International Management Master Thesis No 2004:18

ACHIEVING SUCCESSFUL IMPLEMENTATION OF IMPROVEMENT PROJECTS IN ELDERLY CARE ORGANIZATIONS

IMPLEMENTATION OF BREAKTHROUGH PROJECTS IN SPECIAL ACCOMMODATIONS FOR ELDERLY

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Abstract

Recent innovations in the medical field improve the opportunities to treat diseases and

injuries better, even at an advanced age. In addition, the Swedish population is

reported as growing steadily older. In order to cope with those challenges, Swedish

healthcare organizations in the public sector undertake many different improvement

efforts. One of those improvement efforts is the use of the Breakthrough Method in

the public healthcare sector. Therefore, the intent of this study to explore how to

achieve successful implementation of improvement projects in elderly care

organizations and specifically the implementation of a Breakthrough Project. The

research concentrates on nursing homes, and especially the caregivers' level that is

involved directly in patient care. The paper evaluates the means of successful

implementation of improvement projects from a learning perspective. Therefore, the

formal and informal learning process of caregivers in nursing homes is presented and

discussed. In addition, influential factors affecting learning process are also addressed

in relation to their impact on the process.

Findings of the study indicate the strong need to better understand the learning

process of caregivers. Another important finding addresses the lack of a feedback

system in nursing homes and aspires to give recommendations to strengthen the

means of follow-up systems. In addition, the importance of using formal and informal

systems as complimentary systems is also another significant finding which clarifies

the importance of communities in the nursing home.

Key Words: work-based learning, implementation, elderly care

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1. INTRODUCTION

1.1 Background

According to the study by the Swedish Federation of County Councils (FCC), the Swedish population is growing steadily older. At the same time, innovations in the medical field improve the opportunities to treat diseases and injuries better, even at an advanced age. This, in turn, leads to the rapid increase of demands and expectations in the healthcare sector. Altogether, these cause a growing workload for the healthcare system.¹

In order to cope with these arising challenges and also take necessary precautions to ensure a stable future, during the last two decades the Swedish healthcare sector has gone through intensive development (Fraser, 2003; cited in Book et al., 2003). Swedish healthcare organizations undertake many different improvement efforts which are based on both management principles borrowed from the private sector and also principles developed in the healthcare sector itself (Olsson et al., 2003).

With the help of all those efforts, the Swedish healthcare system has evolved substantially since 1990s through political reforms, structural changes and cost reduction attempts. However, the process of adjustment has encountered a number of problems. There are shortcomings in access to some care services, and the programs for the elderly are not always sufficient.² The FCC states some shortcomings in elderly care in the access to the services and also inefficient organization of services. This shortcoming in elderly care is partly based on the reforms that took place in the 1990s in order to decrease the cost of care and change the structure of elderly care. The most influential reform was the Ädel Reform in 1992, which transferred the responsibility for providing care in special homes (special residences for the elderly), from county councils to the municipalities. The number of employees working with elderly care has decreased by 78,000 with this reform. This means that the elderly

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¹ Swedish Healthcare in Transition (2003) Swedish Federation of County Councils

² Swedish Healthcare in 1990's "Trends 1992-2000" (2002)

care system had to provide care for greater numbers of older patients with 20% less staff. 3

In order to successfully deal with the drawbacks in elderly care and the new restrictions caused by the political reforms and cost reductions, the FCC initiated several improvement projects.⁴ Olsson et al. (2003) proposes that there is a strong need to better understand these improvement efforts. One of those improvement projects in elderly care is the use of "Breakthrough Projects", which can be explained as a collaborative learning method.⁵ A more detailed description of the breakthrough process and its application in Sweden will be addressed in detail in the following section.

1.2 Breakthrough Project

The Institute for Healthcare Improvement (hereafter IHI) innovated The Breakthrough Series in 1995, in response to consequences of low quality of American healthcare, such as high costs, unscientific care and poor service. IHI is a not-for-profit organization that consists of a small group of improvement advisors from Associates in Process Improvement, who bring the methods and tools to support change. The aim of the organization is to drive the improvement of health by advancing the quality and value of healthcare. The organization provides training and improvement projects for healthcare organizations.

IHI designed The Breakthrough Series to help organizations to create a structure in which interested organizations can easily learn from each other and from recognized experts in topic areas where they want to make improvements.⁸

³ Swedish Healthcare in Transition (2003) Swedish Federation of County Councils

⁴ Swedish Healthcare in Transition (2003) Swedish Federation of County Councils

⁵ The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Healthcare Improvement

⁶ The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Healthcare Improvement

⁷ www.ihi.org

www.ini.org

⁸ The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Healthcare Improvement

A Breakthrough Series Collaborative is a short-term (6- to 15-month) learning system that brings together a large number of teams from healthcare organizations. ⁹ The structure and organization of the learning efforts can be followed in Figure 1.

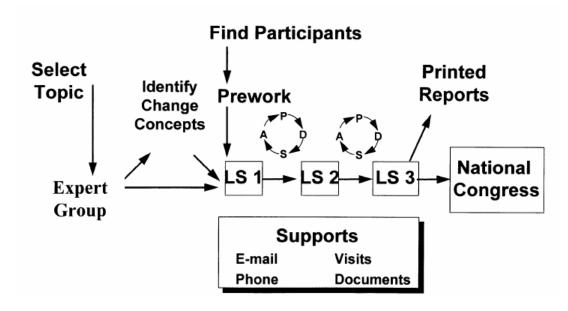


Figure 1: The Breakthrough Method "IHI's Collaborative Model for achieving Breakthrough Improvement". 10

The original breakthrough process starts with the selection of a particular area in healthcare, which is ripe for improvement. Leaders of IHI are responsible for defining the topic in healthcare. IHI identifies experts related to the topic and ask all those specialists to facilitate and provide support throughout the breakthrough process. In this point, the Swedish organization, FCC, conducts a different strategy than the original breakthrough method, which is based on the premise that the organization should define in which areas and fields they need improvement and how they can improve those.¹¹

Interested healthcare organizations are elected to participate in breakthrough projects through an application process. Once the organization applies, a small investigation of

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⁹ The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Healthcare Improvement

¹⁰ The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Healthcare Improvement

¹¹ Interview with Johan Murmester (Breakthrough Project Leader in FCC)

the organization is carried out. Senior leaders in the organization are expected to guide, support, and encourage the improvement teams, and to bear responsibility for the sustainability of the teams' effective changes.¹²

Traditional Learning Sessions (LS) are face-to-face meetings, usually three of which are conducted during typical collaborative, bringing together teams from each organization and the expert faculty to exchange ideas. At the first Learning Session, experts from faculty present a vision for ideal care in the topic area and specific changes, called a Change Package, that when applied locally will significantly improve the system's performance. Teams learn the Model for Improvement (see Figure 2) that enables them to test these powerful change ideas locally, and then reflect, learn, and refine these tests.

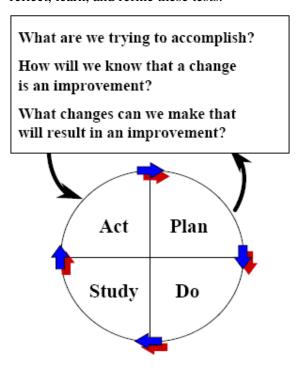


Figure 2: Improvement Circle ¹³
The Improvement Circle has four stages, which encompass: "Plan, Do, Study, Act."
Those four stages identify four key elements of successful process improvement: specific measurable aims, measures of improvement that are tracked over time, key changes that will result in the desired improvement, and the series of testing cycles

¹² The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Healthcare Improvement

¹³ The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Healthcare Improvement

during which teams learn how to apply key change ideas to their own organizations.¹⁴ Even though the improvement circle is developed by Associates in Process Improvement,¹⁵ the structure of the model can be concluded as being based on the Kolb's model of experiential learning (see Figure 4). The main idea behind the model of improvement is based on the premise that teams learn how to operate by creating aims and ideas, experiencing and testing the ideas and deducting notions from those experiences. Therefore, the Improvement Circle can be interpreted as a simplified version of Kolb's circle, which is used in the process improvement.

At the second and third Learning Sessions, team members learn even more from one another as they report on successes, barriers, and lessons learned in general sessions, workshops, storyboard presentations, and informal dialogue and exchange. Formal academic knowledge is bolstered by the practical voices of peers who can say, "I had the same problem; let me tell you how I solved it."

In 1997, the Swedish Federation of County Council decided to use the Breakthrough Method in order to facilitate necessary improvements in the Swedish healthcare system. Therefore, the federation took responsibility to manage and disseminate this knowledge to the county councils involved.¹⁷

The method is offered to the FCC by one member who attended an IHI conference about breakthrough in Boston.¹⁸ The first initiation was through a regional pilot project, in Skåne. Following the pilot project two local projects in Stockholm and Uppsala were also started. In the first year, 20 teams and a handful of facilitators have learned the methodology. ¹⁹ However, the Federation of Swedish County Councils indicates that they can only provide support and attempt to inspire. The difficult and important work of change can only be done by those who are involved directly in

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¹⁴ The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Healthcare Improvement

The Improvement Guide, Jossey-Bass, 1996 cited in The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Healthcare Improvement

¹⁶ The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Healthcare Improvement

¹⁷ http://uno.svekom.se/skpubl/index.htm?http://uno.svekom.se/skpubl/start.jsp

¹⁸ Interview with Carina Svensson (Project Leader),

¹⁹ http://uno.svekom.se/skpubl/index.htm?http://uno.svekom.se/skpubl/start.jsp

patient care. And they need the support of their leaders and managers.²⁰ Therefore it is important to focus on caregivers who are providing care and investigate deeper how those people learn new ways of working, required by improvement projects and how they implement improvement efforts to their daily practice.

The application of the Breakthrough Model in Swedish elderly care can be narrated through the project called "A Better Dementia Ward", which aims to improve the quality of care for dementia patients in nursing homes. This project was initiated in 2001 in Sweden, and several nursing homes throughout Sweden have participated in the first run during the period of 2001-2002. ²¹

As mentioned above, the implementation of the improvement project requires the change in exiting practices. In the "Better Dementia Ward" project, the keystone of the improvement efforts is defined as "putting the care-receiver in the centre". Team members for the project are chosen from different nursing homes and normally two to three people from each organization are included as representatives, some of which were caregivers. Representatives inform the rest of the caregivers and other personnel, through weekly meetings, about the recent required changes in routines and progress about the project. The progress is presented by graphics and measurable outputs in order to clarify the vision and outcome of improvement efforts. 23

Teams developed several necessary actions to improve the health condition of the care-receivers in dementia sections. It has was noted that the overuse of medicine for constipation exists. Members of the teams decide to try natural ways to help care receivers overcome this problem.²⁴ Consequently, several methods are brainstormed, such as:

- Serving plum drinks and oil during the meals
- Conducting more activities during the day
- Taking care receivers to the toilet more frequently
- Increasing the amount of liquids

²⁰ http://uno.svekom.se/skpubl/index.htm?http://uno.svekom.se/skpubl/start.jsp

²¹ En Bättre Demensvård ÎI, Genombrott, (Brochure)

²² En Bättre Demensvård II, Genombrott, (Brochure)

 $^{^{23}}$ For more detailed information regarding the project, see www.lf.se\utveckling\demensvard

²⁴ Interview with participant members in the Breakthrough project

All those suggested improvements required a different sequence of daily routines and also an additional workload for caregivers. Those examples stated above indicate that caregivers are required to allocate more time for the care receiver and try to focus on "putting the care receiver in the center of the attention." The application of the project also means that the sequence of some of the routines will be changed and caregivers will be directed to work in a different way. For instance, morning routines may become longer than usual since with the implementation of the project caregivers are required to take the care receiver to the toilet more often than before. It can also mean that the new requirements will demand that caregivers spend more time with the care receiver, by accompanying them through a daily activity not only few days a week but everyday. In addition to this, caregivers are required to learn the new methods, through training sessions and regular update meetings with the representatives of the project in the nursing home. However, more importantly they are required to learn a new philosophy, which puts the care receiver as the center of the focus.

To summarize, as we mentioned earlier, the overall success of implementation regarding improvement projects such as the Breakthrough Project heavily depends on people who are involved directly in patient care. Besides with the requirements of the breakthrough project, those people, caregivers, are expected to learn a new way of thinking regarding care receivers and also learn a new way of working to perform their daily tasks. Consequently, issues regarding caregivers' learning will be addressed deeper.

1.3 Purpose of the Study

The overall purpose of this study is to understand how the improvement projects in elderly care can be implemented successfully. As mentioned earlier, successes of the improvement projects heavily depend on how people, who are actually carrying out the caregiving and directly affected by the launch of improvement projects, learn, understand and use the necessary changes and improvements in their daily work. Therefore, we strive to understand how caregivers learn new practices and change

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²⁵ Interview with participant members in the Breakthrough project

their practice. In order to attain those intentions, we also explore the factors that might play a role as barriers or facilitators in the implementation of improvement projects in elderly care. We believe that we will be able to offer insights and better understanding for the elderly care organizations, in order to support successful implementation of improvement projects.

