts of development project (see Figure 1). The integration of the ethnographic and narrative approaches offers a promising development for qualitative researchers, even though the approaches derive from separate origins (Gubrium and Holstein, 1999). In this study activity theory is used as theoretical framework and the various layers of change are traced in narratives, documents and material artefacts such as work premises and maps.

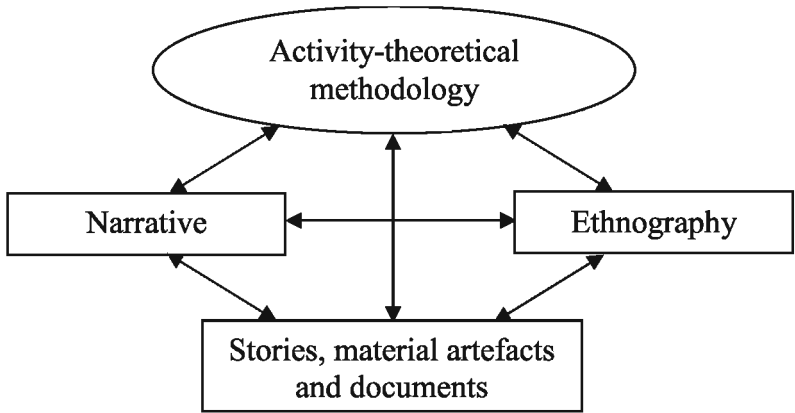


Figure 1 Overview of the methods and their inter-linkages in the study (Kerosuo, Kajamaa and Engeström, 2006)

For us the integration of narrative and ethnographic methods means “moving between” narratives and ethnographies in data collection and analysis (Kerosuo, Kajamaa and Engeström, 2005). Informants often tell the ethnographic researcher stories in the field. The storytellers, on the other hand, describe patterned incidents of activity, that is, their own “ethnographies,” without realizing they are doing so. The ethnographic methods we use have only recently been developed in cultural- historical activity theory. Researchers are becoming interested in the long-term aspects of wide-ranging social incidents (Kerosuo, 2007; 2006; Hasu, 2005; Saari, 2003).

The act of narrating is social in nature and involves the past, present and future (Engeström, Engeström and Kerosuo, 2003). Narrating is a social and communicative act that links the individual and organizational narratives as well as the researcher to the interviewees (Kerosuo, 2007). The act of narrating represents time as “lived time” involving real pasts in an actual present and in anticipated futures. The interviewees’ narrated memories are mediated by interactions and socio-cultural artefacts at work, such as spaces, documents, considered acts of remembering and representations of organizational memory. Organizational change and learning is captured through the memory traces of the participants of past development project (see also Kerosuo et al., 2005; Engeström et al., 1990).

With document analysis it is possible to capture the temporality of development projects and clarify the empty time in the narratives. Documents can be textualizations of organizational activity (Iedema, 2001), which are interlinked with the context of activity (Berg and Goorman, 1999). They can act as containers of organizational activity and also be the documents in use (Prior, 2003).

Activity theory attempts to investigate the gradual and overlapping nature of change in developmental cycles. The motivation for change always arises from tensions or contradictions in historically evolving organizations (Engeström, 1987). The developmental cycles of an activity can be modeled on the cycle of expansive learning (Figure 2). The focus of expansive learning is on large-scale transformations in activity systems that take several years to carry out in organizations. Large-scale expansive cycles of organizational transformation consist of small cycles or mini-cycles of innovative learning. These mini-cycles are potentially expansive and do not always lead to organizational transformations (Engeström, 1999: 384-385).

We used concepts for studying change and learning such as consequentiality, sustainability and the diffusion of innovations. We analyzed the processes of a development project with the concepts of anchoring, resistance, stabilization, destabilization, engagement, cultivation and maintenance. The concepts are tools and are explorative in nature. We reflected the concepts that the data indicated in the phases of the cycle of expansive learning (see Figure 4).

The principle of *consequentiality* refers to the intentional as well as unintentional consequences of change projects. The principle of

consequentiality directs the study toward seeking and interpreting connections, the interference between connections and the prerequisites for connections in the long term. Long-term consequences give indications about *sustainable development*. Sustainable development means temporal stability or continuity. Sustainability means viability and the ability of change to produce responses and to withstand criticism (Datnow, Hubbard and Mehan, 2002). Sustainable change processes require involvement of the management (Buchanan, Fitzgerald and Ketley, 2007; Hargreaves and Fink, 2003), cooperation, communication, creativity and a degree of open-endedness as well as the employees' commitment to planning and implementing change (Nocon, 2004).

