Action research as a method for improving the effectivity of change processes and stimulating learning in organizations: a case study

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The central question in this article is how the use of a survey feedback methodology in action research can improve organizational change and enable all organization members involved to learn to change more effectively. Action research is based on the supposition that actors in organizations have useful and detailed practical knowledge and experience. Researchers, on the other hand, have knowledge about and experience in conducting research and theoretical knowledge about organizational change processes. Together, these two groups can examine the nature and causes of problems, make sense of research results, learn about the dynamics of organizational change and make choices for interventions.

Action research can be used as a method to improve organizational change and to stimulate learning processes in and between organizations. Interactive feedback sessions of research results offer opportunities to understand the reasons underlying failure and stimulate interaction processes as well as a joint search process for alternative action. Making sense together of the reasons underlying failure can help people in organizations learn to handle future change processes more effectively.

In this article we present a case study in which barriers to organizational change were studied and discussed with all organization members involved in a change process. We investigated the factors underlying the problems experienced by a Dutch institution for socio-cultural work in the implementation of self-directed teams.
A questionnaire was used to map the approach and management of the change process and give insight into the experiences organization members had with the change process. This questionnaire was distributed among all organization members concerned. We provided feedback on the issues raised in the interviews and the questionnaire to all team members. The team members then engaged in interactive sessions to understand the factors underlying their difficulties in working together in self-directed teams. Each team chose the problems that were most important for that team as a starting point for improvement. The team members thoroughly studied these problems and all teams suggested a range of possible solutions. These solutions were then discussed and actions were chosen.

The process of data gathering, feedback sessions, exploration of the data by team members and action planning underlying this action research approach are described in this article. Attention is given to the roles of the researcher, the managers and the team members in understanding the nature of the problems and in learning to engage in independent problem-solving behavior. One of our conclusions is that sharing research results with all those concerned is crucial in action research. Discussing research results with actors in the organization helps them to understand organizational change processes and allows them to search for action alternatives. Members of an organization can then themselves start working on interventions that fit their specific problems. Finally, the

problems we encountered during the process are highlighted and attention is given to the potential offered by action research to help people in organizations engage in double-loop learning processes.

1. Introduction

Change tends to become the stable state of the contemporary organization (e.g., French & Bell, 1995; Kotter, 1995). Changes in the demands from the environment cause organizations to change the fundamental nature of the organizations. These large-scaled change processes can be referred to as second-order change processes (Boonstra, 2000, French & Bell, 1995). The problems of changing in these processes are connected with the complexity and turbulence in the organization and in the environment. Changes in the environment lead to instability and are an incentive to bring the organization back into balance with its environment again. In complex change processes, where problems are ambiguous but known, and people have suggestions for their solution, organization development is an appropriate approach for problem solving. Complex change processes often involve changes in structure, culture and individual behavior, and require people in an organization to join in the search for solutions for shared problems in an interactive learning process. Organization development can help people in organizations learn to solve their own problems and cope with and anticipate problems in the future (French & Bell, 1995). In order to study these processes involved in managing complex and extensive change, a specific research approach is needed. Traditional academic research is inadequate to generate knowledge about the dynamic reality of interactive learning. This research is guided by the traditional values of objectivity in the service of scientific purity. The most important objection to this type of research is that it denies the relationships between the researcher and the empirical object (Boonstra, 2000). The object is however also subject: ‘it talks back’ (Van Beinum, Faucheux and Van der Vlist, 1996).

Better equipped to deal with the unstable, dynamic situation and the multitude of voices wanting to speak out in organizations engaged in complex change processes, is action research. Closely aligned with organization development, action research is the application of the scientific method of fact finding and experimentation to practical problems requiring action solutions and involving the collaboration and cooperation of scientists, practitioners, and laypersons. This is done by systematically collecting research data about an ongoing system relative to some objective, goal, or need of that system. These data are then fed back into that system, actions are taken by altering selected variables within the system based both on the data and on hypotheses, and results of actions are evaluated by collecting more data. The desired outcomes of the action research approach are solutions to the immediate problems and a contribution to scientific knowledge and theory as a model, guide, or paradigm (French and Bell, 1995). In action research, the researcher is working with members of an organization over matters that are important to them and they intend to take action based on the intervention. Action research can therefore be considered as being both action and research oriented (Eden en Huxham, 1996). It directly intends to create alternatives to the status quo and to promote learning at the level of norms and values. Its focus is on stimulating double loop learning (Argyris, Putnam, Smith, 1985) by engaging in dialogue, sensemaking and a joint search for solutions to problems which contributes to the understanding of complex change processes.

2. Sensemaking, learning and action research

Action science has as its goal to generate knowledge and learning by engaging in joint sensemaking of problems and generating action alternatives for their solution. These interactive characteristics of action research are especially important because, as was stated by Weick, an organization is communication activity. If the communication activity stops, the organization disappears. If the communication activity becomes confused, the organization begins to malfunction. Continuous communication is needed to develop and maintain the exchanges and interpretations of intersubjectivity, and the shared understandings of generic subjectivity. Shared understandings are created in interaction and lead to future action. This process of sensemaking is retrospective and social. Actions, and therefore problems, can become an object of attention only after they have occurred. In everyday life, retrospective sensemaking involves many short time spans between action and reflection. Memory traces are then typically fresh and indetermined, and the problems that might be encountered in joint sensemaking concerning hindsight bias can be minimized (Weick, 1995). By acting and then reflecting, we can discover what reasoning informed our actions. Action then serves as a means of exploring a situation, and produces information that can be used for the design of future action.

Action science in practice focuses on problem setting, as well as on means-ends reasoning or problem solving. If we fail to achieve our goals we reflect on the original frame and the setting of a different problem. This first approach is referred to as single loop learning and the second as double loop learning (Argyris, Putnam en Smith). Second order learning takes place when people start questioning their own interpretation of a situation and the underlying assumptions. It concerns reflections on peoples own thinking and acting, and on the underlying assumptions that are at the basis of them: the way in which people observe and interpret, define problems, analyze and conceptualize, act and interact (Schön, 1983, Boonstra, 2000).

Second order learning is related with reflective action research. In reflective action research, knowledge is generated in an interactive process in which the actors reflect on their actions and stop to consider the way in which they are learning and generating new knowledge. Reflective action research is directed at action, reflection and the generation of knowledge. It is about understanding ambiguous problems, initiating processes of interaction, and starting a joint search for action alternatives in order to handle problems. The point of this all is to generate knowledge and to develop theories on the processes of renewal and learning. Acquired knowledge and learning experiences must be made meaningful for others (Boonstra, 2000; Eden & Huxham, 1996). All aspects of the renewal process are communicated, giving attention to the context of study, the various voices that have made themselves heard, the conflicts and tensions that have arisen and the perspectives and reflections of the actors on their actions and underlying assumptions (Boonstra, 2000).