1.4 Problem Statement and Research Questions

The idea behind improvement projects such as Breakthrough is to increase financial and organizational efficiency of organizations and improve the quality of elderly care. Therefore, it is essential to ensure successful implementation of the projects, especially starting with the people who are most affected by the requirements of the project. In order to provide better insight to the integration process, we define our problem statement as:

How to achieve successful implementation of improvement projects in elderly care organizations.

As mentioned above, the improvement projects such as the Breakthrough Project require caregivers to learn new ways of working and different routines. Even though those projects are initiated by the organization itself, the initiation is normally by a nurse or by a senior manager who support improvement efforts in the organization. Caregivers are usually obligated or expected to pursue the new routines and cooperate with the improvement efforts. Besides, caregivers' reactions and cooperation are often taken for granted. In this point, we believe that it is of crucial importance to explore how they learn to change their daily practice. Therefore, we choose to focus on the caregivers' level and clarify our main problem with several important sub/questions:

• How caregivers learn in nursing homes?

This question is intended to find out the ways of caregivers' learning in nursing homes. We endeavor to discuss and present the existing learning system in nursing home. We believe that exploring the learning system in nursing homes enables us to better understand how caregivers are informed and trained to use the new routines, and to pinpoint the strong or feeble parts

in the learning system. Therefore, we believe that a deeper understanding and analysis of existing learning systems in nursing homes will facilitate implementation of improvement efforts by clarifying how to communicate and initiate improvement efforts

• What are the factors affecting caregivers' learning processes and their adaptation of new routines?

This question is intended to find out the factors that surround caregivers' learning and change of daily routines and how those factors can affect the integration process of the project.

1.5 Methodology

1.5.1 Research methodology

Silverman (1993) defines methodology as a general approach to studying any phenomena. According to Newman and Benz (1998), research methodology can be qualitative, quantitative or combination of both. Denzin and Lincoln (1984) indicate that: qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. The qualitative approach is used when observing and interpreting reality with the aim of developing a theory that will explain what was experienced (Newman and Benz, 1998).

In this study we decided to use qualitative methodology since our research problem focuses on recognizing subjective realities of caregivers' learning and change of practice. Our aim is to observe and analyze caregivers' perspectives on learning and factors related to these issues. Pursuing principles of qualitative methodology, we did not define theories or an hypothesis at the beginning of our study, thus we kept an open approach in our research process even from the very early steps. Moreover, we modified our research problem several times after we read what has been written in the literature about the topics. Several interviews, conducted in the beginning, also helped us to define the direction of our research and concentrate more on learning issues. Later, as we gained new insight from the field, we narrowed down our research problem once more. Finally, the theoretical framework was developed when

interpreting findings from the field. The framework also has been changed after valuable feedbacks and also intense analysis of the data.

1.5.2 Empirical Data

In order to collect empirical data for our research, we used documents, interviews and direct observations. The combination of different data collection methods enabled us not only to gain insight into caregivers' understanding of change of practice and learning issues, but also to better understand the social and practical context of their work.

Documents

Secondary data is data that is collected by persons or agencies or published by the company for purposes other than solving the problem at hand (Malhotra and Birks, 2000). Documents such as medical journals, Internet publications, brochures, books and others served as a secondary data for our study. We studied these documents in order to gain knowledge about breakthrough projects and other improvement projects, nursing homes and their structure, caregivers and the content of their jobs in Sweden. The result of this study is presented more deeply in the setting part and also in the background in order to facilitate the readers' reading of the findings and analysis.

Interviews

We conducted several interviews as a part of gathering empirical data for this research. The research interview is a data collection method in which participants provide information about their behavior, thoughts, or feelings in response to questions posed by an interviewer. Probably the most important basis for choosing the interview occurs when the nature of the research issue demands a personal, interactive method of data collection (Crano and Brewer, 2002).

We used structured interviews. Structured interviewing involves exposing every respondent in a sample to the same stimuli. The idea is to control the input that triggers each respondent's responses so that the output can be reliably compared. The most common from of structured interviewing is the questionnaire (Bernard, 1994). We developed two questionnaires for different levels of interviewees: one for managers of nursing homes and the other for caregivers.

The study included three groups of interviewees: caregivers (7 interviewees), nurses (6 interviewees) and general managers of nursing homes (3 interviewees). Fifteen interviews were conducted in the period of five weeks in five different nursing homes. We decided to include all three levels in order to evade subjectivity and to be able to see the situation in nursing homes from several different angles. All nursing homes were located in different communities of Gothenburg and were selected randomly. Only one of the nursing homes included in this study has participated in the Breakthrough Project. Interviews lasted from one to one and a half hours; they were audio taped and later transcribed. Nurses and managers of nursing homes were contacted by phone while caregivers were asked to participate by their nurse or manager. Some caregivers were interviewed in pairs because they didn't want to be interviewed alone. As a result, we carried out eleven individual interviews and four interviews including two interviewees. The interviews were done in English.

Additionally, some telephone interviews were also conducted at the Swedish Federation of County Councils (FCC) with project leaders and members who have initiated the Breakthrough Method in Sweden in order to gain a deeper understanding of the Breakthrough Project and its application in the Swedish elderly care system. Most of the interviewees were project managers or directors within the elderly care team.

Observations

We decided to conduct some observations in nursing homes in order to experience the context in which learning, change and routines and daily interactions of caregivers occur. According to Newman and Benz (1998), observation is the most frequent data collection method used in qualitative research. Lofland (1971) asserts that: *In order to capture participants in 'their own terms', one must learn their categories for rendering explicable and coherent the flux of raw reality. That, indeed, is the first principle of qualitative analysis.* We believe that being familiar through observations with the working conditions of caregivers helps us to interpret and analyze the data we had gathered throughout the study.

Observations were conducted during two days in two different departments in one of the nursing homes in Gothenburg. We used participant observations in which, according to Newman and Benz (1998), the observer is involved with the subjects. As a result, we were involved in caregivers' daily work in a nursing home and performing such tasks as changing diapers, cleaning the floor, feeding the patients, helping to prepare the food, and much more. We were accepted as trainees in the nursing home and other caregivers were teaching us how to perform daily routines. During working hours, we also spent some time with other caregivers on coffee breaks and lunches. Therefore, we had an opportunity to observe and be involved in the small talk and other discussions of caregivers. However, it is important to indicate that not speaking Swedish restricted our understanding of communication among caregivers and their communication with patients. Even though many caregivers tried to speak English with us, interaction among the caregivers, especially about the work, was mainly in Swedish.

1.5.3 Chapter Disposition

When attempting to answer research problems and questions in our study, we use the structural approach that differs from the traditional way of presenting research. Contrary to the common way where the theoretical framework is followed by empirical findings and the latter is followed by analysis and conclusion, we present theoretical concepts in a separate part, which is followed by chapters on the learning process and also surrounding factors, combining both empirical findings and analysis. The structure of this study is summarized in Figure 3.

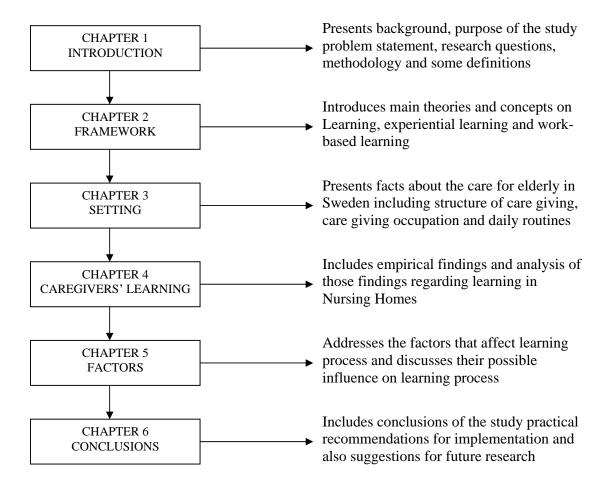


Figure 3: Chapter Disposition in this Study

1.5.4 Definitions

Some important terms and concepts are defined and introduced in this section in order to enable the reader to gain a better understanding of the terms that would be discussed in following sections (See Table 1):

TERM	DEFINITION
Learning Process	The process in which the learner acquires the knowledge and translates it into his\her actions. This process encompasses both acquisition and implementation.
Adaptation/Adoption	The process of adjustment to the new practices, the new ways of doing.
Diffusion/Dissemination	The process of spreading the new practices throughout the organization.
Learning system	The organized and coordinated method or procedure of the formal training in the nursing homes.
Development group	Group of caregivers who are responsible for specific educational topics in nursing homes (for example, nutrition). They meet periodically in order to educate group members and other caregivers in nursing home.
Chain Learning System	The formal training system in nursing homes where one or two selected members of development group are trained in specific subject and responsible for diffusion of the gained knowledge in nursing home.
Daily Practice/Routines	The tasks that caregivers are responsible to carry out during their daily work (more detailed description of routines will be presented in Chapter 2).
Factors	External or internal determinants that might inhibit or foster the caregivers' change and learning processes in nursing homes.

Table 1: Important Definitions in this Study (Created by authors)

2. FRAMEWORK

This section addresses the theoretical overview regarding learning. We strive to present relevant theories in order to provide accurate arguments and analysis in caregivers' learning and related issues. Therefore, we first present how the learning is outlined in this study, and specify the related theory as work-based learning. We also present information regarding the interaction between the learning process and its environment.

Understanding Learning

Many different definitions of learning exist in the literature regarding learning. Several questions are raised by different theorists about the nature of learning such as: is learning a process or is it outcome of the process, is it a conscious or unconscious activity, is it practice based or does it heavily depend on theoretical information load, is it context specific or is there any universal applicability? Hager (2001) emphasizes the ambiguity of the term "learning" and the importance of understanding what is learning. In their review of literature, Fiol and Lyles (1985) also state "There still exists confusion regarding what is learning and how to distinguish it from unreflective change." The definition and depiction of learning varies substantially such as learning as a process, learning as outcome, learning as input, learning as action, etc. Taking into consideration these controversies and the variety of definitions in "learning" literature, it would be beneficial to clarify the framework for learning in this study.

Among the many different theories and approaches that exist in the learning literature, we decided experiential learning best serves the purpose of this study since it is useful to explain how practitioners learn from experience which includes training as well as daily practice itself (Cheetam and Chivers, 2001). Experiential learning theories offer hypotheses about how the learning process works, in some cases suggesting their practical application to adult learning situations. Therefore, in the following we will address experiential learning and specifically focus on work-based learning, which is among the theories under experiential learning.

2.1 Experiential Learning

Experiential Learning is not a single theory but encompasses a range of related concepts and models of learning. Some of these have been used to inform the design of professional development program. They may also be useful in helping to explain how practitioners learn from experience gained (Cheetam, Chievers, 2001). Both of these areas are central to the aims of this research.

The most well-known and widely applied model in experiential learning is Kolb's learning cycle. Kolb (1984), drawing on the work of Lewin (1935), Dewey (1938) and others identifies a number of common propositions about experiential learning shared by earlier theorists (Cheetam and Chievers, 2001). Kolb summarizes these as:

- Learning is best conceived as a process rather than in terms of outcomes
- Learning is a continuous process grounded in experience
- The process of learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world
- Learning is a holistic process of adaptation to the world
- Learning involves transactions between the person and the environment; learning is a process of creating knowledge

(Kolb, 1984, pp.26-37, cited in Cheetam and Chivers, 2001)

Relying on these concerns, Kolb portrays experiential learning in a four polar learning cycles (see Figure 4). Kolb's learning cycle plays an important role in this study for several reasons. First, as mentioned earlier the framework of the learning method in the Breakthrough Project is based on Kolb's learning cycle. It can be followed from the Improvement Model (see page 10, Figure 2) that the learning cycles in the Breakthrough Method have four stages (plan, do, study, act), which correspond with the principles of Kolb's original cycle. Secondly, this study aims to explore learning that occurs through daily experience at work as well as in the training and courses. Kolb's model of experience learning encompasses both forms of learning; formally and through experience.

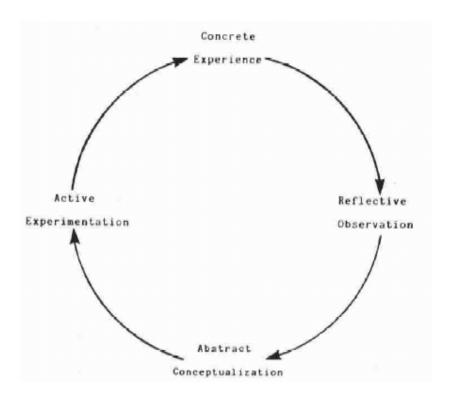


Figure 4: Kolb's Learning Cycle (Sugarman, 1985)

The cyclic nature of the model is important since it emphasizes that learning is a process rather than an outcome. The learner moves from one stage to another until the cycle is completed. At the core of Kolb's model is a simple description of how experience is translated into concepts that can be used to guide the choice of new experiences (Sugarman, 1985). Kolb, (1984, cited in Sheehan and Kearns, 1995) states, *immediate concrete experience is the basis of observations and reflection*. In other words, after the learner goes through the experience, he/she observes the experience and reflects upon the experience analytically. Later, the learner conceptualizes the observations and reflections in order conclude notions or theory from the experience. Then the learner actively tests her/his deductions. This testing gives rise to a new experience and the whole cycle begins again (Kolb, 1984, cited in Sheehan and Kearns, 1995).

