

# How to Develop and Implement a Bottom up KM Initiative in all Levels of a Department in an Organization

Tone Vold<sup>1</sup> and Hanne Haave<sup>2</sup>

<sup>1</sup>NTNU, Norway

<sup>2</sup>INN, Norway

[Tone.vold@ntnu.no](mailto:Tone.vold@ntnu.no)

[Hanne.haave@inn.no](mailto:Hanne.haave@inn.no)

DOI: 10.34190/KM.19.150

**Abstract:** Shortening the time for training new employees is desired, as this will mean reduced cost for the organization. The faster a new employee is a “full member” of the staff, the more income can be generated for the company. We have followed a pilot apprentice program where able to see what worked and what did not. The organization has struggled with high turnover and long training time. They introduced an apprenticeship based training, but due to circumstances within the organization, the training program “crumbled”. For a while the mentors had increasingly different ways of training the apprentices. In this paper we suggest how one can develop and implement a training regime that will work over time. This will contribute towards knowledge management initiatives in the organization as it will help knowledge sharing not only between mentor and apprentice, but also between the mentors and the rest of the organization.

**Keywords:** knowledge management, development, sustainable apprenticeship, organizational learning, organizational change

---

## 1. Introduction

Last year we presented a success story, a single case study, from Norway (Haave and Vold 2018) regarding a mentorship program that had saved an organization a lot of money. There is a large cost tied to the training period of a person, when one calculate the cost of not being fully operative during the period of being mentored (Filstad 2016, Filstad and Blåka 2007, Irgens 2011). Reducing the training period of a newcomer, will thus reduce the spending, or increase the possible income.

The “secret” of the success story was in how a student at the Inland Norway University of Applied Sciences at Rena, Norway, utilized his new knowledge back in his organization. In short, our student learned both from the course content, but also from *how* we taught the curriculum. This *metalearning* (Biggs 1985) the student used to include and involve the potential mentors. The curriculum presented the student with the idea of inclusion and involvement foster ownership (Filstad 2016, Filstad and Blåka 2007, Irgens 2011). This ownership could be helpful with regards to sustainability regarding the training of newcomers.

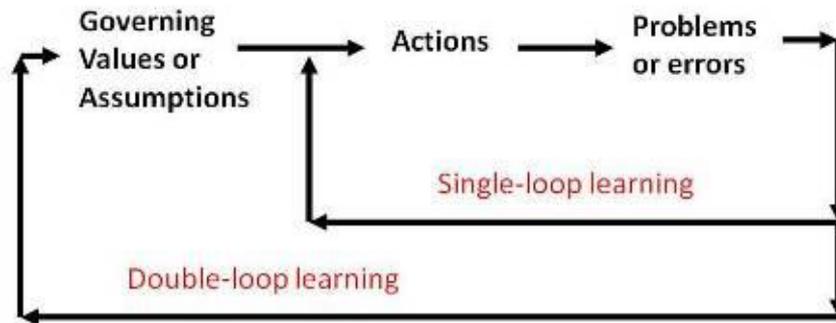
However, our student’s story did not have a “happy ending”. The mentorship still prevail, but the mentors are not coherent regarding their apprentices. They are treated differently and followed up differently. This “disconnection” has happened during a time where there has been someone else being responsible for the task.

Here we will look at how our student, and the organization, can learn from the past and reintroduce a stable, sustainable mentorship.

Firstly we will present the theory we have chosen to enlighten our study, then we present our methodological approach before we present and discuss our data, and lastly conclude.

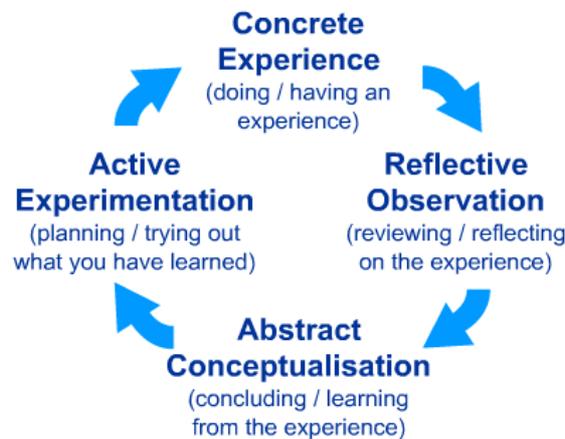
## 2. Theoretical backdrop

Before embarking on a new “round” of establishing a functioning and sustainable mentorship, it is important to learn from previous experiences. If our student and the company went about the task in the same manner as before, the same thing may happen again. However, by understanding what is happening and changing the preconditions, and solving what went “wrong” it is possible to create a more sustainable solution. This we can refer to as a double loop learning (Argyris and Schön 1996). According to Argyris and Schön (1996) it is important to understand the difference between the single and the double loop and take the different necessary steps to secure the double loop.