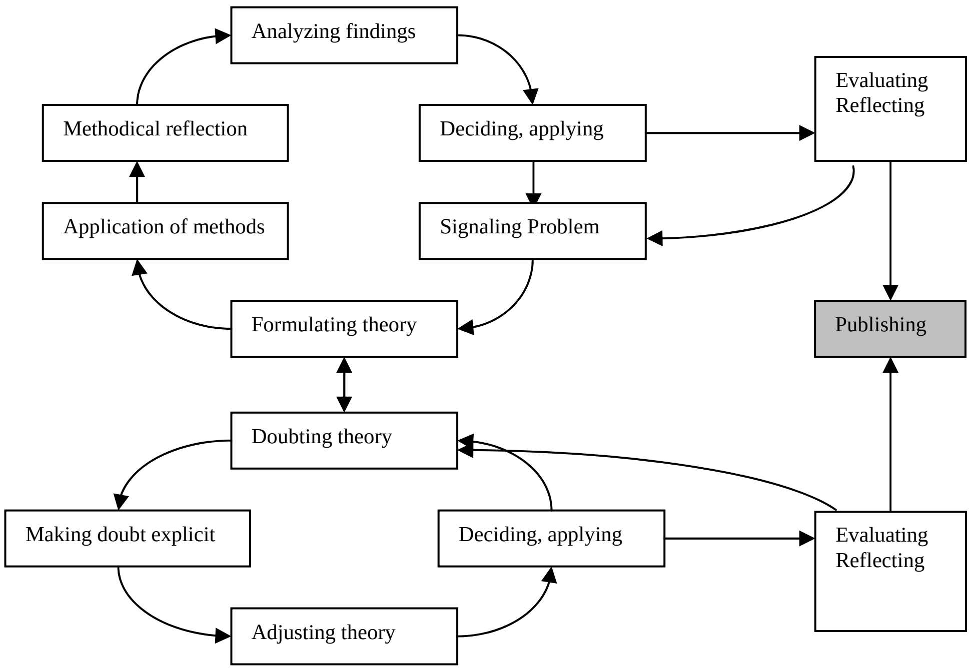
According to social constructionism, people construct their own reality on the basis of the experiences they have. This subjective reality helps them to understand and explain what is happening. In ambiguous situations, people are confused because of the complexity of a situation that is characterized by multiple meanings and multiple opinions of actors (McCasky, 1982). These situations require the social construction of meaning in direct interaction with others, thereby giving space to multiple voices in dialogue. Interaction between actors takes place in a context of the constructions that have been produced in earlier interaction processes. The context was produced in interaction and has become a frame of reference from which reality is comprehended. The combined images of reality or social constructions form a reality that was constructed by the actors and a cultural practice that comprises joint experiences that determine the direction of action. It is a process of mutual understanding in which pluriformity, multiple voices and ongoing interaction allow people to assign new meaning to their action and thinking, and to the complexity of organizing and the resulting problems. Joint experience of problems arise in a dialogue of all involved about their perspectives on emerging problems and possible solutions. Exchanging images of reality and stimulating communication are central in this process, that can be stimulated by organizing workshops or conferences. Experiences from this process can result in new action-patterns that contribute to the dynamics of innovating.

3. Validity of action research

Good action research can help solve practical problems, contribute to theory and to practice in behavioral science, and stimulate greater understanding among scientists, practitioners and lay-persons (French & Bell, 1995). According to Eden and Huxham, it is difficult to justify the use of action research when the same aims can be satisfied using approaches (such as controlled experimentation and surveys) that can demonstrate the link between data and outcomes more transparently. Action research data can be collected using different methods. In the case of empirical action research, the actor collects data by keeping an extensive record of what he or she did and what effects it had. The difficulty with this form of action research is that the researcher may encounter too few useful experiences, that situations may diverge from one another, they may be unique and may not permit generalizations, so it is difficult to compare them, to generalize and to use findings for theory development. The actor may lack objectivity, and there may be difficulties in combining the roles of being both researcher and change agent simultaneously (Chein, Cook & Harding, 1948). In participant action research however, not just the researcher, but also and foremost the people who are to take action are involved in the entire research and action process from the beginning (Chein, Cook & Harding, 1948; Whyte, 1991). In addition to solving practical problems and contributing to general theory, participant action research also aims at making change and learning a self-generating and self-maintaining process in the systems in which action researchers work (Elden and Chisholm, 1993). In this way, some of the problems of empirical action research, concerning the objectivity of the researcher in signaling and interpreting events, can be prevented. The strength of action research lies in its possibility to focus its reflection and data collection process and the emergent theories especially on those aspects that cannot be captured by other approaches (Eden & Huxham, 1996). Eden and Huxham define several characteristics that are important in action research with respect to its design and validity. The validity in action research can be checked by approaching the research question from as many angles as possible, employing redundancy in data collection, and reporting them. The history and context for the intervention must be taken as critical to the interpretation of the likely range of validity and applicability of the results of action research. Action research should be driven from theory, focused on changing the organization by intervening and on data collection, resulting in reflection on data and a generalization of findings and in theory development. From these theories, tools and models can be designed. These can then be used for interventions in change processes, reflection on action and theory can be adjusted. In this way, an incremental, cyclical process of developing theory to action to reflection to developing theory can arise (Eden and Huxham, 1996). Action science should therefore be characterized by the interpenetration of empirical, interpretive, and normative claims. It should be aimed at producing knowledge that is optimally incomplete and that can be filled in as the situation requires. The norms for testing knowledge in science apply for action science as well, but are used quite differently. Public testing, falsifiability, intersubjective agreement on data, and explicit inferences are not only used for testing but also to structure the process for coming to joint agreement, help to interprete situations and meanings, form norms and are used for collection of empirical data. Knowledge is extracted from practice insofar as it enacts norms for valid information, free and informed choice, and internal commitment. In short, knowledge is extracted from a practice that is also used to test this knowledge. Therefore, in action science the context of discovery and the context of justification cannot be sharply distinguished, as it can be in mainstream science (Argyris, Putnam, Smith, 1985).

The research project described in this paper is part of a larger project, consisting of several cycles, in which every part form part in the cycles, but is also a cycle in itself. This research project aims to further develop a method to make organizational change processes more successful and stimulate learning within and between organizations. The research project focuses on the characteristics that influence change strategy, the success of a strategy in a specific situation and the way change processes are guided. This method can be used by change managers and consultants engaged in complex and large-scale change processes. Starting point is that collecting multiple perspectives on a change process, and discussing these different perspectives of all involved, contributes to a successful course of the change process and reinforces learning in and the change capacity of an organization. Mapping change impeding and stimulating factors and providing feedback on them can help provide a positive stimulus to the course and outcome of a change process and can stimulate the change capacity of organizations.
A large survey lies at the basis of this research process. Case studies are used to give us more insight into the factors influencing the success of change processes and the relations between them that resulted from the survey. In our research, to achieve an optimal theory of the practice of organizational change, we use a combination of reflective and regulative cycles. These give us the opportunity to test statistical generalization with the help of analytical generalization using qualitative research in the shape of case studies. Findings from the case studies will be used to evaluate the findings from the survey. Extra attention is given to the formulation of new assumptions and the development of new theories (Boonstra, 2000),

Figure 1: Reflective cycles in action research



In this paper, the focus is mainly on the upper cycle. The upper cycle (Figure 1) is about signaling and identification of the problem, making the starting points, contexts and theoretical assumptions explicit, and applying and reflecting on the method and analysis of results. A complex problem is signaled in the organization under investigation and the theoretical starting points as well as the means and methods that we used to understand and explain this problem are elaborated and made explicit. Next, we explain how we used these methods during the research project in order to understand and explain the problems. We methodologically reflect on the effects of actions and analyze and conceptualize the things we have learned. This new knowledge is used in new actions. Our next step will be to reflect on the things that we have done, on the basis of this reflection, discuss the methods we have used, and make possible doubts explicit. This might then lead to an adjustment of our newly formulated theory and alternative methods are considered, that can be applied in later research processes.

Reflective cycles that have been repeatedly completed should lead to an approved repertoire of solutions, that, with the necessary variations and adjustments to specific cases, can be applied as a practical paradigm, aimed at helping organizations to determine what is important for organizations to change as successful as possible.

4. The change capacity of organizations

To gain insight into the factors that contribute to or hinder change and offer a starting point for an intervention method for change processes, the Universiteit van Amsterdam has developed a method to measure the change capacity of organizations. The concept of change capacity of organizations is related to characteristics of the organization and characteristics of the change process. The situation in an organization can contribute to its change capacity but also hinder its change capacity. Also, the way change processes are handled and managed can be an important predictor of an organization's change capacity.