Kolb's model is important as being the main framework, clarifying and mapping the process of learning. Some theorists upgraded and interpreted Kolb's original model by bringing other dimensions into the original model. Two of these will be described in the following.

Vassalou (2001) deducts from Kolb's description two main meanings that the learning

process encompasses:

1. The acquisition of skill or know-how, which implies the physical ability to

produce some action.

2. The acquisition of know-why, which implies the ability to articulate a

conceptual understanding of the experience

By this definition, Vassalou (2001) split the cycle into two different parts. Vassalou

(2001) clusters Active Participation and Concrete Experience together as being

acquisition of know-how, since in this stage the learner actively and physically

acquires the new ways. He clusters Abstract Conceptualization and Reflective

Observation as being acquisition of know-why since the learner thinks and reflects on

the experience. This division emphasizes that learning is a process (rather than an

outcome), which includes two different dimensions as being the acquisition of the

knowledge and internalization of the knowledge. According to this definition, the

latter would lead the learner to apply acquired knowledge.

Like Vassalou, Ekholm and Ellström (2001) also make a distinction between

acquisition of know-how and acquisition of know-why in Kolb's model. Moreover,

Ekholm and Ellström (2001) add one more dimension to the model and indicate that

there exist some barriers, which prevent the learner from going through the whole

cycle, and confines the learner in one of the parts. Therefore, Ekholm and Ellström

(2001) agree with Vassalou that the cycle is divided in two different sections.

However Ekholm and Ellström (2001) propose that what creates this distinction are

some surrounding factors.

In this point, it is important to remind the reader that some theorists modify Kolb's

cycle so that participants who do not have adequate academic knowledge may also

understand the principles of the model. Ekholm and Ellström (2001) also use the

modified version of the model in which:

Think= Abstract Conceptualization

Reflect= Reflective Observation

24

Do= Active Participation

Experience= Concrete Experience

The nature and meaning of the model stays the same in this modification.

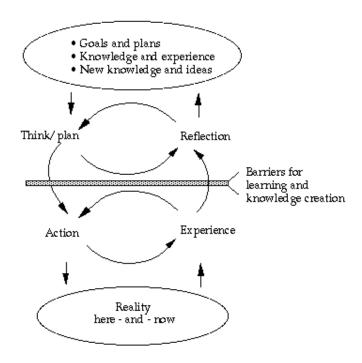


Figure 5: A model for Illustrating Conditions and Barriers for Individual and Collective Learning in an Activity (Ekholm and Ellström 2001)

Ekholm and Ellström (2001) indicate that if possibilities are lacking for reflection of experiences, the learner will be confined in the lower part of the Figure 5. Consequently the learner will continue in old patterns of behavior and new difficulties or problems will be handled simply by doing the same things (Ekholm and Ellström, 2001). The lower part of the cycle represents the change of the practice without any significant learning occurring. In other words, the learner adopts the practice not because she understands and is willing to implement, but because she is told to do so.

In addition to that, the learner might also be confined in the upper part of the cycle. In this part, learners learn through thinking and reflecting upon their actions, for instance, in terms of different alternatives how the work can be. However, the learning that occurs is rhetorical learning, which means that one learns new ways to examine and speak their action, but this does not lead to real action.

Ekholm and Ellström (2001) also state that in order for learning to be implemented in practice, the learner should take all four steps in the process. They also emphasize that it is of great importance to identify the factors, which impede the learning and find ways to deal with those factors. Therefore, we believe that Ekholm and Ellström's modified version of Kolb's model serves the purpose of this study, since it upgrades the model by putting barriers and facilitators into context, which should be addressed in order to assure successful implementation of new routines to the daily practice.

Even though widely accepted and used, there still exist critique towards experiential learning and experiential learning models. Shlesinger (1996, cited in Cheetam and Chievers, 2001) argues that while the learning cycle is relevant, learners in practice jump between these elements in complex ways, that learning is much more fragmented, and often more chaotic that the cycles suggest.

However, the fact that people do learn through experience is beyond challenge. Indeed this is likely to be a major element of professional competence acquisition (Cheetam and Chivers, 2001). As mentioned earlier, experiential learning encompasses many different theories such as adult learning, andragogy and work-based learning (Cheetam and Chivers, 2001). After introducing some general models and concepts of experiential learning, it is important to specify the theory that serves the purpose of this study. Our study focuses on the "caregivers' learning of new routines." Therefore, the scope of learning is limited with work-related topics and concerns. Consequently, we specify our framework with "work-based learning", which will be described and discussed in the following section. It is also important to mention that the Kolb's learning model has been used by several theorists, such as Raelin (1997) and Marsick (1988), when explaining the dynamics of work-based learning; they were discussing that its experiential nature based on task-related issues makes it appropriate to be used as one of the models of learning in work-based learning theories.

2.2 Work-Based Learning

When discussing the learning process of caregivers, it is important to use theories that underline the significance of everyday working practices, and regulatory frameworks that influence those working practices. As a result, we use work-based theory in order to understand caregivers' learning process in nursing homes. Work-based learning is concerned not only with immediate work competencies, but also about future competencies. It is about investment in the general capabilities of employees as well as the specific and technical capabilities. And it's about the utilization of their knowledge and capabilities wherever they might be needed in place and time (Boud and Garrick, 1999).

What is described as either work-based learning or workplace learning in literature is rich both in amount and in variety. While some theorists choose to use workplace learning or work-based learning as equivalent concepts, some of them distinguish workplace learning and work-based learning as different concepts (Rose *et al*, 2001). However, those terms are understood equivalent and will be used interchangeably in our study.

Over the last 50 years there has been growing emphasis placed on the importance of work-related training and development, and more recently this has been extended to the idea of workplace learning. Nevertheless, the issue of work-based learning is surrounded by confusion and indecision (Matthew, 1999). The term "work-based learning" can encompass many things. It can relate to the placement elements, provided as part of a higher education course. It can also refer to formal on-the-job training provided within organization, and it can include the myriad of informal learning experiences that people are exposed throughout their working lives (Cheetham and Chivers, 2001). However, work-based learning is extremely complex and involves more than simple training and development issues. Matthews (1999) emphasizes that most people view workplace learning as limited with a physical location within which they perform the tasks required of their job. However, workplace learning is a considerably broader concept (Matthew, 1999). Following Matthews's (1999) definition, we understand workplace as a broad concept including physical location, shared meanings, ideas, behaviors and attitudes, which determine

the working environment and relationship. Individuals might perceive themselves as part of the workplace even when working in another location physically. A broad definition of workplace learning by Marsick (1987, p. 4, as quoted in NBEET, 1994) emphasizes the interpersonal and contextual influences (Matthew, 1999) and serves as a core definition of workplace learning in this study. The ways individuals learn, and how they respond to change, are key issues within this definition. Marsick defines workplace learning as the way in which individuals or groups acquire, interpret, reorganize, change or assimilate a related cluster of information, skills and feelings. It is also primary to the way in which people construct meaning in their personal and shared organizational lives (1987, p. 4, as quoted in NBEET, 1994, p. 10).

Matthews (1999), referring to Resnick (1987) and Scribner (1986, as cited in NBEET, 1994), argues that learning within the workplace has a number of features, that distinguish it from other types of learning. Learning in the workplace:

- is task focused;
- occurs in a social context characterized by status differences and risk to one's livelihood;
- is collaborative and often grows out of an experience or a problem for which there is no knowledge base;
- occurs in a political and economic context characterized by a currency of favors and pay for knowledge;
- *is cognitively different from learning in schools* (NBEET, 1994, p. 11).

Different approaches exist about how work-based learning is discussed in theories. Many theorists such as De Jong J.A. (1997), Marsick (1988), Mezirow (1985), and Matthews (1999) make a distinction between formal and informal work-based learning. This leads to the discussion of two separate paradigms:

- o Formal (acquisition of knowledge and individual learning within educational institutions).
- Informal (learning through everyday embodied practices; non-educational settings).

The discussion below of formal and informal work-based learning is important for our research. The insight on how professionals learn formally and informally in the workplace will help us to better understand the learning of caregivers. Moreover, it will enable us to develop constructive recommendations on how to implement improvement projects to caregivers' daily practices. The following chapters would address the issues of formal and informal learning.

2.2.1 Formal Work-Based Learning

According to Merriam and Caffarella (1991), formal learning is structured, institutionally sponsored, often classroom-based, with an instructor or trainer planning, implementing and evaluating the learning taking place (cited in Conlon, 2004). Moreover, in the studies of Jacobs and Jones (1995) and Rothwell and Kazanas (1994), formal work-based learning is regarded as structured on-the-job training, which can be described as training related to job characteristics (cited in Zolingen et al, 2000). It is an intentional form of training that contains well-directed pedagogical interventions, in which the workplace functions as a place of learning (De Jong R., 1998, cited in Zolingen et al, 2000). According to Zolingen et al (2000), an additional characteristic of on-the-job training is that it involves intentional learning and, as a consequence, a (formal) training arrangement is required that includes the intended training objectives. Structured on-the-job training may be delivered by a supervisor, an experienced co-worker, a subordinate, or a job coach from outside the organization, or it may be self-directed and thus overseen by the employees themselves. Moreover, according to Malcolm et al (2003), formal on-the-job training or learning uses didactic, teacher-controlled pedagogic approaches; it includes the acquisition of established expert knowledge/understanding/practices. Formal learning may embrace classroom-led instruction, computer-based training, structured handson-application, and operation of a key task or some other traditional planned method (Conlon, 2004).

2.2.2 Informal Work-Based Learning

It is widely argued that much of what we learn, both in an out of the workplace, occurs during informal practice (Conlon, 2004). A study by Marsick and Watkins (1990) concluded that only 20 percent of what employees learn comes from more formalized, structured learning. Instead, they found that personal strategies are most

frequently used, with employees taking time to question, listen, observe, read and reflect on their work environment (cited in Conlon, 2004). Thus, the importance of informal work-based learning cannot be disregarded in our study. However, informal work-based learning did not take as much attention as formal work-based learning in the literature. According to Marsick and Watkins (1990), relatively little appears to be known about how people actually do learn informally.

Informal learning is often described as open-ended, with few time restrictions, no specified curriculum, no predetermined learning objectives, and no external certification (Malcolm et al, 2003, pp. 315-316). The emphasis is primarily on the ubiquity and efficiency of everyday learning, defined in opposition to formal education (Malcolm et al, 2003). Marsick and Volpe (1999) conclude that informal work-based learning is an integration of work with daily routines, triggered by an internal or external jolt, not highly conscious, is often haphazard and influenced by chance, inductively occurs through action and reflection, and is linked to the learning of others (cited in Conlon, 2004). Moreover, employees use informal work-based learning to obtain help, information or support, learn from alternative viewpoints, gain ability to give greater feedback, consider alternative ways to think and behave (planned or unplanned), reflect on processes to assess learning experience outcomes, and to make choices on where to focus their attention (Conlon, 2004). Thus, informal work-based learning often occurs through sharing experience, it is unintentional and unstructured. It occurs while performing the task or after the task is performed.

According to Brown and Duguid (1991), informal learning is important since it fulfils the gap that exists between formal description of work and working reality. The working reality includes many dilemmas, inconsistencies, and unpredictability that are not reflected in the formal description of work by an organization. People do learn through practices because formal training and courses provided by the organizations underestimate the real conditions of work (Brown and Duguid, 1991).

To summarize, informal work-based learning takes place through participation in work and interactions with social partners and practices. This informal work-based learning can also be part of a so-called "situated learning" or learning that happens in "communities of practice," which is a learning approach that discusses the importance

of social context and communities in learning. Since the learning of caregivers can be viewed as a social process that takes place in the interaction of people, it is important to look deeper into the concept of community of practice. By doing that we would be able to understand better the learning realities of caregivers and how their learning in nursing homes occurs. The concept of communities of practice is presented below.

2.2.3 Communities-of-Practice

According to Brown and Duguid (1991), work-based learning is best understood in terms of the communities being formed or joined and personal identities being changed. Learners are acquiring not explicit, formal "expert knowledge", but the embodied ability to behave as community members. Thus, looking at theory of community of practice will provide the understanding of how people in the organization learn and share knowledge informally.