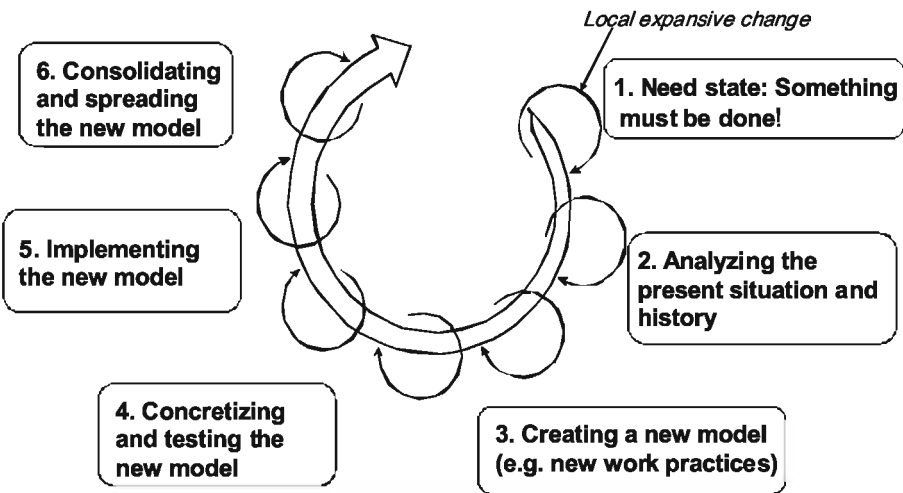


Figure 2 Steps of expansive learning in a development project (modified from Engeström, 2005: 294; see also Engeström, 1999)

When innovations become sustainable, they are likely to *diffuse* (Nocon, 2004: 727). To become consequential and sustainable, innovations must reach a level of acceptance at different organizational levels. Diffusion is a process by which the innovation is transmitted across certain passages in a certain span to the members of a certain social system. The diffusion of innovations is not a one-way linear process, but a network of wordy and branched paths. The processes of the diffusion of innovations and the assimilation of change require time and effort because they create uncertainty and pressure on those involved. The involvement and commitment of people who become interested in innovation at its very beginning are important facilitators in the diffusion process of innovations (Rogers, 1995).

Anchoring changes to the management's plans and to the everyday work of employees and likewise getting support from partners and clients are preconditions for the stability of change (Engeström, 2004). Organizational learning needs to be *stabilized* in order to be sustainable (Engeström et al., 2007). Stabilization refers to acknowledging and supporting change with the help of technologies, economic investments, rules and norms as well as through the division of labor (Kerosuo and Engeström, 2003). *Destabilization* involves the opposite that is, deflecting a change. Destabilization normally occurs when a change is about to become stabilized.

Maintenance in organizational learning means updating, fixing, checking on and supporting a change. Maintenance is often invisible. Lack of maintenance emerges as impoverishment or degradation. *Cultivation* refers to refiguring organizational learning and change instead of simplifying change. During cultivation a change becomes redefined and enriched. *Engagement* means that some leader figures start to support the new ideas and act as change agents. By contrast some employees may start to show signs of *resistance* (see also Kerosuo et al., 2006).

The development project

In the late 1990s, a developmental project was carried out at a university hospital in Finland, in order to create new ways of working that would support hospital workers work-related well-being. The project used the Change Laboratory method, a tool for transforming work, which is based on cultural-historical activity theory (Engeström, Virkkunen, Helle, Pihlaja and Poikela, 1996). A pilot project of the large-scale Change Laboratory intervention was carried out in a ward for internal diseases in 1998-1999 by a working group consisting of employees of the ward and two researcher-consultants. After the pilot project nurses were trained to facilitate new Change Laboratories in other wards of the hospital.

An internal disease ward had been established in 1975 as a geriatric ward nursing long-term patients with many receiving end-stage care. In the mid 1990s the internal diseases ward suddenly began to get acute patients with multiple illnesses. In 1997 a monitoring room was set up in the ward to provide intensive care. With the installation of the monitoring room, employees began to show signs of fatigue, frustration and an inability to master the changes in the working requirements. They refused to work in the monitoring room, for which substitute workers had to be found.

The ward was in a difficult situation when the researchers, acting as a research-assisted consultancy (other than authors of this chapter), entered it in 1998. Both doctors and nurses took part in the ten project meetings and a follow up meeting. They began by constructing a historical analysis of the ward, outlining the contradictions of the work there. The central contradiction was that the nurses were not skilled enough to work with acutely ill patients. The old

ways of working were no longer adequate. The problems in the monitoring room were the central topic of discussion. At the eighth project meeting, a new model of working was finally created. However, the workers felt insecure and shifted between their old ways of working and the new ones established in 1999. The customary division of labor, for example, was confused, and there were still many disruptions in the daily routines. The first author of this chapter entered the ward in June 2004 to study the consequences of the piloting Change Laboratory project.

Data and proceedings of the analysis

The form of narrative analysis depends on the researchers' views of the construction of knowledge, in other words, its epistemology. However, a good deal of narrative analysis is unclear about its epistemological commitments (Redwood, 1999). In this study narrative analysis is grounded in activity theory, and the study is explorative in nature, which means producing new research findings about an unidentified object.

In June 2004, the first author of this chapter interviewed six nurses at the internal disease ward who had been involved in the Change Laboratory project, three representatives of the upper management of the profit unit and two researcher-consultants. Four nurses were interviewed in pairs and two individually, as it best suited them. Representatives of the management were interviewed individually. Researcher-consultants were interviewed as a pair. All of the interviewees were female except for the top manager and one researcher-consultant being male. The interviewees volunteered to participate in the study, and the interview questions were reflexive in nature and invited participants' memories as related to change. The questions focused on three themes: (1) the starting points of the development project, (2) how the development project proceeded in practice and (3) the results and consequences of the development project. Each interview lasted approximately one and a half hours. The interviews were carried out in the hospital ward next to the monitoring room, which was the focus of development during the project. A research assistant who was not otherwise involved in this study transcribed the interviews.