<u>Characteristics of the organization</u> form the starting point for analyzing an organization's change capacity. When moving from the current situation to a new one, it is important to evaluate how the organization functions (Harrison, 1987). The state of affairs in an organization can contribute to or reduce its change capacity. In an innovative organization for example, employees are familiar with change and they are actively striving for it, whereas a bureaucratic organization focuses on stability and therefore hinders change in the organization (Schein, 1992). The six characteristics of the organization we evaluated to determine its change capacity are: (1) goals and strategy, (2) structure, (3) culture, (4) technology, (5) job characteristics, and (6) power relations. These characteristics are interrelated and change in one of them affects the other, as sociotechnical systems theory explains (Boonstra, 1997; Trist, 1981).

Most evaluations of the state of affairs in organizations include their goals and strategy. The formulation of goals and a strategy that can be adapted to changes in the environment is generally seen as a task of top managers (Mintzberg, 1973). It is important that people in an organization are familiar with its goals and agree with them (Burke, 1987). An externally orientated strategy is necessary for competitive advantage (Quinn & Rohrbaugh, 1983). Flexibility of the strategy helps the organization respond to changes in the market or society.

Structure refers to the organization of work and to relationships between different units in an organization. A general distinction can be made between mechanic and organic structures (Burns & Stalker, 1961). Mechanic

structures are formal and rigid, whereas organic structures are flexible and innovative. Lawrence and Lorsch (1967) have shown that there is no best way of organizing. However, changing mechanistic organizations such as bureaucracies is difficult because their structure resists change (Miller & Friesen, 1984).
Organizational culture is defined in many different ways (cf. Deal & Kennedy, 1982; Schein, 1992). Changing an organization's culture takes time and is generally seen as very complicated. For our purposes, we focus on innovativeness and people orientation of managers because these are important characteristics of culture and key issues in organizational change.
Technology, especially information and communication technology, is essential for the contemporary organization. Organizations use technology as a tool or supporting system in many different ways. Its contribution varies from improving the flexibility and innovative capacity of an organization to controlled regulation of the workflow and limiting the freedom of employees (Boonstra & Vink, 1996).
Job characteristics encompass elements of job satisfaction and of human resource theory. Generally speaking, job characteristics have to do with the extent to which people like their jobs and the possibilities that an organization gives them to use their knowledge and abilities, and to develop themselves. Hackman and Oldham (1976, 1980) describe core characteristics needed for job enrichment, like skill variety and autonomy. In addition, human resource activities in organizations deal with issues like career perspectives and development potential of employees.
Political relations refer to the balance between autonomy and mutual dependency of groups and individuals in organizations. This aspect of organizations is not included in many theories yet the importance of power and politics in organizations is acknowledged more and more (Boonstra, 1995; Boonstra & Bennebroek Gravenhorst, 1998a). Pfeffer (1992) describes how centrality of groups and departments increases power but can ultimately lead to strong competition and non-cooperative behavior. Top managers and key persons in an organization are important characters in analyses of power (Beer et al., 1990; Pettigrew & McNulty, 1998). Some of them mainly focus on themselves and their own position whereas other key persons adequately pay attention to the organization and its employees.

Characteristics of the change process itself are often not taken into account when the change capacity of organizations is determined. However, both the design and management of the change process have a crucial impact on the change capacity of organizations (Beer, 1980; French & Bell, 1995; Kanter, Stein, & Jick, 1992). In general, the change process becomes a visible reality for employees only after the initial diagnosis of the organization has been made and the goals for the change have been set. At the start of the implementation of the changes people form an image of the new organization and the necessity of the change (Jick, 1993). Therefore, we also incorporate characteristics of the change process in our analysis of the change capacity of organizations. Thus, the change capacity is distinguished from organizational diagnosis. The latter can be determined before the start of a change process whereas the former needs to be determined during the process. The ten characteristics of change processes we evaluate are (7) goals and strategy of the change, (8) its technological characteristics, (9) tensions within and between groups in the organization, (10) the timing of the process, (11) information supply, (12) generation of support for the change, (13) the role of change managers, (14) the role of line managers, (15) expected outcome, and (16) support for change.

Many of these characteristics are topics in the literature on organizational development (cf. Cummings & Worley, 1993; French & Bell, 1995; Greiner & Schein, 1989). Additional characteristics to be considered when evaluating far-reaching change processes are provided by authors following other approaches tot organizational change. For instance, Clark (1995) highlights the importance of technology in change processes and Carnall (1990) stresses the timing of change processes. In the following paragraphs, we briefly describe the ten characteristics of change processes we evaluate when assessing the change capacity of organizations.

One of the first steps in far-reaching change processes is the formulation of goals. After a sense of urgency is established, people in an organization will start thinking about the direction the change process should take. Kotter (1995) calls this ‘creating a vision’. Agreement among stakeholders over the goals is important both for further specification of the goals and for transforming the abstract goals in concrete actions to be taken on the work floor.

Information and production technology can be a supporting tool for organizational change as well as a major problem when for instance computer systems cannot be integrated in the case of a merger of two administrative companies. Therefore, it is important to assess the need for technological changes, their complexity, and the effort required to implement them (cf. Clark, 1995).

Tension within and between groups seems to be an intrinsic part of change processes. In addition, in far-reaching change, tension between the existing culture and the desired culture is needed to get the organization moving. Nevertheless, sensing tension and dealing with it are important aspects of change management (Boonstra & Bennebroek Gravenhorst, 1998b).

The importance of timing is recognized by many authors, but specific recommendations are scarce. Three dimensions of timing seem to be relevant. Phasing of far-reaching change processes is well-known and common practice (French & Bell, 1995). The amount of change in a specific period is a key variable for determining the impact change has for an organization (cf. Cummings & Worley, 1993). Available time for each phase may be the most delicate dimension. If the phases take too long, the change may loose salience and most people will not notice something happening (Beer et al., 1992). However, too little time for change constrains the necessary solving of problems and adaptation to the new situation (Carnall, 1990). In addition, far-reaching change requires people to learn new behavior and often to adjust their norms and values. Such major adjustments take time and are hindered when phases follow each other too fast.

Providing information and communicating about the change should be adapted to the different stages in the process (Klein, 1996). In general, effective information supply entails clear presentation adapted to the audience, frequent presentation (if possible through various media), honest information, and trying to use the formal routes before the informal ones. This provides clarity about the change to all layers of the organization and makes employees feel involved in the process.

Generating support and participation of employees are seen as crucial elements to successful change (Beer et al., 1990; Burke, 1987; Kanter et al., 1992; Landau, 1998). One critical factor is active involvement of top managers in the change process: they should communicate a vision about the future organization and propagate the norms and values of the new culture. An open attitude of change managers towards ideas and experiences of employees stimulates active support. In addition, such an attitude makes it possible to use available knowledge in the organization for improving the change process.

Change managers guide and monitor the change process. Professionalism of change managers, credibility, and trust in their skills of all parties involved significantly contribute to the change capacity of an organization because they reduce uncertainty (Burke, 1987). In addition, change managers need good communicative skills to discuss topics such as goals, decisions, the design of the process, and achieved results. Furthermore, sensitivity for obstacles, problems, and political behavior of groups and individuals is desirable.

Line managers generally fulfill a crucial role in far-reaching change processes. They manage the day-to-day process of change and assist the change managers. That is, they translate the overall goals of the change into specific actions to be taken in their departments or teams (cf. Kanter et al, 1992; Nadler & Tushman, 1990). At the same time, they usually have to change their personal leadership style and the way they interact with their employees. Currently, we see a movement away from authoritative leadership to middle managers who are expected to coach and facilitate (Yukl, 1998). Coaching and facilitating leadership styles are important aspects with respect to the course of change processes.