Jubert (1999, p. 166) defines community of practice as (a) flexible group of professionals, informally bound by common interests, who interact through interdependent tasks guided by a common purpose thereby embodying a store of common knowledge (cited in Davenport, 2001, p.62). Community of practice shares knowledge, learns together and creates common practice. Community members frequently help each other to solve problems and develop new approaches for their field. This makes it easier for community of practice to learn together (McDermott, 1999).

Wenger and Snyder (2000) suggest that the community of practice draws its strength from the fact that it is informal, driven by the desire to share expertise, sets its own agenda, finds its own 'shape' and is sustained by the interest and passion of participants. Lave and Wenger (1990) argue that learning, understanding and interpretation involve a great deal that is not explicit or explicable, developed and framed in a crucially communal context (cited in Brown and Duguid, 1991).

Having described working and learning in terms of communities, we would like to mention that it is important to understand the distinction between groups/teams and communities of practice for the purposes of this study. In their study, Brown and Duguid (1991) distinguish canonical or formal groups/teams and non-canonical or

informal groups (or communities of practice) within the organization. Canonical groups are recognized and fostered by organizations, non-canonical groups or community-of-practice, as discussed before, are not organized and directed by the organization. Wenger and Snyder (2000) also describe formal groups/teams as those that have common goals and specific job requirements. Communities of practice are different from formal or canonical groups/teams. Brown and Duguid (1991) define communities as fluid and interpenetrative. Their shape and membership emerges in the process of activity, they are not created to carry out a task and not recognized by the organization. Moreover, membership in communities of practice is self-selected. People in such communities tend to know when and if they should join (Wegner and Snyder, 2000).

According to Brown and Duguid (2001), communities of practice offer a particularly helpful level of analysis for looking at work and learning. Communities of practice are significant repositories for the development, maintenance, and reproduction of knowledge. Joining such a community gives access to its collective knowledge. Therefore, we see community of practice as a significant concept when investigating learning issues in nursing homes: it enables us to understand how caregivers' learning occurs and what is involved in their learning process. Moreover, it is worth mentioning that the ability of organizations to adapt continuously and respond proactively to environmental change is, to a significant degree, determined by community of practice. Members of community of practice are often simultaneously members of that organization. Thus, according to Constant (1987, cited in Brown and Duguid, 2001), community of practice also creates a vital link between organizational strategy and changes emerging outside the organization.

2.3 Learning and Surrounding Factors

As discussed before, work-based learning occurs in the social context. The learning process usually includes the organization itself, immediate colleagues, and the relevant discipline or profession.

Furthermore, some theorists suggest that often learning effectiveness is dependent on the environment for learning (Teare 1998). For example, Sluis (2004) states that the working environment around learning should be considered as an important source of influence on learning as it can play a facilitating or inhibiting role (Sluis 2004). Moreover, the model of Ekholm and Ellström (2001) (see Figure 5) also emphasizes the role of different factors in the learning process by upgrading Kolb's Model. However, their study neither provides a structured definition of factors nor discusses the effects of those factors in relation to learning.

We believe the need to understand factors around the learning process in order to be able to answer the research question. Different researchers, characterize different perceptions of those factors. Fiol and Lyles (1985, p.804) identify four factors that affect the probability that learning will occur: culture, strategy, structure and environment. Mumford (1990) calls attention to the interaction among learning and such factors as networks, peers, subordinates, bosses, and mentors. Even though identified and evaluated differently, all of those theorists emphasize the influence of different factors on the learning process. Moreover, according to some theorists such as Mezirow (1985), Marsick (1988) and De Jong J.A. (1997), work-based learning cannot be explained only by a technical paradigm. The appropriate description should include task-related, self-related and environment-related features. Illeris (2004) also discusses the significance of surrounding factors in an individual's learning process. Illeris (2004), based on the original model developed by Jørgensen and Warring (2001), reproduces a model that discusses both technical and social features of learning environment and its affect on the learning process.

Illeris (2004) indicates that learning takes place in a dynamic relation between the employees' learning processes, the communities at the workplace and the enterprise as a technical-organizational system.

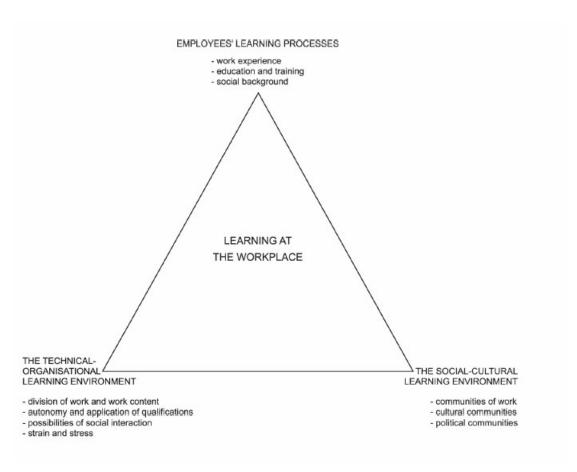


Figure 6: A Model for Learning at the Workplace Developed by Jørgensen and Warring (2001), reproduced by Illeris (2004)

Based on this, in the background the triangular model is set up between the three main components in workplace learning: the technical-organizational learning environment, the social learning environment, and the employees' work processes. Illeris (2004) identifies technical organizational environment in relation to the enterprise or organization itself and the learning is primarily fostered by the organizational needs. In relation to the social learning environment, it is in particular social and cultural matters that are important for learning possibilities.

However, Illeris (2004) also calls attention to the interaction between the individual employee and the learning environment in which learning occurs. Therefore, Illeris (2004) emphasizes the necessity to analyze the employees' background, experience and future perspectives in order to understand the dynamism in the encounter between learning environment and learning processes. Illeris (2004, p.432) states that: *The*

individual elements in the model function in a dynamic relation to each other. For example, the learning process of the individual employee is closely interwoven with the development in the social learning environment. In the same way as learning in the workplace must be understood as a dynamic relationship between the different elements in the model, the elements are in turn dependant on a number of matters at the societal level.

3. SETTING

In order to understand how caregivers learn and implement what they have learned, it is important to understand the care-giving occupation, characteristics of a caregiver, the working environment of caregivers, and daily routines in elderly care organizations. Therefore, in order to provide necessary background information, in this section, we introduce the structure of the Swedish elderly care system; we describe the care giving occupation and present social-demographic characteristics of caregivers. Lastly, we explain daily routines in Nursing homes in order to clarify duties and responsibilities of a caregiver.

3.1 Elderly Care in Sweden

Elderly care in Sweden is mainly structured around two different services, homebased care and special accommodations. "Special accommodation" is the focus in this study and all the caregivers included in the study are working in special accommodation facilities. This group includes residential with special services such as old peoples' homes, nursing homes, group dwelling for people with dementia and group dwelling for people with psychiatric illness.²⁶

Various institutions under "special accommodation" have become more and more similar in appearance and orientation and also with respect to the state of health of the residents, staff ratios and routines. ²⁷ Homes for the elderly accommodate people with slight dementia or similar conditions, with reduced memory function, and with age related weakness or physical disease. Nursing homes are accommodating people in need of extensive personal and/or medical care or people with failing functions.

²⁷ Care Work with Older People, 2002-2003, p.18

²⁶ Care Work with Older People, 2002-2003, p.34

3.2 Care Workers

Main care giving occupations of elderly care are auxiliary Nurses (undersköterska) and home helpers (vårdbiträde). Home helpers are responsible for the care service for those who are living in their own house or living in a service house. Service houses usually accommodate the elderly who are in fairly good condition but still need some help in order to manage daily activities. Home service itself includes shopping, laundry, and walks or help making errands. Everything that a person can't manage himself or herself, they are entitled to receive help with.

Auxiliary nurses are working in special accommodations such as nursing homes (sjukhem) or old peoples' homes (äldreboende). Being an auxiliary nurse is more demanding since the condition of the care receivers in nursing homes or old peoples' homes are more serious than home services. An auxiliary nurse is responsible for helping the residents with everything they need help with, such as medicines, toilet visits, activities, walks, minor shopping, escort to the doctor or dentist and also doing laundry, cleaning the residents' rooms/flats. Every auxiliary nurse is responsible for one or two patients in the residence. This means that the auxiliary nurse has a special responsibility for this care receiver to give him/her a shower once a week and also to be the contact person for relatives.

It is important to indicate that all interviewees and people who were involved in the observation are auxiliary nurses. The definition of "caregiver" is used in this study to represent auxiliary nurses in nursing homes or old people' homes.

A fulltime caregiver works 37 hours a week and the workday varies between five to eight hours. Many auxiliary nurses arrange their schedule in agreement with their colleagues, so that they can decide who will be working the evening shift, weekends etc. There are also caregivers who work 70, 85 or 90 percent. They generally do not work on weekends and night shifts. In Sweden, 90 percent of caregivers are female (in

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²⁸ Care Work with Older People, 2002-2003, p.47

2000) and nearly 40 percent of the care workers are 45 years or older²⁹ (Johansson, Noren, 2002).

The necessary education to become a caregiver can be obtained from two different sources: gymnasium and adult education centers (Komvux). In gymnasium, there is a three-year healthcare program, which also offers specified courses for rehabilitation. The programs in adult education include both basic education corresponding to compulsory basic school and voluntary education such as vocational courses. The different levels of education requirements in nursing homes or special accommodations based on the occupation can be followed in Table 2.

Occupation	Education	Salary
Home helper	Upper secondary school Health care programme	Ca 1700 Euro/m
Auxiliary nurse	Upper secondary school Health care programme	Ca 1800 Euro/m
Nurse	3 years university studies	ca 2200 Euro/m
Home help administrator	3 years University studies	ca 2200 Euro/m

Table 2: Facts about the Care Givers Involved in the Care of the Elderly 30

Regarding education, Swedish care workers are the second best educated care workers in Europe. According to comparative studies, the job stability and job rotation for the Swedish care workers cannot be said to be the best since 12.4 percent (in 2000) of the care workers are looking for another job. This is a high percentage compared with other occupations in Sweden, and also the highest in Europe (Johansson, Noren, 2002, p. 44).³¹

In order to understand care giving occupation, it is important to discuss further characteristics and perceived difficulties of care giving occupation. Care giving traditionally is both activities and feelings. (Ekholm and Ellström, 2001) As discussed earlier care giving can be characterized as a complex work with influences from

³¹ Caregivers including: children nurses, preschool teachers, child minders, auxiliary nurses and nursing assistants

²⁹ Caregivers including: children nurses, preschool teachers, child minders, auxiliary nurses and nursing assistants

³⁰ Care Work with Older People, 2002-2003, p. 49

³¹ Conscissors including children pursus proschool

various occupational and organizational cultures. In broad terms care giving is a concept encompassing a wide range of human experiences that have to do with feelings, concern for others and taking charge of the well-being of others (Ekholm and Ellström, 2001).

Care giving is identified as a physically and psychologically demanding job by caregivers. The responsibilities such as lifting the care receiver, carrying them to bed or to their wheelchair, or helping them to wash are perceived physically hard to carry out. Many caregivers indicated that they have some physical problems in the back and some of them even have to quit the job because of orthopedic problems.

In addition to that, caregivers also indicated other difficulties regarding the content of the job apart from physical challenges. First, many of caregivers find it difficult to deal with patients who have mental diseases such as dementia. Another difficulty mentioned is the interaction with relatives. In many of the nursing homes, if the caregiver is responsible for the care receiver, he/she should also be the "contact person" for the relatives. This means that the caregiver needs to answer their questions and collaborate with them about the condition of the patient. Caregivers stated that it is frustrating when the relatives cannot accept the recent condition of the care receiver and react in an aggressive way towards the caregiver.

3.3 Daily Routines

Daily routines are more or the less the same in many of the nursing homes or old peoples' homes. The routines during the day are connected to the meal times. In some of the nursing homes caregivers are also responsible for cooking the lunch and dinner, while in some of the cases the nursing home buys the dinner from another facility or has a special kitchen staff. In all of the cases, it is the caregiver's responsibility to prepare breakfasts.

The general flow of daily routines is presented below in Table 3. Even though timing might be different in different nursing homes and old peoples` homes, as mentioned before, the general description of the routines are usually the same. We believe that it is important to discuss daily routines in detail based on two reasons. First, this would

give the reader the opportunity to compare the existing situation and what will change in the current situation. Second, this will clarify how caregivers would be affected by the new requirements.

06:45	The day shift starts. The staff goes through the daily report. Thereafter the residents are assisted with their morning routines.
09:00	Breakfast is served.
10:00-11:00	Activities. The activities of the day are posted on the notice board.
	Lunch is served. People who want to rest afterwards will be assisted
12:00	to do so.
13:00	The evening shift begins.
15:00	Afternoon coffee is served.
17:00	Supper is served followed by coffee.
18:00-21:00	Bedtime is within these three hours. The staff assists all the residents.
21:00	The night shift begins with the staff going through the day's report.
21:30,02:00 and 05:00	The staff takes turns to check on all the inhabitants.