The narrative approach was used both in data gathering and in the data analysis. We call the conducted narrative interview situations storytelling events. There were two steps in the narrative analysis of the interview data: identifying the narratives and constructing a map from the identified narratives. First, the narratives about change were identified.

Mishler's (1986) four categories were used in extracting the narratives. Those categories include 1) an orientation that describes the setting and character, 2) an abstract that summarizes the events or incidents of the story, 3) a complicating action that offers an evaluative commentary on events, conflicts and themes, and 4) a resolution that describes the outcomes of the story or conflict. Then the interviewees' experiences were organized into sequences with beginnings, middles and ends, or an emplotment of the narratives (Ricoeur,

1984). The narratives were emplotted by writing short summaries of each story that we considered essential, labeling the summaries and placing them in a temporal map structure.

The interviewees led the researchers to study documents and spaces at the ward. In addition to the interviews, important ethnographic data was traced by asking interviewees what they considered to be essential “remains” left from the past development project. The first author of this chapter conducted the field work for this study. She wrote field notes at the research site and videotaped and photographed the site. All the interviews were videoed and audio recorded. She collected reports related to the Change Laboratory project (1998-1999), memos, evaluations, legal records, auditions (2001-2003), floor plans, annual reports of the ward (2000-2006), strategy and financial plans of the hospital (1997-2002) and maps. There were two types of documents: those that acted as containers of organizational activity and those documents in use (Prior, 2003). We analyzed the documents and supplemented the narrative story-maps with documentary information, for example dates.

The analysis of the ethnographic data completed the narrative analysis. To combine the narrative and ethnographic data a map of the overall view of change was drawn (Figure 3). After creating an overall view of the change, the narratives and the supplementary ethnographic data were studied with the concepts of anchoring, resistance, stabilization, destabilization, engagement, cultivation and maintenance. The concepts unfolded in the narratives. Finally, the cycle of expansive learning was used to analyze the change and learning process of the employees involved in the Change Laboratory project (Figure 4).

Central findings

Overall view of change on the internal disease ward

In Figure 3 a map illustrates the synthesis of the analysis of the narratives, documents and observations. The map represents the overall view of change on the internal disease ward. In the middle of the map the temporal path of main changes is presented. Successful change efforts are marked on the top of the figure, while the lightning-type arrows below refer to elements that caused problems and conflicted with the change efforts.

The employees actively developed their ways of working in the ward, gradually received support from the management and over the years have created an entirely new and functional work environment. The principal *consequences* of the Change Laboratory project relate to the development of the monitoring room. It took approximately five years to reach the situation in which the monitoring room can be described as a functional, modern, working environment. The photos in Figure 3 show the present monitoring room with its new office and equipment.

As a result of the narrative analysis and emplotting we found five principal plotlines, which depict the main consequences of the Change Laboratory

project, from the interview data: 1) changes in requirements, 2) changes in the work distribution, 3) changes in working methods and 4) changes in spaces, facilities and equipment and 5) changes in the personal empowerment of the nurses.

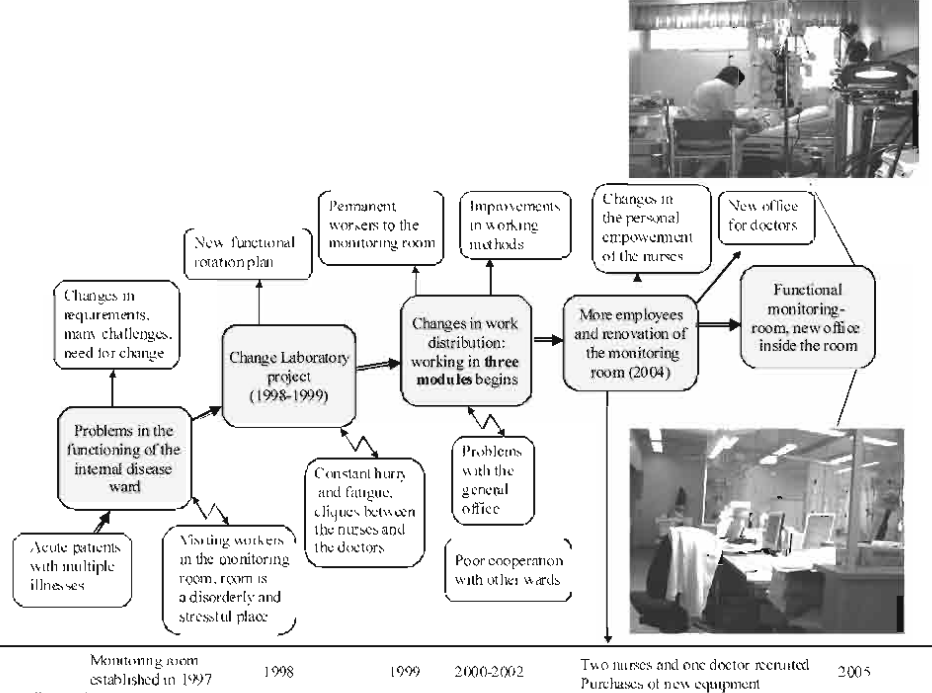


Figure 3 The overall view of the change on the university hospital ward 1997-2005