Expected outcome or willingness to change (Metselaar, 1997) is influenced by many factors. Here, we focus on the psychological component of the expected outcome of a change process. At the psychological level, elements such as faith in the feasibility of the change, belief that it is necessary and does not threaten personal interests, the certainty to be qualified to do a good job in the new organization all contribute to a positive expectation of the change process (Connor, 1995). The organizational and social components of willingness to change (Werther & Davis, 1986) such as functional organization of work or political behavior are discussed above. In short, expected outcome refers to the psychological conditions that help people to develop a positive attitude towards the change.

Support for change refers to the active role that people can fulfill in a change process. A clear example of this is the contribution that employees desire to make to a change process. Among others, Burke (1987) supposes a positive relationship between generating support and employees' desire to contribute. If people are invited to participate in the change process and if their ideas are taken seriously, then support and commitment will increase (cf. Strauss, 1998; Toulmin & Gustavsen, 1996), as will personal benefit of the change. Furthermore, when people find the change necessary and they agree with the goals their support for change and commitment are likely to increase.

The questionnaire 'The change capacity of organizations'

The questionnaire was developed in four stages. First, a broad literature review was conducted to gather (1) statements about actions and circumstances that contribute to or hinder change in organization, (2) results of studies on far-reaching change processes, and (3) theoretical ideas about how change should or should not be designed. In addition, we analyzed case descriptions of change processes from about 60 consultants and change managers. Second, the results we obtained in the first stage were arranged according to the aspects in Model 1 and the first outlines of the questionnaire appeared. Third, data from an exploratory study on the change capacity of organizations were used to test the raw version of the questionnaire. We asked practitioners attending post academic courses to write down what conditions contribute to or hinder change according to their experiences. Comparing the hundreds of statements they produced with the raw version of the questionnaire led to a few additional statements to be included in the questionnaire. Fourth, the questionnaire was administered in a pilot study to test whether the statements were clear, whether the scales were reliable, and to get experienced with its feedback possibilities.

The questionnaire has fifteen scales, which are described in Table 1. Each scale consists of three to eight statements. Respondents are asked to indicate on 5-point scales, ranging from -2 (strongly disagree) to 2 (strongly agree) to what degree each of the 79 statements apply to the situation in their organization. This distinction is useful for reading the graphical display of the results because disagreement with statements is displayed as a negative contribution to the change capacity and agreement as a positive contribution (see table 1). An example of a statement about the characteristics of the change process is “The goals of the change process are clear for members of my organization”. If a respondent disagrees with this statement, lack of clear goals is considered a barrier to change. When he or she agrees , clarity of the goals is considered to contribute to the change process.

Table 1

Scale Descriptions of the Change Capacity of Organizations Questionnaire

Organization	
Goals and strategy	This scale refers to clearness of the goals of an organization, agreement about these goals, external orientation of its strategy, and degree of flexibility to deal with market demands and developments outside the organization
Structure	This scale refers to the organization of work and decision making about operations in an organization
Culture	This scale refers to opportunities for innovation, people oriented leadership, and cooperation within an organization
Technology	This scale refers to available technology, clearness of the use of supporting systems, and information about work procedures.
Job characteristics	This scale refers to division of labor, quality of work, relationships with colleagues, and career perspectives in an organization
Political relations	This scale refers to the interests of individuals and departments or teams, the division of influence, and to the degree of competition in an organization
Change process	
Goals	This scale refers to clearness of the change objectives, and agreement about these objectives, and understanding of the change strategy
Technology	This scale refers to complexity of technological adjustments, effort required from employees to implement the adjustments, and available technological support to effectuate the change
Tension	This scale refers to tensions between and within teams or departments of an organization resulting from the change and to pressure on the existing culture
Timing	This scale refers to phasing and pace of the change process, time to adopt the change, and the speed of the decision making process about the change
Information supply	This scale refers to amount and clearness of information about the change process and the way an organization supplies this information
Creating support	This scale refers to involvement of top managers, coaching of employees, and opportunities people have to influence the course of the change process
Change managers	This scale refers to the competence of the change managers, their visibility, and communication between change managers and employees

Line managers	This scale refers to the role of line managers in the change process, the way they deal with the change, and the interaction with their subordinates during the change process
Expected outcome	This scale refers to expectations of employees regarding the development and outcomes of the change process
Support for change	This scale refers to the perceived necessity of the change and the desire of people to actively contribute to the change process

5. Case setting

A Dutch neighborhood based local welfare organization in Arnhem, a city of 135.000 inhabitants, was in 1998 confronted with a need to reorganize the entire organization, triggered by recent budget cuts. The resulting curtailment of the number of staff, joining of teams and abolishment of functions took its toll on the organization's service and employees' work. In order to improve the overall functioning and make the organization more efficient and effective, the decision was made to start a qualitative and quantitative reorganization of the entire organization.

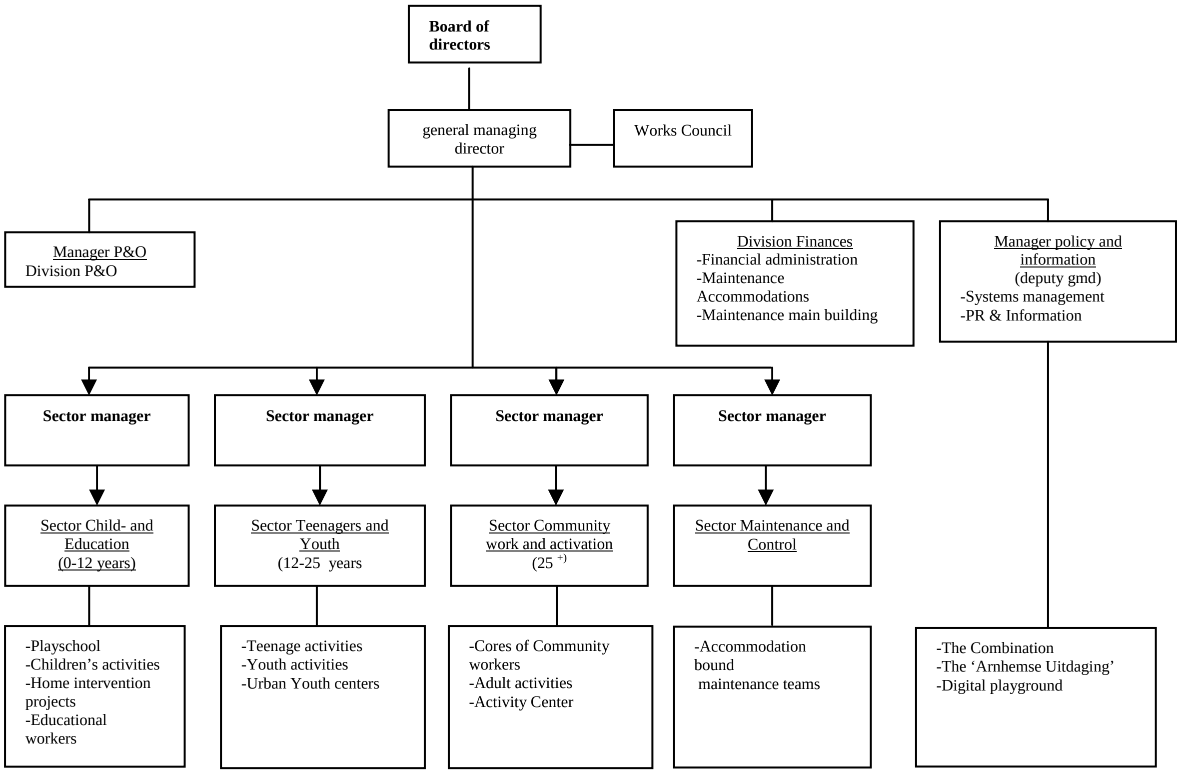
A new mission statement stressed the importance of a strong social involvement, participation, a trusting relationship with clients, integral policy, cohesion and networks. A strong presence in town was going to be realized by organizing activities for all age groups as close to people as possible, in neighborhoods and quarters. The organization attends especially to disadvantaged people. It has 250 employees in the different disciplines, and about 1.400 volunteers assisting in the activities in neighborhoods and youth centers. With the help of an external consultant, an internal quick scan is made of the organization and its problems. This quick scan served as a basis for the definition of five central goals and a new organization structure.