**Figure 1:** Single and double loop learning from: Organizational learning: a theory of action perspective (Argyris and Schön 1978)

Learning is also tied to reflecting. According to Schön (Schön 1987, Schön 1991) reflection is necessary for the learning process. Kolb (1984) developed a learning cycle that has been widely referred to.



**Figure 2:** Kolb's learning cycle (1984)

It is possible to refer to the concrete experience is the first «round» of the apprenticeship. Then a reflective phase is needed in order to fully understand what happened, by reflecting on the experience. Then it is time conclude on what went wrong and what could be improved before a new roll out of experiences is done. The same will be for the newcomers in the apprenticeship. It will be equally important for them in their learning process to understand what they are doing, hence it is important for the mentors to understand the concept that Kolb shows.

Another learning from the first process is that it is important to establish a learning culture that allows the enterprise to be a learning organization (Filstad 2016, Filstad and Blåka 2007, Irgens 2011). It is important to establish a learning culture and the management should be leading the process. If the management is absent or not actively taking part in establishing this learning culture, this lack of support from the management may contribute to swift changes if the management should decide upon it. Even if the initiative is coming from the bottom of the organization, it is difficult to sustain it if there is no support from the management (Filstad 2016, Filstad and Blåka 2007, Irgens 2011).

Peter Senge (1992) has described what he calls five disciplines. These five disciplines are shared vision, mental models, personal mastery, team learning and system thinking. The shared vision is about an organization sharing the same vision after a process that has included the employees. The vision needs to be authentic and shared in order for the employees to support the change process. This resembles the inclusion process described in Filstad (2016) where she refers to a process that includes and involves the employees in order to secure ownership towards the process (Senge 1992).

The mental models refer to organizing a reflection about the organizational members' beliefs and behaviour. It is important to be honest about the real needs. Only when the different parts of the organization is up front, and is not only fending for their own budget, it is easier to share the mental models and work for the organization as a whole (Senge 1992).

The personal mastery is about the members of the organization continuous learning. By learning, it is possible to achieve goals that important to them and the organization (Senge 1992).

Team learning is about learning together and from colleagues, and understand that this will support a larger outcome than learning on ones own. This may imply that they need to change their mental models in order to learn (Senge 1992).

Systems thinking is about the ability of understanding the organization as a whole and that all the disciplines are connected (Senge 1992). Senge himself used the metaphor of an elephant; divided it is virtually impossible to understand that the different parts make up an elephant. Senge also use the metaphor of a living organism (Senge 1992), the same metaphor used by Gareth Morgan (1998). The living organism may change according to climate and environment in order to survive. This picture of an organization suggest that the organization should be able to adjust to markets, customers and other external and/or internal impact.

### **3. Methodological approach**

The methodical approach is that of a case-study, where we investigate the organizations experiences when it comes to their efforts in establishing a sustainable program of apprenticeship. When doing case studies we get a better understanding of how the organizations' participants interact within the context. This approach also gives the opportunity of developing "thick descriptions" of the case and the situation (Geertz 1973, Remenyi 2012). Our ability to understand the organization and the past and ongoing processes is important for the outcome of the study. To deal with this we have had informant interviews with the management of the firm. We also have visited the firm and in addition to doing interviews, had the opportunity to observe how the workplace is organized and take in some of the "spirit" of the firm.

The data was collected by doing semi-structured in-depth individual interviews with three selected employees of the firm. This was including one of the apprentices, one of the mentors and one of the team-coordinators. We also performed a group-interview with the manager and the other team-coordinator. The informants was selected by the organizations manager, and this of course may influence the character of our data. As these informants was mainly positive to the latest changes occurring in the firm, it could be that with other informants we would have had a broader variety of opinions.

When analysing the data we used categories derived empirically from our data and theoretically from relevant theory, thus to understand the ongoing processes of the organization, the individual and organizational learning effects and how this can be used in the ongoing developing of sustainable apprentice-program.

### **4. Results and discussion**

Our investigations show an apprenticeship that is no longer coherent. The ownership to the apprenticeship was with our main informant. When the responsibility was removed from him and left with someone that did not have an ownership to the task, the training of newcomers have become left to the mentors with little or no follow up.