The participatory observation gave us useful insights into the leading activities in the monitoring room. The ethnography enabled us to attach the interviewees’ stories to material artefacts on the ward. Following the nurses and doctors in the monitoring room contextualized the stories told in the interview situations. Observation gave us information about the contexts in which changes and learning had occurred. The patients in the monitoring room, the nurses’ working methods and how patients responded were observed. The shift changes and their effects as well as how nurses communicated information about patients were also observed. The patients in the monitoring room needed constant care, the machines needed checking every once in a while, and the telephone rang constantly.

The consequences of change efforts

In the following, we will present a synthesis on the findings based on the analysis explained above. According to the nurses’ stories, the ward faced large-scale changes before the Change Laboratory project began. The six nurses interviewed all recalled that the main issue discussed in the project was the

monitoring room on the ward. The monitoring room had been established in 1997 because the hospital wanted to centralize the care of patients needing intensive care. As a result, the ward began to have patients with multiple and very acute illnesses. The number of patients also increased, and the nature of work became very hectic. Basic care also became more complicated along with the new type of patients. The requirements to work in the monitoring room were too high for the employees.

The monitoring room was a disorderly and stressful place to work at. It was a disorganized, confined place, and its equipment was poor and even dangerous to use. The old equipment did not meet the new requirements. The regular staff members refused working there and were replaced by substitutes. The development project was started in 1998 to improve the situation and to support employees' work-related well-being. The main aim was to find ways in which the regular staff could work in the monitoring room.

Many problems discussed in the project were related to current working methods and distribution of the work load. The workload was experienced as uneven by the nurses. The cooperation with the doctors and other wards was experienced as poor and there was lack of communication. Some trials were carried out to improve these issues. The general feeling was that the wards very much liked to defend their "territories". Units often struggled with money problems and competed with each other for resources; this situation did not support the development of cooperation.

In the Change Laboratory, the idea of dividing the ward into three modules by types of patients was introduced, with the nurses rotating from two models to the monitoring room model. The ward was practically divided into "reds", "blues" and "monitoring" -modules. A trial divided the ward more equally between the teams. Each of the regular workers is in the monitoring room for a three-week shift followed by three weeks at their "home-base" -module. The nurses always consult each other between shifts and the flow of information has improved.

Working conditions improved because of the changes that took place after the project. An additional nurse has been recruited for morning, evening and night shifts, and more doctors are available. New equipment has been purchased for the monitoring room. For example, the ward has received new monitors, and training courses have been offered to introduce the new technology. Some employees feel that there is still a shortage of computers and not enough time to learn new things, but in general the sentiment is that the equipment has improved, although some of the old equipment is still in use. Some nurses complained that the new medical technology has caused more complicated patients to be assigned to the ward.

The monitoring room was totally renovated in the spring of 2004. Two rooms were joined, making the monitoring room spacious and functional. An office was built inside the monitoring room during the renovation. From then on, one nurse started to take responsibility for two patients, and another nurse

sees to another two. Some nurses felt that work in the monitoring room was ideal because of the small number of patients and the ready availability of help if needed.

A functional innovation was created as a consequence of the Change Laboratory project: a separate office was built inside the monitoring room, and all files related to the monitoring room were shifted out of the general office, easing the situation there. It was suggested that doctors visit the monitoring room first thing in the morning; the plan was adopted and is still in practice. The doctors customarily had come to the monitoring room very late in the afternoon; the nurses did not have enough working time to update the patients' records and had to work overtime. An additional room was also established for the doctors, easing some of the stress in the office.

The stories about the changed requirements and conducted changes involved quite emotional discourse. The nurses reflected on their feelings of anxiety, uncertainty and frustration when talking about the many problems caused by the monitoring room. There had been cliques between the nurses and the doctors and also some power-struggle issues between the licensed practical nurses and the registered nurses before the Change Laboratory project began, and the flow of information was unsatisfactory. Before the project began, employees on the ward were not used to having staff meetings. They remembered discussing important issues in the project that had never been discussed in public, such as the atmosphere and the treatment of coworkers.

Sustainability and diffusion of innovations

When we analyzed the *sustainability* of the change efforts and development we came up with the following results. Changes created in the Change Laboratory project have remained in force. The work in the monitoring room is described by the nurses as flexible. The idea of the three separate modules has been sustained. The rotation plan has been sustained in practice and found to be functional, fair and flexible. The three module model has clarified the roles of the nurses. Now everyone knows when to work in the monitoring room, and no one avoids going there or taking responsibility. Three weeks is considered as the optimal working period in the monitoring room, after which the nurses shift back to the regular internal disease ward. Nurses are assigned certain patients in the monitoring room, improving the continuity of care and making it more patient-oriented.