The goals of the change process are:

1. More delegation of responsibilities and competences
2. Teams and workers should be made more responsible for results
3. A smaller 'gap' between policy making and execution
4. More integration of neighborhood- and city-based activities and projects
5. Stimulating a wider range of job characteristics, flexibility, expertise, and career development

Two external consultants are asked to help implement a new structure. The organization, that was until then geographically organized in six districts lead by town district managers, is divided into four functional sectors, three of which are aimed at different groups of clients: children and education, teenagers and neighborhood activities. The fourth sector cannot be considered as part of social and cultural work. This sector is responsible for the overall functioning of all accommodations the organization uses for its activities.

Figure 2: Organization diagram of the new organization



All four sectors are lead by sector managers. Together with the managing director, the deputy managing director and the head of the department of Personnel and Organization, the managers form a management team. Within and between sectors, (temporary) project groups or sub teams operate. Each of the four sectors develops its own mission statement and goals in line with the general mission statement. A uniform sector policy functions as a binding factor for each of the units in a sector. This policy is also a starting-point for solving some of the problems pointed out by the quick scan like a low general involvement of workers in the organization, little use of the capacity and knowledge of workers and little possibilities for participation. In the different town districts, workers are organized in interdisciplinary teams composed of workers from all four sectors, that work as self-directed as possible. Starting point for the assignment of workers to teams is the presence of a relatively permanent core group of community workers in the problem areas, assigned according to the extent of problems in a particular neighborhood. This core of workers has as its most important goal the development of district welfare programs. According to the specific needs of a neighborhood, more or less workers from the other sectors are assigned to the interdisciplinary teams. Responsibilities and competences are delegated to these teams, that have responsibility for obtaining the required results. The striving of all this is to make the 'gap' between policymaking and execution smaller, stimulate integration between quarter- and urban oriented projects and stimulate expertise and career development. The sector managers maintain the interconnections between expertise and guide workers individually. Each sector manager also functions as a coach, coaching two or three of the interdisciplinary teams.

The change process has great impact on the organization. Implementing the new structure and working with it appeared more difficult than was expected. The organization needed feedback on the experiences workers have with the changes, and the way they are handled and the new organization structure. To evaluate the process, gain more insight into the specific problems workers have with the new organization, and generate ideas for improving the situation, the University of Amsterdam is asked to investigate what factors hinder the change process and how the organization and its people can learn to handle these factors and learn to change more effectively.

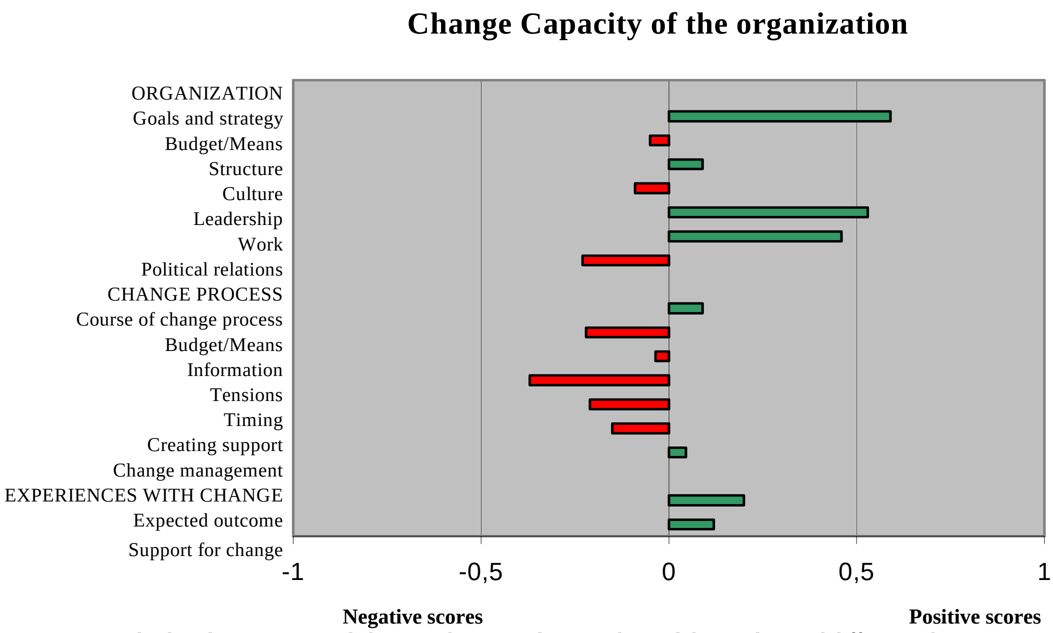
Changes in the organization were extensive and problems are encountered in all sectors and within most of the teams. The approach chosen consists of a large scale diagnosis of the problems, in which all organization members are involved. Empirical action research, composed of interviews and survey research, and supported by a participative setting in a step-by-step approach was chosen. This approach was chosen in order to avoid as much as possible the initial (subjective) ideas from the researcher or management about the causes underlying the problems with the change process, and possible solutions, but giving space to many voices in a dialogue, leading to many points of view. First, document study gave us more insight into the art and practice of the organization and the change process. Some introductory interviews were held with members from each of the sectors and of the management team, in order to get an impression of their view on the change process and the problems they encountered. Then, the questionnaire to measure the change capacity of organizations (Bennebroek Gravenhorst, Werkman & Boonstra, 1999) was adjusted to fit the terminology used in the organization and enclose the aspects that were specifically important in this change process.
The contents of the questionnaire were discussed with a member of the management team and again adjusted. Then the questionnaire was tested on a group of organization members from different disciplines, which lead to a few additional adjustments and a separate version of the questionnaire for the maintenance sector. Questionnaires were then distributed and explained in four sector conferences, one for each sector, and were filled in conjointly. Each sector manager explained to his people what would be done with the results and people were given the opportunity to ask questions about the questionnaire. The manager of every sector collected the completed questionnaires and handed them to the researcher. After results had been analyzed, they were first presented to the entire management team and to the works council. This was done because there were some tensions within the management team between the managers on the one hand and the other, ‘policy-making’ half of the management team on the other hand. Whereas the organization members were negative about the change process, the top management of the organization was more positive. This placed the managers, being right between these two hierarchical layers, into a delicate position. They were responsible for carrying out the changes as well as for the process that workers had to go through of learning to work in and adapt to the new organization. The idea was to give insight into the differences of opinion and thereby into the position the managers were in. Initially, our idea was to involve the works council in this process as well, because there were some tensions between members of the works council and the management team. The management team however decided that it would be best to provide separate feedback.

6. Survey results

In Figure 3, the mean scores of all scales of the organization's change capacity are displayed. The figure shows that some characteristics of the organization are evaluated quite positively (bars pointing to the right): the goals and strategy, leadership and the work. People were however unsatisfied with the political relations in the organization (bars pointing to the left).