Table 3: Daily Routines in Special Accommodation³²

The dayshift starts at 06:45 and the morning procedures begin with a short oral report from the night personnel. Caregivers discuss and divide the work among the group. Thereafter, they attend to care receivers in the morning routines. Morning routines include:

- Helping the care receiver to wash their face and hands
- Taking the care-receiver to the bathroom
- Changing the pads, if the patient has incontinence problems
- Assisting the care receiver with dressing up
- Making the bed
- Cleaning the care receiver's room if it is needed

Afterwards, the care receivers are taken to the main kitchen where breakfast is served. Many nursing homes are flexible about the timing for the breakfast. If the care receiver asks to sleep longer, he/she usually takes the breakfast later. Caregivers assist care receivers who are not able to eat by themselves during the meals. After the breakfast, some nursing homes provide several different types of activities for care

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³² Care Work with Older People, 2003-2004, p 41

receivers. It is important to indicate that the type and frequency of the activities vary substantially based on the nursing homes. Some nursing homes provide activities everyday; some of them a few days a week and some nursing homes do not provide activities at all. The type of activities can vary from playing bingo to taking a walk outside or to watch television together.

4. CAREGIVERS' LEARNING PROCESSES

The learning in nursing homes can be described as the learning that occurs at a workplace. Caregivers often learn at work through practicing, sharing experiences, and participating in on-the-job training. Moreover, their learning is task-forced and collaborative; it occurs in a social environment and is different from learning at schools (Matthews, 1999). Therefore, the learning of caregivers in nursing homes can be defined as work-based learning.

In this chapter we will address the learning issues of caregivers. We use work-based learning approaches presented in our framework to interpret and analyze how caregivers learn in nursing homes. When analyzing the formal learning of caregivers, we use definitions and concepts presented in formal work-based learning, for example on-the-job training. When analyzing informal learning of caregivers, we involve informal work-based learning concepts and particularly community of practice theory. Using those concepts enables us to better understand the learning of caregivers and the issues involved.

4.1 Formal Work-Based Learning in Nursing Homes

There are different types of formal courses in nursing homes including product-related courses (for example, incontinence), medical courses (for example, nutrition, medicine, dementia, diabetics), social courses (for example, communication with relatives, ethics) and many more. These courses are provided by the municipality, companies, universities, or hospitals. Some of the courses are held inside and some outside of the nursing home. The outside locations include such places as universities, hospital, companies, municipal education centers, and others. Many nursing homes also support further education of the caregivers in an adult education center (Komvux) or at the university. Some courses are obligatory by the municipality and compulsory for all caregivers; some courses are not obligatory for all caregivers and managers of nursing homes usually decide who should attend what course.

Every nursing home has a budget for courses and the budget is normally provided by the municipality. While some courses are financed from this budget, other courses might be financed by the municipality, and thus are free of charge for nursing homes. There are also some free courses that are provided by companies, for example product-related training. Most courses are held during working hours, thus enabling caregivers to attend during the workday. However, if the caregivers attend the obligatory courses during their free time, they are paid for the hours they spent at the course.

Every nursing home has a formal system of learning, for example formal on-the-job training for newcomers and healthcare program students. This is a structured, planned instruction occurring in nursing homes where a new caregiver or a healthcare student has to follow an experienced caregiver for certain period of time, usually from four to six weeks. It is worth mentioning that even though the newcomer might have considerable experience as a caregiver before in another nursing home, she or he still has to undertake the on-the-job training in the new nursing home. The objective of this training is to learn the routines that are specific for this particular nursing home.

Moreover, in many nursing homes, formal learning is characterized by a so-called chain learning system. The term "chain learning system" is suggested by us in order to describe specific formal learning systems in nursing homes. This chain learning system means that there are caregivers in nursing homes who are specially educated or trained in a certain topic (usually one or two caregivers in each topic, for example nutrition, dementia, or any other). These one or two caregivers are responsible for the education and training of their other colleagues in that specific topic. The caregivers, specializing in one or another topic, come from different departments of nursing homes and form development groups such as incontinence groups, nutrition groups or other groups. Based on Duguid and Brown (1991), these development groups can be identified as formal canonical groups that constitute formal learning systems in nursing homes.

The manager usually chooses the caregivers and the topic they are responsible for. Managers might take into consideration the interest of caregivers when deciding who is going to be specialized in which topic. This decision is also based on information received during annual meetings where caregivers, among other issues, discuss their educational needs with the managers. After being appointed responsible for one topic,

caregivers undertake different courses related to that topic and later educate other colleagues in their nursing home. This happens in the form of formal lectures or more spontaneous support during performing daily tasks. Once selected to be an expert in a specific area, these caregivers have a formal responsibility to provide support and information for the others. Thus, the aim of the formal chain learning system in nursing homes is to diffuse expertise throughout the organization so that every caregiver will have the same knowledge.

There are several benefits of the formal chain learning system. First, it was indicated by managers in nursing homes that this learning system is highly cost and time effective. Second, it brings confidence and in-house support as caregivers can always ask for help and necessary information from their expert colleagues. Third, when given the responsibility for a specific topic, caregivers were more committed to learn and spread the knowledge throughout the organization. This leads to conclusion that "chain" learning is an efficient tool of formal learning systems in nursing homes, where the knowledge is acquired and shared by caregivers based on their direct involvement.

According to Malcolm (2003), De Jong J.A. (1997) and others theorists, formal learning is also often referred to formal on-the-job training that embraces classroom-based training, structured hands-on-application and instructions in the workplace. In nursing homes, there exists a lot of formal on-the-job training. These are normally held in classes, in big or small groups, and they use teacher-controlled methods of teaching. Most caregivers pointed out that these training are of great importance for them for two reasons. First, caregivers believe that training give them a different perspective on their daily practice and thus helps to provide better care. Second, medicines and other products used in care-giving sector are developing very fast; thus, caregivers indicated that it is crucial for them to be updated about these developments through formal courses and training. Also, if caregivers need to know something related to their work, they also use the Internet, books, medical journals, and internal documents in the nursing home.

When discussing what makes it easy or difficult to learn during formal training, caregivers indicate several factors. Most of them reflect methods that are used during

training. The size of the group was mentioned as an important factor in training: caregivers indicated that in small groups it is easier to interact with a tutor. Moreover, they also feel more involved when studying in small groups. Another factor that was mentioned is the opportunity to practice during training: caregivers indicated that it was easier to remember and apply what has been taught if they could practice. Most of them stated that they prefer to practice or have a workshop during the course instead of just listening to lectures. ... We have to practice it (product) on each other and (if) it is a small group, we practice and we can feel it (product) so that is good...so I will feel how to feel to be a patient when you are helpless and lying there.

Moreover, caregivers also indicated that it is easier to understand courses when they are not complicated and done on the basic level both in the content and language. They also stated that if it is easier to relate content of the course to reality, it is easier to understand it. Having the courses in their workplace was also mentioned as a facilitating factor. Caregivers indicated that having courses in a familiar environment makes them feel relaxed, and thus understand the course better. Another important factor that was brought up is the possibility for assignments: caregivers pointed out that searching for information for assignments helps them to understand and learn the topic better. Moreover, getting notes from the tutor aids them in following the training and later enables them to share information with colleagues. It has been said that having a personal interest in the topic also helps to understand courses better.

To summarize, Figure 7 represents the factors that caregivers indicated as the most important when discussing formal on-the-job training and what makes it easier or more difficult to learn.

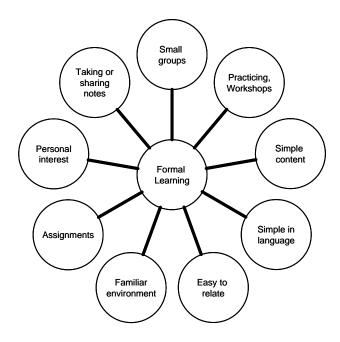


Figure 7: Factors that Facilitate or Inhibit Learning in Formal Training (summarized by authors)

It is important to mention that training providers can have a greater impact on some of the factors and smaller on others. For example, it is easy to control size of the group, share notes or conduct workshops. However, it is more difficult to foster personal interest in the topic.

4.2 Informal Work-Based Learning in Nursing Homes

The most common answer to the question "How do you learn in this nursing home?" was "from my colleagues and through experience." When caregivers need to know something related to their work, the first thing they do is they ask their colleagues. It is important to mention that when talking about the relations with "colleagues", caregivers were always talking about other caregivers who worked with them on the same level or in the same group. Nurses and managers were not included in the same "colleagues" group and the working relationship with them was mentioned separately. The only case when caregivers consult nurses or managers is when their colleagues are not able to help them. Moreover, if caregivers have a problem or question, they try to find solutions collectively. Also, there is a strong culture of information and

knowledge sharing through the conversations during coffee or lunch breaks or during daily activities. According to the theories presented in the framework chapter, such a working and learning environment can be interpreted as a community of practice where learning happens not only in formal groups/teams created by management, but also in everyday practice where caregivers learn by observation, asking on the spot, or sharing common expertise when performing daily tasks. These communities of practice in nursing homes are not organized by management, they are informal, sustained by the interests of caregivers and don't have specific goals or responsibilities (Wegner and Snyder, 2000).

Moreover, as we discussed before from Brown and Duguid (1991) and Lave and Wenger (1990), caregivers as community of practice members frequently help each other to solve work-related problems. Care giving has a very strong culture of collaboration and support when performing daily routines or sharing knowledge. As indicated by one caregiver: *Because it's a (type of) work where we have to help each other, otherwise it will not work out.*

If some caregivers have time, they try to help each other in order to create additional free time that can be used to provide more attention for care receivers. Moreover, many daily activities, for example lifting or washing the patient, are carried out by caregivers in pairs. There are no formal rules in nursing homes obliging them to help each other. Also, no rules say who will help whom. While performing tasks in pairs, caregivers also discuss work-related issues, share information and talk about private things.

In nursing homes, less experienced caregivers learn through observing and following the more experienced ones. Despite the difference in experience, the ones who had formal education in care giving usually help those who don't. This knowledge sharing and learning through practice is one of the attributes of communities of practice. This was also emphasized by the caregivers: *They (experienced caregivers) teach you things and they hope that you will do the same as them. So, it is quite equal. ...and qualified nurses are also very nice. They are helpful.*

As we mentioned before, caregivers also emphasized that they learn a lot not only during formal classes but also through experience at work. This also supports the argument of Marsick and Watkins (1990), that learning often takes place informally when performing daily routines. This kind of learning is not highly conscious, occurs through action and reflection, and is linked to the learning's of other caregivers (Marsick and Volpe, 1999). According to Brown and Duguid (1991), working and learning are inseparable; learning at work occurs through experience and practice. Caregivers emphasized that during many years of their work experience they learned a lot through practicing at work. During observation and interviews, we identified two main reasons why learning through work experience is highly significant for caregivers. First, as Duguid and Brown (1991) describe, there is a gap between the formal description of the caregivers' work and their working reality. The working reality of caregivers is complex and includes a lot of unpredictable situations that needed to be solved quickly. The formal description of caregivers' work overlooks what it really takes to get the job done. Caregivers learn through practicing because formal training underestimates the real conditions of their work. Relying on Brown and Duguid (1991), we can derive that learning through daily experience is important for caregivers because it allows gaining the knowledge and skills necessary to perform their work.

We see informal learning that occurs in community of practice and through daily experience at work as the essential way of spreading knowledge in nursing homes. Very often it is the most efficient way to integrate new routines or practice in caregivers work, as caregivers will share the expertise by performing tasks or obtaining help. As there is a lot of trust in a community of practice, this will allow greater acceptance of new practices into everyday work. At the same time, learning from more experienced caregivers may create a threat to new practices as they can teach the newcomers only the old traditional ways of performing work, thus not integrating new ideas and new knowledge into everyday work.

4.3 Bridging Formal and Informal Learning: Towards Learning Reality

Many theorists make a distinction between formal and informal ways of learning. However they emphasize a complementary nature of formal and informal learning. According to Ellström (2001) and Barnett (1999), informal learning is important but not sufficient for the acquisition of knowledge and needs to be supported by formal education. At the same time, formal education needs to be supported by informal learning in order to be effective. Marsick (1988) also calls attention to look at both formal and informal aspects of learning. She indicates that training and education are just delivery systems. Therefore, it is important to look at informal learning where individuals or groups acquire, interpret, and reorganize a related cluster of information skills and feelings.

As Brown and Duguid also suggest (1991), in order for learning take place, the organization should support formal systems with informal ones and vice versa. They argue that looking only at canonical groups will not provide a clear picture of how work or learning is actually organized and accomplished. In their study of communities of practice, Brown and Duguid (1991, p.45) state: We are not arguing that communities simply can and should work without assistance from trainers and corporations in general. Indeed, we suggest that situations inevitably occur when group improvisation simply cannot bridge the gap between what the corporation supplies and what a particular community actually needs. What we are claiming is that corporations must provide support that corresponds to the real needs of the community rather than just the abstract expectations of the corporation. Therefore, the formal learning system delivers knowledge or information available. However, this does not necessarily mean that the knowledge and information delivered will be diffused in the organization and reach all individuals. This brings the importance of the informal learning into the discussion. The latter enables the diffusion of knowledge, information and even ideas throughout the organization.