More staff has been recruited to work in the monitoring room, which has sustained the changes and supported new work distribution and the new working methods. Presently the nurses complete their shifts in the monitoring room, and there are no longer substitutes. A new head-nurse was recruited to the ward and she has been active in developing the monitoring room together with the staff nurse. The idea of the new schedule for doctors' rounds has been sustained. The doctors come to the monitoring room to see severely ill patients first thing in the morning. After the project the ward has continued to have regular staff meetings which are in general experienced as useful forums for

information sharing. Over the years, the nurses and doctors have developed a more integrated community and the nurses have managed to overcome their fears of working in the monitoring room. Some nurses even see the work with acute patients with multiple illnesses as an opportunity for personal development and empowerment.

Local changes were produced in the Change Laboratory project on the ward. The consequences of the development project *diffused* to new workers on the ward which has sustained the project. The innovations created were very ward specific and have not generally diffused to other wards. Cooperation with other wards did not develop. Workers felt the need for multi-professional cooperation, but there are no structures to support it in practice. However, one of the interviewees explained that another ward has been very interested in the development project and has implemented some of its ideas. The hospital management did not create structures to diffuse the project to the hospital as a whole, and the nurses who were trained to facilitate new Change Laboratory projects were not assigned to similar projects.

The expansive learning process in the hospital ward 1997-2005

Transformation of activity emerges in the need state of the cycle of expansive learning (see figure 4). At this first stage the employees' work is disturbed in some way, and they begin to question their practices. In the case study especially the monitoring room caused problems on the ward. The Change Laboratory project thus began.

In the second stage of expansive learning there is an emergence of double binds which are, according to Bateson (1972), situations in which no matter what a person does, he or she can't win. The requirements to work in the monitoring room were too high for the employees who worked on the ward. The double binds can be solved through analysis and reflection on the situation. The employees developed ideas about new ways of working and created the model of three modules. The *anchoring* stage of the new model caused a lot of frustration and *resistance*. In 1999 the employees were shifting between old and new practices and experimented more with their working methods. There were signs of resistance among the employees, with the monitoring room still causing problems. The six-week period was considered too long a time to work in the monitoring room, it became *destabilized* and employees went back to the old working methods in the third stage of expansive learning.

In the fourth stage, the employees reflected together on the created new ideas and *cultivated* the idea of a six-week period, originally created in the Change Laboratory, trying out work in the monitoring room for only three weeks. The idea of a shorter rotation plan was taken into practice, and it *stabilized* routines fairly quickly. After getting more employees on the ward, the nurses again tried to work in the monitoring room. Most employees felt the new period worked well, and consequently, they showed *engagement* towards the new model. The

monitoring room began to function better when the regular staff started to take responsibility for it. The ward's staff nurse and the new head nurse have worked steadily to get more resources for the monitoring room. They have *maintained* the stabilization of the consequences of the project and regularly approached the upper management which finally agreed to some essential purchasing that the ward requested in support of developing the monitoring room.

In the fifth stage, from the year 2000 to 2002, the hospital management made purchases to improve the monitoring room and renovated it in 2004. These efforts enabled the final consolidation of working methods. In this case the development of the monitoring room was so central in the Change Laboratory project that there was not enough time or resources to concentrate on many other issues in the regular ward. However, the employees facilitated the recreation of the work environment and reached expansive learning in relation to the development of the monitoring room. The changes can be described as mini-cycles of innovative learning as they occurred gradually within the local context of the internal disease ward and especially in its monitoring room.

Discussion and Conclusions

In this chapter an activity theoretically oriented narrative approach to evaluate the long-term consequences of development projects was presented. The study integrated narrative and activity theoretical frameworks in a novel way. Narratives and the material consequences of a development project were used in evaluating organizational change and learning. The activity theoretical framework guided the epistemological premises of the research process. The case study of the consequences of a Change Laboratory project at the university hospital ward illustrated how the activity-theoretical-narrative approach was put into practice.

Evaluations of change efforts are often carried out immediately after development projects in hospitals by using quantitative techniques. Exceptionally, this study implemented an activity theoretically oriented narrative approach to find the qualitative consequences of the change efforts.

The research question of this study was: "What does an analysis of employees' narratives reveal about organizational change?" The analysis revealed long-term consequences and local expansive learning that were not identifiable immediately after the development project. The case study produced new information about the narrative and material consequences of the project, the diffusion of innovations and the sustainability of the project. The multi-level analysis of the data produced five main storylines and an overall view of change, and made it possible to depict expansive learning.

Some of the consequences emerged only years after the project. The project caused resistance at first, but then the employees started to transform the ideas to suit their needs, and learning occurred. Employees tried new working methods, but simultaneously had to employ old equipment and work in poor work premises. The focused development of the monitoring room produced new ways of working and a new division of labor in the activity system of the

internal disease ward. The development of the facilities and equipment took the longest time in this case.