With regards to the way the change process was handled, people were also quite negative. Although people have some insight into the goals and course of the change process, they are not satisfied with the way the change process is handled and managed. The budget and means people have are not enough to realize the new situation and work in it. The information about the change process could have been better and the changes cause tensions among workers. The timing of the change process is evaluated negatively: changes were too fast. Also, the support for the change that management created is evaluated negatively. The role of the management team in this change process is however evaluated slightly positive.

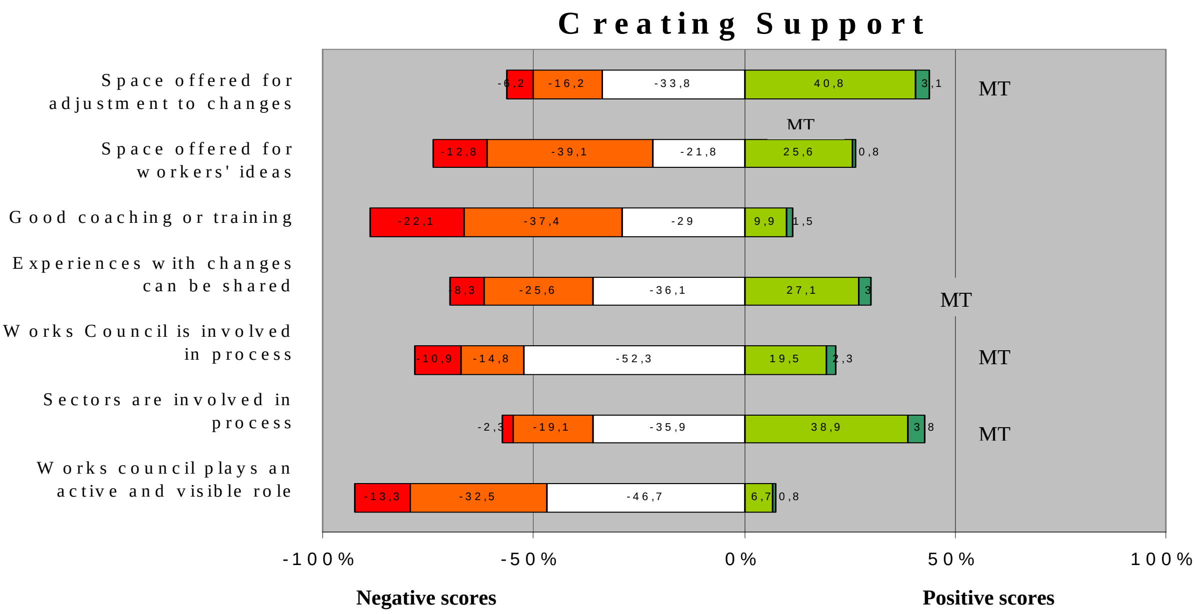
Figure 3: Mean scores of the organization's change capacity



Note: Figures are displayed on a -1 to 1 scale because the scores do not go beyond these values and differences become more visible using this range.

Closer examination of the results on the basis of separate questions and examination of the differences between groups and hierarchical layers in the organization gave us more insight into the problems that were experienced. It seemed that many organization members had trouble understanding the goals of the change process. The goals were unclear to them, they did not agree with the goals of the change process and people weren't sure on how to put the goals into practice. In line with these findings, people were dissatisfied with the information that was given about the change process, and the possibilities that were offered for communication. Workers considered the support that was created for the change process as insufficient, probably because of the uncertainty in the organization about the goals and the limited information supply. regarding change management, they were more satisfied with the support their own manager gave them during the change process, but they were dissatisfied with the task of the management team in guiding and monitoring the change process and communicating about the goals, the decisions that were taken, the design of the process and the achieved results. Furthermore, they were dissatisfied with the way the management team handled problems and dealt with political behavior. As a consequence, people experienced the change process as going too fast and they did not have the opportunity to reflect on and get used to the changes. Furthermore, there were cooperation problems within the teams composed of the different sector members and between the sectors as a whole, and the overall workload was high. Feelings of unity in the organization were lacking and cooperation between workers from different sectors was bad. The survey results showed that on many of the characteristics measured, the management team was significantly more positive, suggesting differences in opinions on the change process between workers and management (see for an example the results for creating support in Figure 4: significantly positive scores of the management are marked with 'MT'). The white parts in the bars represent the people that say that they don't know or have no insight into the aspect.

Figure 4: Results for the scale of 'Creating support'



7. Feedback processes and dialogue sessions

Because of the nature of the problems, the critique on the leading role of the management team and the unclearness about goals of the change process, the management team decided that the results should first be presented in a large scale meeting for all organization members, in which members of the management team would also be present to join in the process and ask and answer questions. This might have helped the management team to find out why people criticized their role in the change process and to bring about more interaction between workers and management team. The meeting was however not very successful. Inquiry among some of the organization members showed that there were different reasons for why this meeting was not successful. First of all, only a small part of the workers attended the meeting. It was said that workers doubted that the management team would take the results seriously and they would not be inclined to work on solutions for the problems they experienced. Also, for many workers, the date and time chosen for the meeting were not convenient. Another reason mentioned was that the results would also be discussed in the teams and many workers preferred to talk about the change process in their own team. Second, the select group of workers that did attend to the meeting was very critical about the results and the organization, and although the initial attitude of the management team was a constructive one, the skeptical attitude that workers held towards the management team hindered them from engaging in constructive dialogue. Critique was sharp and, unfortunately, neither the members of the management team nor the researcher tried to intervene to make the course of the process more constructive. Instead, some reactions were defensive at first, trying to explain why certain negative results were obtained instead of letting the workers explain the results, and in the end reactions towards the critique started to become offensive. Discussion arose and the meeting was broken off leaving many unsatisfied.

In the following weeks, the results were discussed in the teams. Research results indicated that many of the problems were experienced as coherent with working together in teams. Therefore, it was decided that results should be discussed, if possible, in the (larger) area teams, or, if that could not be accomplished, within the (smaller) location bound teams. In the fourth sector, that is responsible for the overall functioning and maintenance of accommodations, not all workers work in teams. Because of that, a sector meeting was organized to give feedback on the results, although some of the workers had already discussed the results in their team. In each of the sessions, the researcher presented the research results and the coach or manager was present to ask and answer questions and to help stimulate interaction and sensemaking processes.

The larger teams were asked if they preferred to discuss the results during the presentation as each topic was presented, or if they would like to hear the presentation first, mark the results that were especially important to them and then talk about these topics in smaller groups. Almost all teams preferred to discuss the topics conjointly during the presentation. One of them decided to hear the results first and then discussed the results in two smaller groups, reporting their findings to the total team afterwards. They did this with the help of three basic questions: ‘What is happening?’ ‘Why is this a problem?’ ‘What can we and management do about it?’. The coach of this team also took part in one of the teams. The team was critical, but, on the other hand, also enthusiastic to talk about their problems in a playful kind of way. They were able to give more insight into the causes underlying the problems, had some ideas about solving them and were willing to help solve the problems. Also, almost all team members had an obvious part in the discussion, whereas in the other groups, mostly a few more dominant workers took control. This team differed from the other teams however, in that the consequences of the change process were less extensive for them than for the other teams.

In the other teams, process and outcomes differed, depending on the atmosphere in the team and whether the meeting was held in the area teams or in workers own location team. People were more open and comfortable talking about their experiences in their own team than they were in the larger area teams. Some of the area team members did not know each other well enough to talk about their experiences and some even did not know each other at all. This hindered the sensemaking process, because workers were less comfortable talking about their personal experiences in an group of people that was unfamiliar to them. In the location bound teams, the process of jointly interpreting the research results, understanding them and searching for action alternatives was therefore easier. Depending on the atmosphere in the group however, the teams that were able to be more contemplative, came to a more constructive sensemaking process than those teams that experienced large problems in their everyday work and were obviously angry about the situation they were in. In one of the teams that probably experienced the largest problems, the coach was hindered to attend to the meeting. Here team members were able to communicate about the problems they experienced and could make them very clear, but because of the atmosphere in this group and the interaction problems the entire group had with a few other workers from the maintenance sector (who were not present), it was for this group especially hard to think of solutions to their problems other than the hard interventions and promises they thought the management team should make.