The learning system in nursing homes is a good example of combination of formal and informal learning approaches. In Figure 8, we present a summary of what is involved in caregivers' learning.

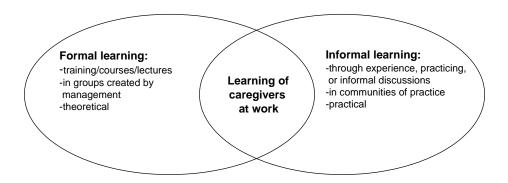


Figure 8: Learning of Caregivers in Nursing Homes (developed by authors, inspired by model of Svensson *et al* 2004, p. 480)

As it can be seen from Figure 8, the left circle represents a formal learning system in nursing homes and includes on-the-job training, courses and workshops. This formal learning is supported by management of nursing homes where learning occurs in formal or canonical groups. Mainly, the theoretical knowledge is shared in these formal groups. At the same time, a lot of caregivers' learning takes place informally. The right circle includes informal learning where caregivers learn through informal discussions, by sharing experience when performing daily routines or practicing. Largely, practical knowledge is shared in non-canonical groups or communities of practice that are not created by management of nursing homes. Based on our findings, we can conclude that formal and informal learning of caregivers compliment each other: while formal learning serves as a source of new knowledge and information, informal learning in nursing homes helps to acquire this knowledge and share experience effectively throughout the organization. Often with the help of informal learning caregivers gain meaning to what was learned formally. This leads to the conclusion that formal and informal learning systems in nursing homes are inseparable and should be observed as one whole.

5. FACTORS AFFECTING THE LEARNING PROCESS

5.1 Understanding Factors

As mentioned earlier, this study focuses on how to introduce and implement new routines into the daily practice of caregivers. In this section, we will explore how surrounding factors affect caregivers' learning and use of new practices.

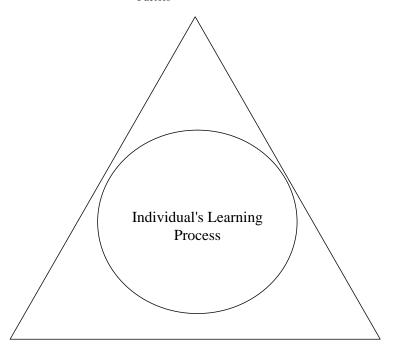
Findings of this study uncover three important groups of factors that have an influence on learning the new practice. Those groups are named as individual factors, structural-organizational factors, and social-organizational factors. The interaction between those factors can be followed in Figure 9. We are inspired by Illeris's model (2001) (see Figure 6) in constructing and mapping the surrounding factors. However, it can be followed in Figure 9 that our model is different from Illeris's original model. Therefore it is important to explain the main differences and reasons related to those:

- Firstly, Illeris's original model makes a distinction between an individual's learning process and their environment. Illeris identifies surrounding factors as a part of two different "environments": technical-organizational environment and social organizational environment. However, in this model we cluster influential elements as group of factors. In our model (see Figure 9), an individual's learning process is placed in the heart of the pyramid and all three points around are identified as external factors that have an influence on this learning process. The learning process encompasses acquisition and also use of the learning, which results in a change in practice.
- Second, even though Illeris (2004) addresses some individual factors, which
 affect the learning process, he addresses those factors as a part of an
 individual's learning process. In our model we discussed individual factors as
 a separate group of factors that are as influential as technical-organizational
 and social-organizational factors.
- Lastly, all the factor groups in our model are classified based on the source of
 effect. This means that individual factors are directly related to the
 individual's qualities and directly affects the individual. Therefore, job related
 issues are analyzed under the individual factors since the findings of this study

show that factors related to a job have a direct influence in the individual learning of caregivers. However, technical-organizational factors represent a group of factors that have a broader affect in overall organization as well as individual, for example decision making.

Individual Factors

- Job Related Factors
- Social and Demographical Factors



The Technical-Organizational Factors (Structural Factors)

- Decision Making
- Management Style
- Feedback

The Social Cultural Factors (Social Factors)

- Working Relations
- Cultural Communities

Figure 9: Individual's Learning Process and Influential Factors (Adapted from Illeris 2003, p. 432)

5.2 Individual Factors

5.2.1 Demographical Background

Social and demographical characteristics of caregivers such as age, gender, and experience are identified to be influential in the process of learning and the use of new routines. Those factors will be addressed in the following section:

Age and Experience

The findings of this study revealed that the age and future plans of the caregiver play an important role in implementing new practices. As mentioned earlier, the average age of a caregiver in Sweden is around 45, and some older caregivers are waiting for retirement. In their study investigating the learning of caregivers, Ekholm and Ellström (2001) also presented significant differences between older (more experienced) and younger (less experienced) caregivers in perceptions and in the way they perform and learn their routines. Several main differences between older and younger caregivers can be followed in the Table 4. The table encompasses the findings of this study as well as some findings from Ekholm and Ellström's (2001) research.

	Older	Younger
1. Belief	Learning only occurs in practice	Stronger belief in the need for theoretical knowledge
2. Background Education	Lower educational background	Higher educational background
3. Decision Making	Greater power in decision making process of organization based on experience	3. Reluctant participation in decisions based on lower confidence caused by lack of experience
4. Influence in Transferring Practice	4. Greater Power in transforming the practice because of the "learn from the experienced" tradition of care giving	4. Full respect to the older caregivers in transferring the routines
5. Discussion	5. Not much discussion about the ways of practice	5. Greater discussion about their practices
6. Attitude Towards Change	6. Strictly attached to old habits	6. More open towards new ideas

Table 4: Different Aspects between Older and Younger Caregivers (Created by authors)

We believe that it is important to deeply analyze those differences between younger and older caregivers as indicated in Table 4.

1) Belief: Ekholm and Ellström (2001) reported that in the younger working group of caregivers (average age 28), there was a prevailing strong belief in the need for theoretical knowledge in care giving. In the older group (average age 54), however, the majority of caregivers did not feel that theoretical knowledge was necessary, rather learning occurs only in practice.

- 2) Background Education: Findings of this study show a higher degree of background education- not only in social services but also in various areas- among young care givers. Ekholm and Ellström (2001) also noted that caregivers in the younger group have higher technical educations within the social services area than the older group.
- 3) Decision Making: Many young caregivers (interviewed in this study) indicated that older caregivers have more experience and they believe that their knowledge is superior to younger caregivers. Therefore, when young caregivers are willing to accept or implement a new practice, they undergo some conflicts with older caregivers. As indicated by one nurse: Sometimes there are personnel coming, newly educated from the school and they are a bit younger in years or something, and they get a lot of problems when they want to take up new ideas. The old personnel don't want to accept this. So it is a conflict.
- 4) Influence in Transferring the Practice: Many of the nursing homes have a very strong culture of "learning from an experienced one." This increases the credibility of the old members and clarifies that older members usually transfer the routines to the new members. Therefore, more experienced members have the power to control how and what they will teach to the newcomers.
- 5) Discussion: Another difference between the older and younger caregivers' perception is about the disposition to discuss the work. One opinion among younger caregivers is that they are more disposed to confer with one another about how work should be performed and that older caregivers do what they have always done without discussing it. This reveals that the new practices are more likely to diffuse among younger caregivers since they have the tendency to share and discuss about how to improve their daily work.
- 6) Attitude Towards Change: Many caregivers and managers indicated that it is difficult to introduce any change in the routines since older caregivers, who usually comprise the majority in nursing homes, do not welcome changes. It was indicated that older caregivers are strictly attached to their old habits. As indicated by a nurse: It is difficult because most of all the care helpers don't want any changes. They often

talk about how it was ten years ago and many of them women, because there are a few men working here, they are going to retire soon. So they are looking forward to that (retirement) as well. So maybe they are not on concentrated to this job. They don't give too much energy so they don't want changes really. They don't take it positive.

How Age and Experience Affect Implementation

It is easier to disseminate the new practice among younger caregivers, since young care givers are

- More open to new ideas and changes.
- More likely to discuss everyday practice with their colleagues.
- Willing to try to exchange ideas about how to improve their daily practice.

Moreover, many younger caregivers believe in the need for a stronger theoretical background. In addition, most of them are newly graduated, and their familiarity with classroom education, workshops, assignments or group works is easier to revive compared with older caregivers. Therefore, young caregivers usually respond more positively to the training sessions when it comes to acquiring new practices.

On the other hand, it is also important to indicate that there is a strong tradition of "learning from the experienced" in nursing homes. This means that older caregivers teach the routines to newcomers. Therefore, older caregivers have greater power to disseminate and transfer the old practice that they would like to pursue. On this point strong resistance from older caregivers creates a barrier for the implementation of the new routines and also for the learning of younger caregivers.

Gender

As mentioned earlier in social-demographic characteristics, most of the caregivers working in nursing homes are female. Caregivers in the interviews pointed out that fact affects how they interact with each other. The gender factor is emphasized in interviews as a part of the definition of working relations. At the same time, a female working environment is considered as supportive and cooperative by caregivers. Caregivers also stated that they are trying to help each other when it's needed and

when they can. It was mentioned, despite having qualified and unqualified caregivers, those who had formal education in caregiving usually help the ones who did not.

How does gender affect Implementation

The issue of gender is indicated as a positive as well as a negative influence. Many caregivers indicated that a female dominated community leads to less open communication among caregivers as well as between caregivers and management. It has been emphasized that during the meetings with management many caregivers prefer to keep silent, even though they complain after the meetings to their colleagues. Some caregivers even identify this habit as "backstabbing". This problem in communication plays an inhibiting role in the learning of caregivers since it is difficult to discover how they respond to the suggested changes. Many of caregivers do not give their reaction straightforwardly. Therefore, it would be difficult for managers or project leaders to discover the problematic issues and discuss with caregivers about the problems they face during the improvement efforts. However, it is difficult to assess what the underlying reason is behind the lack of straightforward feedback. The root cause can be cultural or educational as well as gender related.

On the other hand, as indicated earlier, a female working environment was also identified as being supportive and this plays an important role in the diffusion of new practices in the organization. Thus, if the majority of caregivers are in favor of the change and improvement efforts, they will also be encouraging for other caregivers to pursue the new ways of working.

5.2.2 Job Related Factors

Hodkinson et al. (2000) indicate that focusing on the work-based learning requires examining how the design and social organization of the job encourage or discourage learning. The job itself has the potential to encompass resistance as well as positive attitudes towards the learning of a new practice. Mumford (1990, p. 18-19) also emphasizes the importance of the job itself by defining the job as *the main learning vehicle*. Findings of this study also point out that the design of the caregiving, restrictions and difficulties at work play supportive or inhibiting roles in the learning process of the new practice.

Since the factors related to the job are influential in the learning process, it is important to state factors that have been perceived as barriers. This study reveals three main job-related factors that play an impeding role in caregivers' learning processes:

- Lack of time
- Low payment
- Implementation of instructions to real practice

Lack of Time

The main factor that has been indicated as a barrier to learning is lack of time. We come to realize that lack of time could originate from an inadequate number of staff or the heavy workload in the nursing home. Caregivers also indicated that they normally do not have enough time to perform their tasks based on the instructions given in the courses or training.

Many caregivers mentioned that their workload is heavy. In some nursing homes, the workload is heavy because caregivers are responsible for too many care receivers. In other cases, caregivers are responsible for few care receivers who have serious health problems such as heavy somatic illness or dementia. Having too many patients or too many responsibilities prevents caregivers to implement suggested new improvements to their daily practice.

Another factor that creates time constraints is "lack of staff". As mentioned earlier, lack of staff also leads to time constraints for caregivers by increasing their workload per person. This constraint in the number of the staff exists for almost all nursing homes included in this study. The reform in elderly care in 1992, which resulted in cutbacks in the number of caregivers, can be one of the reasons for this problem (Johansson, Noren, 2002). Since then, many of the nursing homes in Sweden are facing financial constraints. This makes it financially difficult for the management to recruit new caregivers.

Even though caregivers perceive lack of time as a major difficulty, it is hard to asses what they really mean. Firstly, time is essential but not always sufficient to perform a certain job (Ekholm and Ellström, 2001). Second, during observations, caregivers were spending their breaks by socializing with other caregivers instead of prioritizing care receivers.