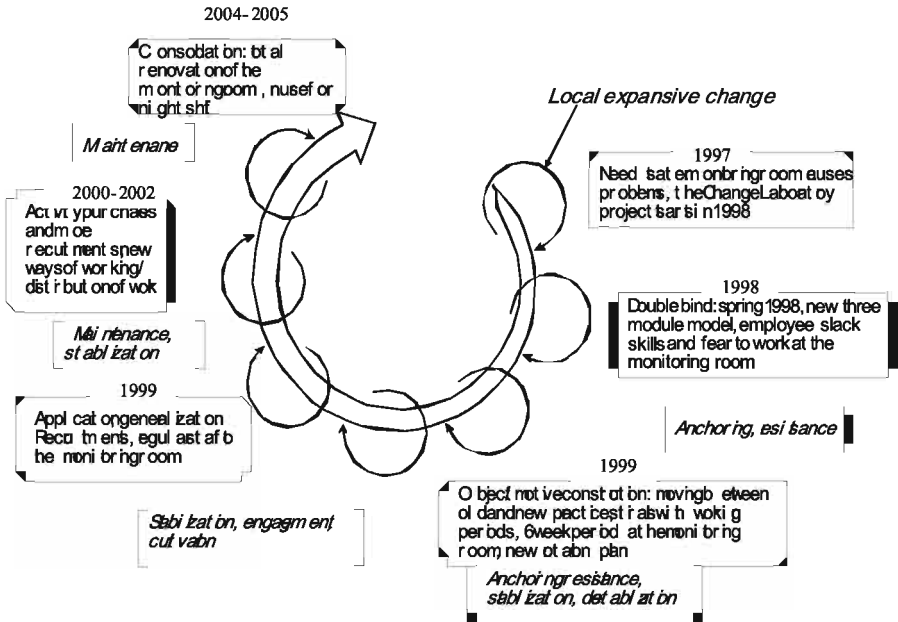


Figure 4 The phases of expansive learning on the hospital ward, 1997-2005

The main objective of the development project was to support and increase employees' work-related well-being. Work-related well-being is an abstraction and is usually measured with numerical inquiries. In our view, the concrete development efforts and improvements, described in the case example, contribute to work-related well-being. In activity theoretical words, the meaning of work and the object of work become collectively reconceptualised in the change process; it enabled employees to better manage their work with acute patients with multiple illnesses.

Among other things, the results of this study described what the interviewees remember and how they remember the changes connected to the development project. The employees' narratives revealed the temporality of change, the emotions related to change and the historical situation before the project began. The stories were especially intertwined with the space of the monitoring room. The interviewees tried to make sense of the change process in the interview situation. They remembered the development project as demanding but also supportive of personal growth. Interestingly, the nurses interviewed in pairs interacted and supported each other in the interview situations, and the nurses interviewed individually as well referred to the opinions of their colleagues and to the material surroundings of the interview situation.

The interviewed nurses represented their occupational group, and constituted a community of remembering and reminiscence of the social aspects of organizational change. They presented themselves as working in a highly demanding environment under pressure, yet as competent nurses. This became evident as the interviewees constantly mirrored past activities and conditions with present and future ones while negotiating and constructing shared stories. We argue that a setting like a storytelling event gives employees an opportunity to construct shared meanings and form organizational memory which otherwise does not become evident.

The analysis of the ethnographic material brought out the “sedimentary” nature of change in an organization, which emerges in various layers. In the interview situations, the bridging of narratives and material consequences took place when the interviewees physically pointed toward different things and rooms which their memories had captured. Material artefacts and spaces functioned as mediating tools and mediated the act of remembering. The material attachment of the results of the development project to employees’ work practices endorsed the sustainability of the change efforts.

Looking at our findings, we think that extending the analysis to the use of ethnographic methods enriched the narrative findings. Analysis of the documents, for example, enabled clarification of the empty time in the narratives, placing them on a certain time scale. The conceptualizing of the narratives gave us insights into the processes of organizational change and learning that the narratives reflected. The extension of the analysis to the use of the cycle of expansive learning revealed that the last phases of expansive learning occurred years after the project ended. The management did not support the sustainability of the development project by diffusing it. The ward developed essentially on its own without support from elsewhere in the hospital. This situation was mostly due to the strict boundaries between the upper management of the profit centre and the front line workers of the internal disease ward and also between the profit centers in the hospital.

Nevertheless, the employees’ active role in developing their work was the most important element in maintaining the consequences of the development project. This result indicated that the management and employees had acted in different realities, and the decisions made by the management reached the real needs of the ward only years after. Finally, the ward received financial support from management, and the financial support played an important role in the maintenance, consolidation and stabilization of the change efforts. The development of ways of working facilitated the recreation of the entire work environment, including its material context and work processes.

Our case study illustrates that sustaining the consequences of a development project requires strong commitment and engagement from employees as well as managers. Our results indicate that an active dialogue is needed between the management and employees in order to evaluate the consequences of past projects and to support sustainable development. In this case the realities of the

operations became separated and were not conjoined until a new head nurse was recruited to the internal disease ward to support the goals of the staff nurse and the employees. The development projects that followed were not linked to the Change Laboratory project. However, the consequences of the project still emerged years later.