The dialogue sessions brought seven essential aspects to light that were important for all teams. These were the unclarity of goals of the change process, problems concerning working together in teams, problems concerning the structure of the organization, workload, difference in culture and competition between sectors, attention of the management team for workers and evaluation of the change process and resulting activities.

As for the goals of the change process, it seemed that formulation of goals was too abstract, and goals were therefore difficult to understand. Most workers did not contribute to the goals that were formulated and the changes that ultimately took place. Those few workers that did participate in goal setting said that they did not recognize their ideas in the plans. People were not able to recognize the formulated goals in the activities and changes that took actually place. Information about the change process was not enough and not clear, and was mostly only in writing, while workers felt the need to communicate about the change process.

Working in teams was difficult because it took time to learn a new way of working. People said they needed time, attention and coaching to in order to adjust. Also, the responsibilities in the team were not clear. Because of the division of the organization in functional sectors, responsibility of workers appeared to be with their sector instead of with their local team, which interfered with cooperation in the teams. Also, the team members said that they missed their district manager who used to give clarity about tasks and responsibilities, and could easily be approached. Because the function of district manager had disappeared, team members had to give each other feedback on their work and behavior, which they found difficult, because they had little insight in their team members' work and responsibilities, and were also afraid to give their team members feedback on their behavior. Besides, because the responsibilities of team members were with their sector instead of with the team, in some of the teams an individually oriented culture had developed.

The sector manager functioned at a distance and had limited contact with his people. Communication often took place by e-mail, management by walking around got lost bit by bit and turned into intervening in case of problems. People started to feel a little lost and, as a result of that and the increased workload people experienced, creativity got lost (e.g. Peters, 1992). The duality of structure, that was functionally as well as geographically oriented, was connected to many of the problems. Communication between the sector manager and the workers was difficult, because of the large span of control of the manager and his distant position. Workers indicated that they felt like hierarchy had increased instead of decreased, as it should have. The new structure caused problems in teams that were composed of workers from different sectors. Sometimes, four sector managers were involved in one team, of which one was also the teams' coach. This lead to problems, especially when managers' opinions differed on specific issues. Also, the position of the coach was unclear when he had to fulfill a dual role: coach to the team but also manager ('boss') to some of the team members. This also gave rise to uncertainty among team members. Workload in the organization was high among managers as well as workers. Workers had to fulfill more tasks than before the change process, and because of the dual structure the need for coordination and fine-tuning in meetings increased. People indicated that there was no more time

left for creative tasks, whereas for many people, these were the aspects that had most motivated them in their work.
The division of the organization into sectors also caused competition between workers from different sectors. Workers often had little insight into the policy of the other sectors. Besides that, although people from different sectors worked together in teams, there was rivalry for instance when the manager of one sector gave his people privileges that the others did not have. Also, the tasks that were formerly the responsibility of the maintenance workers, now had to be shared in the team which lead to frictions between agogic and maintenance workers. Regarding the attention that the management team had for the workers, people felt like the management team was not really interested in their opinions about the change process. They said to have had little possibilities to adjust the course of the change process and thereby were denied the opportunity of anticipating the problems that resulted from the change process. They wanted to be involved in the policy and the course of business in the organization and they wanted the management team to invest in and care for their personnel. They also indicated that they wanted to be involved in the evaluation activities of the change process, wanted to talk with the management team about the problems they experienced and many of them wanted to engage in joint problem solving. Several first attempts were made for suggestions for solutions.

The researcher collected and wrote down all information resulting from the dialogues, the problems that the teams discussed, their interpretation and the solutions they generated. After each meeting, the session was briefly discussed with the manager. The managers were asked to discuss these reports in their teams and ask the team members whether they agreed on their contents. The reports were then included in a total report on the survey results. The results of the dialogue sessions were integrated to make the problems the teams experienced as well as all possible solutions that workers suggested, clear. This report was discussed with the management team, who, on the basis of the results, started on a plan of action. Besides that, in the fourth sector, that was responsible for the overall functioning of the accommodations, people suggested to restart the theme groups that had been functioning for a while to work on problems concerning the change process, and focus them especially on the problems that resulted from their meeting. In some of the teams, people indicated that they wanted to talk about the results and actions in later team meetings.

After all results had been collected and documented, the management team decided to start on action plans to improve the situation and interact more with the workers. The possibility of a second survey has been proposed during a management team meeting by one of the members of the team, to evaluate the efforts to make the change process more successful.

8. Discussion

Learning

Did learning occur? This question is hard to answer in this stage of the process. Nonetheless, we will try to describe some of the things that happened and things that people said that suggest that learning has taken place. First order or adaptive learning did take place in the dialogue sessions in which all workers contributed to making sense of the problems and thinking of solutions to those problems. People's energy to change came from a dislike of the current situation and a motivation to get away (Senge, 1990).

After inquiry part of the workers in the larger area feedback teams said that they were prepared to contribute to solving the problems, when they were given enough space to do so. They stressed that it was important to them that management expressed openness and clarity about the space that they were prepared to give for people's own initiatives and about the efforts that were going to be taken in order to solve the problems. Others were less energetic to actively contribute, but said that they wanted to 'blow whistle' when things went wrong or might go wrong. Overall, many of the workers said that they would like to offer their expertise, to help think of solutions for problems and were willing to solve problems themselves, as well.

When asked what they thought about the dialogue sessions that were held to jointly trying to understand the problems in the organization and the generating of ideas in order to solve the problems, all teams were positive. One of the teams seemed however ahead of others and said that, normally, they engaged solely in monitoring the efforts of others (e.g. management), and how they handled problems and changes. They observed the efforts from a distance and criticized what they saw. The team said that it is generally hard to change from the position of a distant observer to an active participant that is engaged in working on solutions. The meetings that we held, helped them make that shift of position. Engaging in an open dialogue is, according to many of the workers, a 'good way to make clear what the problems are and where they originate from, solve problems, and has served as a first step in creating trust and confidence'. It seemed like, in this team, learning goes beyond first order learning because the initial assumptions and attitude towards the management team are doubted and maybe even adjusted.

Also, in some of the teams, the energy to change the current situation seemed not only to come from an attempt to get away from undesirable aspects of the current situation (adaptive learning), but also from a vision of how a future situation might be (creative learning; Senge, 1990). One of the teams posed a clear vision about what would be important to them in the future organization concerning flexible work, and stressed their readiness to search jointly for alternative actions regarding the lack of means and the possibilities the organization has to maintain and, where possible, improve the service towards clients. An other team for instance stressed the importance of finding out where and how workers from different sectors might cooperate and help each other more.

Role of the researcher

Van Beinum (1992) stated that in action research, the relationship between subject and object is intersubjective. Both the researcher and the subject of study are social actors and beings with a sense of purpose, capability and knowledge. They are both the product and the producers of history. Compared to traditional academic research, this means that action research is based on a mutual relationship. The empirical object has changed: instead of occupying a passive role that merely sanctions research, it embraces active participation. The researcher has changed from a position of objective observer to a position of active involvement based on the principles of constructionism. The relationship between the researcher and the subject of study is explicit and collaborative, and is characterized by joint involvement in an event or social action (Van Beinum, Faucheux and Van der Vlist, 1996). The choices that were made in this research, were made jointly between researchers, management and workers (Van Beinum, 1998). In defining the situation, there were different voices active, constructing realities and creating options to act and make problem solving possible (Boonstra, 2001). In our experience, the researcher cannot stay detached from the organization and the people in it, because, in order to understand the research results, interaction, discussion and dialogue are necessary. This can only be achieved when the researcher lets go of his or her position as a detached researcher and joins in the process of cooperation and interaction. The researcher fulfills a role as regards contents concerning the survey results, and a process oriented role in the task of accompanying the dialogue process.