Low Payment

As mentioned earlier, caregiving is a low-paid occupation and low paid jobs have been socially constructed as requiring low levels of formal qualification. During interviews and observations, several caregivers provided unsatisfactory comments about the amount of wage. Hodkinson et al. (2000) call attention to the relation between low wage and learning. Hodkinson et al. (2000) state that low payment results in employers constructing jobs so as to decrease skill content and by doing so decrease the opportunities for formal learning as well. Although there are not any findings indicating that low payment is an impeding factor in implementing new practices, there exist some opinions such as Hodkinson et al. (2000), emphasizing the de-motivating affect of payment, especially in low- paid occupations. In consequence, non-financial incentives become important to encourage learning.

Implementation of Instructions to Real Practice

A second factor that also impedes the learning process is the ignorance of the real practice. As discussed earlier, training programs, which are designed based on the formal description of caregiving, underestimate the real conditions of work (Brown and Duguid, 1991). Mumford (1990) also states that the attempt to provide more efficient learning experiences through courses is flawed since there is a gap between off-the-job learning experience and the reality of the job. The formal description of the job assumes that caregivers have a certain amount of time for each task or for each care receiver. However, in reality the unpredictability of the situation, and more importantly the emotional attachment to the care receiver, affect the use of time and ways of doing. For instance, two caregivers explained that when the care receiver has a serious illness and is close to the end of their life, they try to spend more time with him/her in order to not leave him alone in his last days. None of the documents explaining the responsibilities of caregiving state that a caregiver needs to spend more time with a patient. As a result, caregivers indicated that they keep doing a practice in a wrong way or in the old way since it allows them to save time.

5.3 Technical - Organizational Factors

Technical-organizational factors can be explained as factors related to the organizational structure. The common characteristic of those factors is the scope of their impact. Factors such as decision making and management style affect the organization as a whole as well as members individually.

Fiol and Lyles (1985) indicate that organization's structure plays a crucial role in determining the learning process. Therefore, it is important to describe the structure of the nursing homes issued in this study. Some nursing homes are structured in wards, which means that each section is divided based on the care needs of the care receiver. For example: Ward A for heavy dementia, Ward B for light dementia, Ward C for somatic illness. Some of them are divided as separate little houses within the nursing home, regardless of the type of the disease. For instance, House "A" accommodates eight care receiver, House "B", accommodates ten care receivers. In some of the nursing homes, one Nurse is responsible from each ward and reports directly to the manager of the nursing home. In some nursing homes, all caregivers in the home, regardless of the section, are subordinate to one manager and all nurses subordinate to another manager.

These different structures of nursing homes mostly function in very similar ways. We did not find any significant relation between the way the nursing home is structured and the way learning occurs.

However, the structure of the organization clarifies three very important indicators that are influential in the learning process. Those factors are *decision making*, *management style* and *feedback system*. Each factor will be discussed in detail in the following section.

5.3.1 Decision Making

Duncan (1974) emphasizes that different decision making structures, based on the organizational structure, are needed in the same organizational unit depending on the degree of flexibility that is required: A centralized, mechanistic structure tends to reinforce past behaviors, whereas an organic, more decentralized structure tends to

allow shifts of beliefs and actions (Duncan, 1974). A standard nursing home has, if we rely on Duncan's definition, a centralized and mechanistic decision-making structure. The county council makes some of the decisions and nursing homes are reinforced to abide as a legal requirement. Managers at different levels make other decisions.

The mechanistic decision making also exists on the caregivers' level. When asked about their decision making, many caregivers indicated that they are empowered to make decisions regarding their daily work. They describe that they have the freedom to plan their daily work and make decisions about their work, for example working schedules.

However in reality caregivers have little room to make decisions. Interviews reveal that despite the fact that caregivers believe they make decisions about their routines themselves, they often consult each other or nurses, especially if those decisions might affect the well-being of a patient. Thus, even though caregivers believe they are independent in their decisions about daily work, they still search for confirmation from others. When they need to make a decision about medicine, caregivers need to ask to nurse. When they need to make a financial decision, caregivers need to consult the department manager or head nurse. Nevertheless, caregivers are sometimes involved in the decision making process, even if the decisions the concern purchase of new products or changes of medicine. Nurses and managers often ask for the caregivers' opinion. As indicated by one interviewee: We are not allowed to make decisions about medicine... but they trust our judgment.

Therefore, involvement in decision making becomes very influential in the learning process. As stated earlier, if the learner feels a certain scope of control in the topic or task, this will enhance the learning process. However, in nursing homes many of the initiations for improvement are structured from the top down and the caregivers' are usually told to learn or ordered to improve. This means caregivers have a relatively small influence on what they will learn and apply. Thus, the involvement in decisions becomes a crucial issue. In order to avoid the lack of involvement in decision making, caregivers should be informed more frequently about improvement efforts and requirements.

5.3.2 Management Style and Feedback

Another factor, which has an influence on learning, is the relationship with managers. Sluis (2004) states that in the work environment, managerial support for learning and innovation is also potentially influential. Axtell et al. (2000) concluded that employees with more supportive managers were more likely to have their ideas implemented (Sluis, 2004). Many caregivers indicated that they have friendly relationships with their department manager who is directly responsible for them. Findings of this study reveal that if the manager is a nurse, the relationship is more close and trustful. As one caregiver indicated about the head nurse: *She is the one who is always asking: "Are you all right? Is something you want to add?" She shows that she cares about us and that makes you trust her. So, we can tell her if something is bad or something is bothering us.*

The relationship of caregivers with the director of the nursing home has considerably greater remoteness. The department manager is still accessible for caregivers, usually between special hours when they can call or visit. In many cases, caregivers turn for help to nurses for help. This creates the distance between management of the nursing home and caregivers. As one nurse indicates: *The helpers (caregivers), we have a good relation with them too ... we have to work together. They come to us first (if) they want to ask.* And we are the closest to them because we are here, working in the ward. They see us everyday. Their manager sits there (another part of the building), so there is some distance.

The most striking finding about the management level and management style is lack of feedback from the bottom (from caregivers) to higher positions in the hierarchy (management level). Many of the managers indicated that they do not really seek feedback in formal ways. For instance, when asked about how they follow initiated changes in nursing homes, none of them mentioned a structured, valid follow-up system. In some cases, directors of nursing homes meet their caregivers only twice per year. Those meetings are organized in a big group, usually including all caregivers working in the same nursing home, and generally aim to give information. Another interesting finding is that the higher the position of manager in a nursing home, the more distant the relations between caregivers and managers. Some higher level

managers never meet with caregivers and receive annual reports from senior level managers. Some of them indicated that they would like to meet caregivers more often, but they don't have enough time.

The caregivers also experience that management seldom gives feedback at all. When it does occur, the positive feedback is of general character and directed to everyone, for example general meetings, "well done girls." (Ekholm and Ellström, 2001).

The only significant feedback and opinion sharing has been carried out through annual meetings involving department managers and caregivers. Those meetings are one to one and focus more on the discussion of goals, education needs, satisfaction, etc. Department managers included in this study indicate that they try to take into consideration opinions and interests of caregivers in decision-making mostly based on those annual meetings.

How Management Style and Feedback Affects Implementation

Hodkinson et al (2000) indicate that management attitudes to the identification of learning needs and objectives need to be examined as well as their relationship to training professionals. This emphasizes the importance of the annual meetings that explores the learning needs and interests of caregivers. Hodkinson et al (2000) also indicate that supervisors may have an equally important role in identifying and communicating information about formal learning opportunities, as well as in supporting or undermining informal learning.

5.4 Social -Organizational Factors

Learning is fundamentally viewed as a social process that takes place in the interaction of people, for instance in various communities of practice (Lave and Wenger, 1991), or more generally and exclusively in terms of the so-called social-constructionist view (Gergen, 1994; Burr, 1995; cited in Illeris 2004). Therefore, it is important to emphasize the social-organizational factors surrounding learning process.

Social and organizational factors such as working relations, cultural communities of caregiving and their influence on the learning process were already discussed in the informal learning section. Therefore, these factors will not be discussed in detail in this section. However, their role as an inhibiting or facilitating element in the learning process of the new practice will be briefly presented.

Communities are one of the essential ways of spreading knowledge and practice throughout the organization. Communities of practice expand the possible range of acceptable ways of being in an organization with a very conformist culture (Senge, 1999). Very often, communities operate as the most efficient way to integrate a new routine or practice in caregivers' routines, since caregivers share the expertise through performing tasks or obtaining help. Given that the level of trust is high in communities greater acceptance of new practices might be possible. At the same time, as mentioned earlier, learning from more experienced caregivers may play an impeding role in implementing new practices as they can teach the newcomers only the old traditional ways of performing work. Thus, they will impede the integration of new ideas and knowledge into everyday work.

Working relations are also another important factor, affecting the learning process and especially the implementation of new practices. Many of the interviewees preferred to describe their working environment as family-like. The family-like atmosphere is described as a supportive platform, where people discuss problems and try to find solutions to help each other: As stated by a caregiver: We are like a big family. And if sometimes you get angry, you scream, shout, but they always support you. And we always support each other. We have really good relationships, because every second week we get to sit down and talk about how we have been, if something is bothering us...then they listen and find a solution together. I describe it like a big happy family.

The friendly and relaxed working environment enhances collaboration and information exchange. As mentioned earlier, many of the tasks are carried out in pairs and caregiving has a very strong culture of cooperation. We believe that this close relationship with peers fosters the diffusion of new practices throughout the organization. On the other hand, it is important to indicate that this close relationship among caregivers might be also a threat, if the majority resists against the implementation of the new practice. This can also discourage caregivers who would like to take the initiative and try to implement a suggested practice.

5.5 Discussion of Influential Factors

We claim that factors that surround caregivers' learning process, such as individual factors, technical- organizational factors, and social-organizational factors, may impede or assist this process. Another finding of particular interest is that the same factors could and did have both supportive and inhibiting influences.

In order to locate different factors in the learning process, we would like to present the core of the Ekholm and Ellström (2001) model once more and discuss the factors as barriers or facilitators!

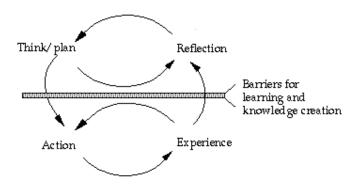


Figure 10: The Core of the Model for Illustrating Conditions and Barriers for Individual and Collective Learning in an Activity (Ekholm and Ellström, 2001)

Different factors might be influential in different points of the circle. Some factors restrict the opportunities of a learner to take action and implement the learning. For instance, the younger caregivers' lack of experiences may cause them to be confined in the upper part of the circle. Simply put, even though they acquire knowledge about the new practice, younger caregivers might be hesitant in applying the new practice in order to not confront more experienced caregivers. Another example can be lack of time. If the caregiver does not have the opportunity to apply the new ways of working based on time restrictions, this may also restrain the caregiver in the upper part of the circle.

On the other hand, caregivers may also be confined in lower part of the circle. Many caregivers do not reflect upon the initiated improvement efforts neither state the drawbacks about those initiations. Therefore, caregivers apply the required practice automatically without reflecting or thinking about it. This might be caused by two important factors. First, most of the nursing homes do not have structured feedback or follow-up systems. Second, as described earlier, some caregivers have a tendency to keep silent when their opinion is asked about the improvement efforts and learning processes. If the learner does not reflect on the experience and think, the change in the practice would be temporary. The learner would have the tendency to go back to old habits easily when his/her motives are terminated.

The desired implementation process requires the learner to go through the whole circle, both lower and upper parts. However, inhibiting factors, stated above, may cause the learner to be confined in the lower or upper part of the circle. Consequently, the learning process will not be accomplished. Nevertheless, there are also factors that support and facilitate the learner to go through the entire circle. Communities in the work place are a good example of facilitating factors that enable the diffusion of new knowledge and practice through a high level of trust and influential affect embedded in the community. Another facilitating factor might be a close relationship with the manager. Open communication and close relationships with the department manager usually enable caregivers to reflect more easily on their experience.

6. CONCLUSIONS AND RECOMMENDATIONS

In our study, we address the implementation of improvement projects in elderly care. We focused on the implementation of the Breakthrough Projects in Nursing homes as the case study. We evaluate and discuss the issue from a learning perspective based on two reasons. First, the Breakthrough itself is a collaborative learning method and the main principles of the method are based on the learning models and methods. Second, the implementation of the project will lead to changes in the daily work of caregivers who are directly involved in caregiving. In order to achieve these changes, caregivers would need to learn new routines and also implement them in their practice. Thus, in our study we emphasize that in order to ensure successful implementation of the project, it is important to understand the caregivers' learning process. Moreover, as change and learning are not isolated from the context around, it is significant to explore different factors arising from this context and also individual characteristics of the learner. These factors might have a strong influence on the dissemination of a new practice into caregivers' work. Main conclusions and recommended actions are presented in the following.

When creating a strategy for successful implementation of the project, it is important to understand how caregivers learn in the nursing home. Our study emphasizes that caregivers' learning is work-based. Moreover, caregivers learn not only formally in courses and trainings, but also informally when performing tasks, practicing, or even having informal discussion with their colleagues. Furthermore, their learning often occurs in communities of practice which are informal and not created by organization. In our study, we also underline that formal and informal ways of learning support each other. Thus, when planning successful implementation, it is important to emphasize both systems in order to assure that caregivers will learn and use new practices. For example, during formal training or courses, the theoretical knowledge could be shared. Later, the informal discussions or practicing in communities of practice should be supported in order to ensure to dissemination of this new knowledge in the nursing home.