We argue that management can learn change management from employees' narratives. The type of activity-theoretical-narrative analysis conducted in this study can be used as a resource for change management, for example, in connecting different development projects (see also Engeström et. al., 2007). Moreover, studying the consequences of development projects supports the linking and bridging of separate projects and promotes sustainable development in organizations.

The results of this study have had practical implications. We have used the approach presented in this chapter in analyzing five development projects in the Finnish health care system. The map representing the overall view of change (Figure 3) has been utilized in a staff training of the internal disease ward to develop its practices further. The results of this study have also served as a starting point to facilitate a development project in a surgical operating unit in the hospital under study.

References

- Abma, T.A. (1999), 'Introduction. Narrative Perspectives on Program Evaluation', in T. Abma (ed), *Telling tales: On Evaluation and Narrative, Advances in Program Evaluation 6*. Greenwich, CT: JAI Press, pp. 1-27.
- Abma, T.A. (2003), 'Learning by telling: storytelling workshops as an organizational learning intervention', *Management Learning*, 34 (2), pp. 221-240.
- Bahktin M. (1981), *The dialogic imagination: Four essays*, Austin, TX: University of Austin Press.
- Bateson, G. (1972), *Steps to an Ecology of Mind*, New York: Ballantine Books.
- Berg, M. and Goorman, E. (1999), The contextual nature of medical information, *International Journal of Medical Informatics* 56 (1-3), pp. 51-60.
- Boje, D. (1991), 'The story-telling organization: a study of story performance in an office-supply firm', *Administrative Science Quarterly*, 36 (1), pp. 106-126.
- Buchanan, D.A., Fitzgerald, L. and Ketley, D. (eds) (2007), *The Sustainability and Spread of Organizational Change: Modernizing Healthcare*, London: Routledge.
- Cole, M. and Engeström, Y. (1993), 'A cultural-historical approach to distributed cognition', in G. Salomon (ed), *Distributed cognitions*, New York: Cambridge University Press, pp. 1-46.

- Cuban, L. (2001), 'Answering tough questions about sustainability'. Paper presented at the First Virtual Conference on Sustainability of Local Systemic Change. <http://sustainability.terc.edu/index.cfm/keynote/paper>
- Czarniawska-Joerges, B. (1995), 'Narration or science? Collapsing the division in organization studies', *Organization*, 2 (1), pp. 11-33.
- Czarniawska, B. (1997), *Narrating the Organization. Dramas of Institutional Identity*, Chicago, IL: University of Chicago Press.
- Czarniawska, B. (1998), *A Narrative Approach to Organizational Studies*, Thousand Oaks, CA: Sage Publications.
- Czarniawska, B. (2000), 'The Uses of Narrative in Organization Research', *GRI Report 2000:5*.
- Czarniawska, B. (2004), *Narratives in Social Science Research*, London: Sage Publications.
- Datnow, A., Hubbard, L. and Mehan, H. (2002), *Extending educational reform: From one school to many*, London: Routledge.
- Davydov, V.V. (1988), 'Problems of developmental teaching', *Soviet Education*, XXX (8-10), whole issue.
- Denning, S. (2001), *The Springboard. How Storytelling Ignites Action in Knowledge-Era Organizations*, Boston: Butterworth Heinemann.
- Engeström, Y. (1987), *Learning by Expanding. An Activity - Theoretical Approach to Developmental Research*, Helsinki: Orienta konsultit.
- Engeström, Y. (1999), 'Innovative learning in work teams', in *Perspectives of activity theory* Y. Engeström, R. Miettinen and R-L. Punamäki (eds), Cambridge: Cambridge University Press, pp. 377- 404.
- Engeström, Y. (2000), 'A Story of Four Umpires', *Organization*, 7 (2), pp. 301-10.
- Engeström, Y. (2001), 'Expansive Learning at Work: Toward an Activity Theoretical Reconceptualization', *Journal of Education and Work*, 14 (1), pp. 133-156.
- Engeström, Y. (2003), 'The horizontal dimension of expansive learning: Weaving a texture of cognitive trails in the terrain of health care in Helsinki', in F. Achtenhagen and E.G. John (eds), *Meilensteine der beruflichen Bildung. Milestones of vocational and Occupational Education and Training. Band 1/volume 1: Die Lehr-Lern-Perspetive. The teaching-learning Perspective*, Bielefeld: W. Bertelsmann Verlag GmbH & Co, pp.153-180.
- Engeström, Y. (2004), 'Managing as argumentative history-making', in R. Boland (ed), *Managing as designing*, Stanford: Stanford University Press, pp. 96-102.
- Engeström, Y. (2005), *Developmental work research: Expanding activity theory in practice*, Berlin: Lehmanns Media.
- Engeström, Y., Brown, K., Engeström, R. and Koistinen, K. (1990), 'Organizational forgetting: An activity theoretical perspective', in D.