Role of the management

In our experience, involving managers in the feedback cycles and in dialogue is necessary. When management is present, obviously takes workers' problems seriously and assigns importance to their meaning, workers are more inclined to actively participate in sensemaking processes, because they sense that it has 'a use to put energy into it'. This was especially so when managers actively contributed to the process, did not impose their view on the situation on workers but asked questions and stimulated their workers to give their view on what was going on and what could be done about it. If they were open to the workers' opinions, this position created a sense of trust in the workers, that was not achieved in the organization wide meeting where reactions to critique was explained from management's own points of view, and reactions were overall defensive or offensive instead of constructive. Besides, an open attitude helped indirectly to bridge the distance experienced between management and workers. Lastly, the awareness in many workers that problems were mutual ones, and managers as well as themselves 'wrestled' with them, gave rise to a shared problem vision, locus of responsibility for the problems is not sought and placed with management (see also Senge, 1999), but more understanding among workers for managers' position and henceforth a more constructive attitude developed.

Role of workers

All workers stressed the importance of involving them in the process, because the process concerned their work, its contents, cooperation and the way in which they performed their jobs: the change process had large consequences for their everyday work. They also stressed that they had broad expertise, concerning their own discipline, their clients, they knew what means and people they needed to do their jobs and knew the processes in the organization. As such, they claimed to be entitled to be part of the process, to be heard and to be given the opportunity to (actively) participate and to be able to make an important contribution to the process. Stimulating people to work on problems in small groups stimulated also the less dominant workers and new people to give their opinions and helped especially to make a shift from the position of distant and critical observer to active participants.

It was easier for people to talk about their problems, be open about their vision and constructive about solutions in the small group of people they directly worked with, provided that there were no large interpersonal conflicts in the team.

Survey feedback as an instrument and a methodology

Earlier experiences with using survey feedback as a method of creating insight into barriers to change, making them open to discussion, stimulating interaction between the parties concerned and generating energy and creativity for change and learning have produced useful experiences that have been used in this action research process. In our experience, clarity about the method of using survey results for feedback to and dialogue with all concerned, an emphasis on joint learning by interpreting and acting and agreement between researchers and people in the organization are important. Survey feedback should be used as a methodology for joint understanding . In classical literature, survey feedback is however often used for discussion with management. The danger of this is that limiting the distribution of research results solely to the change management may result

in change managers subjecting the people concerned to interventions, on the basis of their own interpretation of research results. These interventions are presumed to have a positive effect on the change process. What however actually happens is that central guidance and control increase while the effectivity of control decreases.
To avoid wrong expectances about the methodology, it is important that these elements are made clear during the first (intake) meeting between the researcher and representatives of the organization. Top management must understand the underlying assumptions of the method and accept these assumptions. They must be prepared to share results and not use them as an assessmentprocedure for the functioning of leaders of specific departments in an organization. Top management must be reserved in their interpretation of specific results, but stimulate processes that lead to significant interactions and gives space to all involved to interpret the results themselves.
Early in the process, the way of distributing the questionnaires to the people in the organization has to be discussed. Important is that people are informed about the research project in advance, and that questionnaires are distributed, explained and completed during working hours, preferably in a large scale meeting or during work meetings. Questionnaires should be adapted to the situation and the vocabulary used in the organization and the nature of the change process in order to connect directly to the important issues in a specific organization and change process. In many organizations, people from different hierarchical layers in an organizations have differing opinions about the management and course of change processes. Because of that, we pay attention in our research to differences of opinion between people from different parts or divisions in an organization and between hierarchical groups such as managing director(s), managers, workers, members of staff and consultants in our analysis of the results. An overall view is then fed back to the entire organization, and specific feedback is provided for different departments, for managers and workers together. In our experience, it is important to involve managers directly in the distribution of questionnaires, let them take part in the dialogue following the feedback of results, participating themselves and stimulating people to give their opinion and share their ideas, because managers often play an important role in carrying out change processes and coaching workers along the way. After the sessions, the outcomes of and experiences with the dialogues of all work groups can be put in writing and can be shared between groups in work meetings.
One of the dilemma's we encounter in case studies is about how the survey results should be presented with respect to the hierarchical layers in the organization. Should survey results be presented to people from hierarchical layers separately, or would it be better to choose a general presentation for all organization members together? In this case study, we have chosen a presentation for top and middle managers jointly, because of the tensions between these groups. Used like this, survey results can help to create more understanding between groups in an organization about each other's position and points of view.
In this particular case study we have learned that it is very difficult to start an interactive sensemaking and learning process when people are angry about the situation in the organization. In this process, we went on with the presentation of survey results where it would probably been better to first pay attention to the people and the question of why they reacted the way they did, discuss that first and then try to turn the situation into a more constructive one. In line with this, we have learned that, in teams that experience internal conflicts, constructive thinking was harder to accomplish than in those teams that got along well and were therefore more able to look at the situation from a contemplative point of view. Furthermore, we have learned that, letting people talk about survey results in small groups and then presenting them to the larger group, is a better way of letting everyone participate than when people react to the results during the presentation. Also, the problem with giving direct

reactions to survey results is that the researcher's role is not so much that of an action researcher anymore, because it shifts from accompanying or coaching a dialogue session to presenting and guiding discussion on details of research results. There is too much attention for and discussion about smaller details in the research results. It would be better if people first got an overall image of the situation in the organization and then talked about that image, the aspects that are especially important to them, the causes underlying their own problems and possible solutions.

We learned that, when results are discussed in small groups, people are more able to transcend the stage of criticizing and go on to the stage of constructive thinking and acting. Also, people are more inclined to talk about their personal experiences and problems in their own team, the team that they worked with in their own work environment, provided that they get along well. They were also more able to go deeper into the problems they experiences than when dialogues were held in larger groups of people that did not know each other well. Besides that, we have learned that it is important that the manager or coach of a team takes part in the dialogue process, because it shows his commitment to solving the problems that workers experience and he can contribute to the sensemaking process, and because of that contribute to eliminating a distance between workers and management and stimulating a joint creation of a common vision of what a future organization might look like.

Concluding remarks

The method of survey feedback can help provide insight into and learn from differences in opinion between different groups in an organization and may provide an opportunity for objective sensemaking. Our experiences have learned us, however, that there are several conditions that must be fulfilled for survey feedback to be effective. Trust in the organization is for instance important for people to be able to talk openly about the problems they experience. Also, to be able to discuss the problems on a deeper level, it is important that workers work together and share work experiences. Especially the condition of openness might not be achieved in all organizations. Furthermore, the process of performing survey research and then providing feedback on the results takes time. Experiences, thoughts and interpretations may therefore not be fresh and indetermined anymore, and we may therefore be confronted with the problem of hindsight bias (Weick, 1995). The questionnaire we used is a method that can be used to bring about dialogue processes about organizational change, but it is also a general model, gathered from ideas from 'experts' on the subject of organizational change. It is imposed on the organization and therefore might not leave much space for the organization members' own sensemaking processes. Finally, the second order learning results that were attained were limited to only a few teams. On the basis of this, it might be interesting to find out if other action research methods, that use group dialogue processes as a basis for the analysis of problems and the sensemaking process, might be more able to part from an open and indetermined position, and might have proven to be more succesfull than the survey feedback approach described in this paper.

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