Findings of this study show that caregivers' cooperation and involvement in improvement projects are often taken for granted. This means that caregivers are usually told or ordered to change their routines. This has several negative outcomes. First, since caregivers are not informed properly the reasons for improvement efforts and changes, their learning process may be impeded. In this situation caregivers may implement the new requirements in the routines automatically and no reflection or thinking will follow. Therefore, the learning process will not be completed and caregivers may quickly return back to their old ways of working when the forcing motivation terminates.

Second, when they are not properly informed, many caregivers have a tendency to produce pessimistic and unconstructive scenarios about the future situation. Some of them feel panicked and insecure about the required changes. This also affects their motivation towards their job and their enthusiasm about the projects.

Therefore, we believe that it is very important to inform and involve caregivers in the very early stages of the project. This can be done through regular meetings with the management as well as project representatives from the ward. These meetings should present information about the following topics:

- What is the Breakthrough Method and what is the philosophy behind this project?
- Why are the improvement efforts needed?
- Why the new ways of doing are better than existing ones?
- How will the project contribute to the nursing home?
- What kind of challenges caregivers may face during the implementation of the project and how they can overcome those challenges?

Another important finding is regarding feedback in nursing homes. We came to realize that existing feedback systems in nursing homes are considerably disorganized and inefficient. Moreover, the improvement steps in the Breakthrough Method require specific measurable aims, measures of improvement that are tracked over time. Therefore, in order to follow the progress of the improvement project, it would be

beneficial to ensure a structured feedback system. This feedback system can be established through regular formal discussions or learning sessions, as well as informal settings such as coffee times. In those informal settings, people can feel more relaxed to ask questions and openly indicate their opinions about improvement efforts. We believe that a structured feedback system will also serve to increase the feeling of involvement, which is very crucial in implementation efforts.

Consequently, recommended facilitating actions in order to establish a follow-up system can be stated as:

- Regular discussion with caregivers about the implementation process, formally during courses and training, and informally during informal discussions.
- Asking suggestions from caregivers of how to solve encountered problems.

Finally, during the research we realized that different nursing homes have different viewpoints and systems regarding learning. These differences might arise based on the different size, age, and management style in different nursing homes. Therefore, we believe that it is vital to better understand internal dynamics of the nursing homes, in order to assure successful implementation. It is important to indicate that recommended actions in this report should be tailor-made to the specific characteristics of the nursing home. This specification would be more accurate if it can be done by a member of the nursing home who is familiar with the characteristics of the organization, caregiver's profile, and working relations. For instance, a ward supervisor, a head nurse or a caregiver might be given responsibility by management.

To summarize, implementation of an improvement project is a complex process that needs to be designed and planned carefully. In our study, in order to assure successful implementation, we focused on the caregivers' level. However, for the future research, it may be of particular interest to look at different levels in the hierarchy, such as middle management, team leaders, or senior executives. The interactions between different levels and the affect of this interaction can also contribute to the future research. Moreover, further research could also be extended to other types of

public organizations. The understanding of how improvement projects can be successfully implemented in other public organizations would help to increase financial and organizational efficiency, and also improve the quality of service in the public sector.

REFERENCES

Axtell, C., Holman, D., Unsworth, K., Wall, T., Waterson, P., Harrington, E., (2000), "Shop Floor Innovation: Facilitating the Suggestion and Implementation of Ideas", *Journal of Occupational and Organizational Psychology*, 73, p. 265-85.

Bernard, R.H. (1994) "Research methods in anthropology: qualitative and quantitative approaches", Thousands Oaks, CA: AltaMira Press.

Book, S., Hellström, A., Olsson J. (2003) "Perceptions of Improvement in Swedish Healthcare: Implications for Improvement Practices", *Quality Management in Healthcare*, 12 (4), 212-224.

Boud, D., Garrick, J. (1999) "Understanding learning at work", London: New York Routledge.

Brown, J.S., Duguid, P. (1991) "Organizational learning and communities-of-practice: toward a unified view of working, learning, and innovation", *Organizational Science*, 2(1), 40-57.

Brown, J.S., Duguid, P. (2001) "Knowledge and Organization: a social perspective", *Organizations Science: Journal of the Institute of management Science*, 12(2), p.198-213.

Care Work with Older People (2002-2003). Swedish National Team, Birgittaskolan Linkoping Omsborg City-Aspen,

Cheetham, G., Chivers, G. (2001) "How professionals learn in practice: an investigation of informal learning amongst people working in professions", *Journal of European Industrial Training*, 25(5), p.248-292.

Conlon, T. J. (2004) "A review of informal learning literature, theory and implications for practice in developing global professional competence", *Journal of European Training*, 28(2-4), p.283-295

Crano, W.D., Brewer, M.B. (2002) "Principles and methods of social research", London, Lawrence Erlbaum Associates.

Davenport, E. (2001), "Knowledge management issues for online organizations: 'communities of practice' as an exploratory framework", *Journal of Documentation*, 57(1), p.61 – 75.

De Jong, J.A. (1997) "Research into on-the-job training: a state of art" *International Journal of Educational Research*, 25(5), p. 449-471.

Denzin, N.K., Lincoln, A. (1984) "Handbook of qualitative research", Thousand Oaks, CA: Sage. Qualitative Studies in education.

Dewey, J. (1938) "Experience and Education", Kappa Delta Pi, Indianapolis, IN

Ekholm, B., Ellström, E. (2001) "Conditions of knowledge creation and use in caring – the case of home help service in a Swedish municipality" 18 October 2004 http://www.theknownet.com/xml2/learnOrg/44176154/printable.html

Ellström, P.E. (2001) "Integrating learning and work: conceptual issues and critical conditions" Human *Resource Development Quarterly*, 12(4), p.421-435.

En Bättre Demensvård II, Genombrott, (Brochure)

Fiol, M.C., Lyles, M. A. (1985) "Organizational Learning". *The Academy of Management Review*, 10(4), p. 803-813.

Fraser S. (2003) "Snabbare spriding av batter sjukvård en arbetsbok för hälso-och sjukvård (Accelerating the Spread of Good Practice: A Workbook for Healthcare)" Swedish ed. Chichester, UK: Kingshamn Press

Hager, P. (2001) "Workplace judgment and misconceptions of learning", *Journal of Workplace Learning*, 13(7/8), p.352-359

Hodkinson, P., Rainbird, H., Evans, K., Senker, P., Unwin, L. (2000) "Incentives and Barriers to Learning in the Workplace: A Research Agenda", Conference Papers: Working Knowledge: Productive Learning at Work, Proceedings of International Conference, Sydney Australia, December 10-13.

http://uno.svekom.se/skpubl/index.htm?http://uno.svekom.se/skpubl/start.jsp

Illeris, K. (2003) "Workplace learning and learning theory", *Journal of Workplace Learning*, 15(4), p. 431-441.

Jacobs, R.L., Jones, M.J. (1995). "Structured on-the-job training: unleashing employee

expertise in the workplace", San Francisco: Berrit Koehler Publishers.

Johansson, S., Noren, P. (2002) National Report, Sweden, WP4, Surveying Demand, Supply and Use of Care. Sweden: Umeå University, p.1-48.

Jørgensen, C.H. and Warring, N. (2001), "Learning in the workplace – the interplay between learning environments and biography", paper presented at the Nordic Educational Research Association Congress, Stockholm, 15-18 March.

Jubert, A. (1999) "Developing an infrastructure for communities of practice: the Siemens experience", *Online Information Proceedings*, Hinksley Hill: Learned Information Europe, p.65–168.

Kolb, D. A. (1984) "Experiential Learning", Prentice-Hall, Englewood Cliffs, NJ.

Lave, J., Wenger, E. (1990) "Situated Learning: Legitimate Peripheral Participation". IRL Report, Palo Alto, CA: Institute for Research on Learning.

Lewin, K. (1935) "Dynamic Theory of Personality", McGraw-Hill, New York, NY

Lofland, J. (1971) "Analyzing social settings: a guide to qualitative observation and analysis", Belmont, CA: Wadsworth.

Malcolm, J., Hodkinson, P., Colley, H. (2003) "The interrelationships between informal and formal learning", *Journal of Workplace Learning*, 15(7/8), p.313-318.

Malhotra N.K., Birks, D.F. (2000) "Marketing research: an applied approach", Harlow: Pearson Education Limited.

Marsick, V. (1988) "Learning in the Workplace: the case for reflectivity and critical reflectivity", *Adult Education Quarterly*, 38(4), p.187-198.

Marsick, V., Volpe, F. (1999) "Informal learning on the job" *Advances in Developing Human Resources*, 3, Berret-Koehler, San Francisco.

Marsick, V., Watkins, K. (1990) "Lessons from informal and incidental learning", Routledge and Kegan Paul, New York, NY.

Marsick, V.I. (1987) "New paradigms for learning in the workplace", In Marsick, V.I. (Ed.), Learning in the workplace, Croom Helm, London, p.11-30.

Matthews, P. (1999) "Workplace learning: developing a holistic model", The *Learning Organization*, 6(1), p.18-29.

McDermott, R. (1999) "How to build communities of practice in team organizations: learning across teams" *Knowledge Management Review*, 2(2), p.32-36.

Merriam, S., Caffarella, R. (1991) "Learning in Adulthood" Jossey - Bass, San Francisco, CA.

Mezirow, J. (1985) "A critical theory of self directed learning", in Brook field, S. (Ed), Self-directed Learning: From Theory to Practice, Jossy-Bass. Inc., San Francisco, CA, p.18-22

Molin, R., Johansson, L., (2003) "Swedish Health Care in Transition – Resources and Results with International Comparisons", provided by Swedish Federation of County Councils.

Mumford, A. (1990) "The individual and learning opportunities", Journal of *Industrial and Commercial Training*, 22(1), p.17-22.

NBEET (1993) "Workplace Learning in the Professional Development of Teachers", Commissioned Report, No. 24, Australian Government publishing service, Canberra

Newman, I., Benz, C.R. (1998) "Qualitative-quantitative research methodology", USA: Carbondale and Edwardsville.

Olsson, J., Kammerlind, P., Thor, J., Elg, M. (2003) "Surveying improvement activities in healthcare on a national level - the Swedish internal collaborative strategy and its challenges", *Quality Management in Health Care*, 12(4), p.202-216.

Rose, E., Wille, M., Temple, B., Harrison, D., Kirkwood, D. (2001) "Workplace learning: a concept in off campus teaching", *The Learning Organization*, 8(2), p.70-77.

Rothwell, W.J., Kazanas, H.C. (1994) "Improving on-the-job training", San Francisco: Jossey-Bass.

Schlesinger, E. (1996) "Why Learning is not a cycle", *Industrial and Commercial Training*, 28(2), p.30-5 and (5) p.11-17

Sheehan, M., Kearns, D. (1995) "Using Kolb: implementation and evaluation of facilitation skills", Industrial *and Commercial training*, 27(6), 8-14.

Silverman, D. (1993) "Interpreting Qualitative Data: methods for analyzing talk, text and interaction", London: Sage.

Sluis, van der L.E.C. (2004) "Designing the workplace for learning and innovation: Organizational factors affecting learning and innovation", *Development and Learning in Organization*, 18(5), p.10-13.

Sugarman, L. (1985) "Kolb's Model of Experiential Learning: Touchstone for Trainers, Students, Counselors, and Clients, Journal of Counseling and Development", 64, p.264-268

Svensson, L., Ellström, P.E., Åberg, C. (2004) "Integrating formal and informal learning at work", *The Journal of Workplace Learning*, 16(8), p.479-491.

Swedish Healthcare in 1990's "Trends 1992-2000" (2002), Swedish Federation of County Councils.

Swedish Healthcare in Transition (2003), Swedish Federation of County Councils

Teare, R., Dealtry, R. (1998). "Building and sustaining a learning organization", *The Learning Organization*, 5(1), p.47-60.

The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Health Care Improvement

The Improvement Guide, Jossey-Bass, (1996) cited in The Breakthrough Series. "IHI's Collaborative Model for achieving Breakthrough Improvement" (2003), Institute for Health Care Improvement

Vassalou, L. (2001) "The Learning Organization in healthcare services: theory and practice", *Journal of European Industrial Training*, 25 (7), p.354-365

Wenger, E., Snyder, W. (2000) "Communities of practice: the organizational frontier" *Harvard Business Review*, January-February, p.139-145.

www.ihi.org

Zolingen, S.J., Streumer, J.N., De Jong, R., Van der Klink, M. R. (2000) "Implementing on-the-job training: critical success factors" *International Journal of Training and Development*, 4(3), p.208-216.