- Middleton and D. Edwards (eds), *Collective remembering*, London, Newbury Park, New Delhi: Sage Publications, pp.139-168.
- Engeström, Y. Virkkunen, J. Helle, M. Pihlaja, J. and Poikela, R. (1996), 'The Change Laboratory as a tool for transforming work', *Life Long Learning in Europe*, 1 (2), pp.10-17.
- Engeström, Y. Engeström, R. and Kerosuo, H. (2003), 'The Discursive Construction of Collaborative Care', *Applied Linguistics*, 24 (3), pp. 286-315.
- Engeström, Y., Kerosuo, H. and Kajamaa, A. (2007), 'Beyond discontinuity: Expansive organizational learning remembered', *Management Learning*, 38 (3), pp. 319-336.
- Gubrium J. F. and Holstein, J. A. (1999), 'At the border of narrative and ethnography', *Journal of contemporary ethnography*, 28 (5), pp. 561-573.
- Hammerslay, M. and Atkinson, P. (1995), *Ethnography: principles in practice*, London: Routledge.
- Hargreaves, A. and Fink, D. (2003), 'Sustaining leadership', *Phi Delta Kappan*, 84 (9), pp. 693-700.
- Hasu, M. (2005), 'In search of sensitive ethnography of change: tracing the invisible handoffs from technology developers to users', *Mind, Culture and Activity*, 12 (2), pp. 90-112.
- Iedema, R. (2001), 'Resemiotization', *Semiotica*, 137 (1-4), pp. 23-39.
- Ilyenkov, E. V. (1977), *Dialectical logic: Essays in history and theory*, Moscow: Progress.
- Kerosuo, H. (2006), *Boundaries in Action. An Activity-Theoretical Study of Development, Learning, and Change in Health Care for Patients with Multiple and Chronic Illnesses*, Helsinki: University Press.
- Kerosuo, H. (2007), 'Following my traces -Exploring the emotional engagement with the research subject through the researcher's artwork', *Culture and Organization*, 13 (1), pp. 55-72.
- Kerosuo, H. and Engeström, Y. (2003), 'Boundary crossing and learning in creation of new work practice', *Journal of Workplace Learning*, 15 (7/8), pp. 345-351.
- Kerosuo, H., Kajamaa, A., Engeström, Y. (2005), 'Building bridges between the past, present and future: Narrative and emotional remembering of organizational change efforts', in S. Gherardi & D. Nicolini (eds), *The Passion for Learning and Knowing*, University of Trento e-books, Trento. <http://eprints.biblio.unitn.it/archive/00000828/>, pp. 11-35.
- Kerosuo, H., Kajamaa, A., Engeström, Y. (2006), 'Organizational learning remembered –traces of change in narratives, documents and material artefacts'. Paper presented in *Organizational Learning and Capabilities*

- 2006 Conference at the University of Warwick, Coventry on 20th - 22nd March 2006.
- Middleton, D. and Edwards, D. (1990), 'Conversational remembering: A social psychological approach', in *Collective remembering*, D. Middleton and D. Edwards (eds), London, Newbury Park, New Delhi: Sage Publications, pp. 23-45.
- Mishler, E. (1986), *Research Interviewing: Context and Narrative*, Cambridge, MA: Harvard University Press.
- Nocon, H. D. (2004), 'Sustainability as Process: Community Education and Expansive Collaborative Activity'. *Educational Policy*, 18 (5), Corwin Press, pp. 710-732.
- Orlikowski, W. J. (1996), 'Improvising organizational transformations overtime: a situated change perspective', *Information Systems Research*, 7 (1), pp. 63-92.
- Pettigrew, A. (1995), 'Longitudinal Field Research on Change. Theory and Practice', in G. Huber & A. Van de Ven (eds), *Longitudinal Field Research Methods. Studying Processes of Organizational Change*, Thousand Oaks California: Sage Publications, pp. 91-126.
- Prior L. (2003), *Using documents in social research*, London: Sage Publications.
- Redwood, R. (1999), 'Narrative and Narrative analysis', *Journal of Clinical Nursing*, 8 (6), pp. 674.
- Ricoeur, P. (1984), *Time and narrative. Vol. 1*, Chicago, IL: University of Chicago Press.
- Rogers, E.M. (1995), *Diffusion of innovations*, New York: The Free Press.
- Saari, E. (2003), *The pulse of change in research work. A study of learning and development in a research group*, Helsinki: Helsinki University Press.
- Tsoukas, H. and Hatch, M.J. (2001), 'Complex thinking, complex practice: The case for a narrative approach to organizational complexity', *Human Relations*, 54 (8), pp. 979-1013.
- Virkkunen, J. (1994), *Sosiaali -ja terveystoimen yhdistyminen uhkana ja mahdollisuutena. Tutkimus muutosta koskevasta ajatusmalleista*. Helsinki: Sosiaaliturvan keskusliitto. Hyvinvoinnin tukiverkostot julkaisuja 1/1994, Helsinki: Hakapaino Oy. [The integration of social services and public health services as a threat and as a possibility. The study of schemes on change, Published in Finnish by The Finnish Federation for Social Welfare and Health].
- Vygotsky, L.S. (1978), *Mind in society: The development of higher psychological processes*, Cambridge, Mass: Harvard University Press.
- Weick, K. E. (2000), 'Emergent change as a universal of organizations', in M. Beer and N. Nohria (eds), *Breaking the code of change*, Boston, Mass: Harvard Business School Press, pp. 223-243.