The newcomers are treated differently: "All the mentors have different ways of doing the training" (informant newcomer) There is also little or no agreement on how to follow them up after the necessary training period.

Hence, there is no common mental models, nor shared vision (Senge 1992) about what the task is about. Although there is some personal mastery (Senge 1992) with the ones being trained, the mentors seems to lack this.

Retrospective, our informant reflects in this way: «We didn't make it with the first pilot new-comer training - those who was tired of work got to be the mentors".

One of the mentors claim to be a mentor because he was encouraged to become a mentor, not because he saw it as an opportunity to learn more, but because he saw the need for an enhanced training of newcomers. Hence, there seem not to be any shared vision (Senge 1992) amongst the members of the organization that we had access to. To establish a shared vision at least for the apprenticeship would be beneficial to the organization.

Since our main informant owned the task, there has according to our informants (our main informants' co-workers and employees), not been a coherent training of the mentors. This could have been organized as teams (Senge 1992) where the members (the mentors) could learn from and with each other.

Upon interviewing our main informant and his senior manager, we do get the impression that they are about to understand that the elephant must be seen as one organism (Senge 1992). The training of newcomers must be seen as one part of how the organization function. This ability to understand that it is all a connected system and that system thinking (Senge 1992) is necessary to see the whole, we believe will be very valuable in order to re-erect a fully functioning apprenticeship.

They seem to be in the process of reflecting upon what "went wrong" in the first experiencing and they have asked for help to articulate how they can organize for a new take on the apprenticeship.

When the manager says: «It will always be a challenge to make employees develop the right mind-set and manage themselves, as to decide whether or not they need help. You're allowed to do mistakes. But you shall learn from them". This may be a sign of an organization on its way to developing a culture for learning.

Hence, they are working their way through Kolb's learning cycle (1984). Reflection being the "bridge" between knowledge and competency is necessary to support the process doing things better (Schön 1987, Schön 1991).

Our investigations also show a will of changing some of the "governing values and assumptions" (Argyris and Schön 1996). This suggest a will to undergo a double loop learning process. One of the learnings from the process has been that they not only need the apprenticeship to be a bottom up initiative, but also a top down anchoring of the apprenticeship. The management need to be attentive and support the change processes tied to the development of a sustainable apprenticeship (Filstad 2016, Filstad and Blåka 2007, Irgens 2011).

## **5. Conclusion**

Summing up, the organization would need to follow up on their double loop learning process that they are in, following up the steps of Kolb's learning cycle (Argyris and Schön 1996, Kolb 1984). They should also look towards Senge's five disciplines (Senge 1992). To make the mentors share a vision and mental models on how their apprenticeship may develop to become more unified, fair and predictable to the newcomers, would strengthen the apprenticeship arrangement. In order to develop a shared vision and shared mental models, it is possible to organize the mentors in teams so that they can learn from each other and together with each other. They can work together in order to establish a common understanding of how they are to perform their mentoring. This involvement resembles the involvement and inclusion that took place in the "first round", but will be even more necessary now, as this will support the ownership to the "new" way of performing the apprenticeship. Learning together and from each other, developing a common apprenticeship may also support the mentors' sense of personal mastery (Senge 1992).

Based on our investigations we have suggested organizing the mentors and possible mentors in learning teams and through seminars that the management take part in decide on a common training program not only for the newcomers, but also to mentors. What is expected of a mentor, how should they undertake the task of mentoring, what kind of follow up of the apprentices should be acceptable, are examples of questions that needs to be addressed.

### **5.1 Further research**

It will be interesting to follow this process, should they comply. Theories are derived by observations, but it is also interesting to see if interventions have the desired result, even if the theory imply it. If they choose to organize the training of the mentors and organizing of the apprenticeship, it will be interesting to do a follow up study of the new arrangements to assess the sustainability of the new apprenticeship.

## **References**

- Argyris, C. and Schön, D. (1996) *Organizational Learning II. Theory, Method, and Practice* New York: Addison-Wesley Publishing Company, Inc.
- Biggs, J. B. (1985) The Role of Metalearning in Study Processes. *British Journal of Educational Psychology*, 55(3), pp. 185-212.
- Filstad, C. (2016) *Organizational Learning: - from knowledge to competency*, 2. utg. ed., Bergen: Vigmostad & Bjørke.
- Filstad, C. and Blåka, G. (2007) *Learning in organizations*, Oslo: Cappelen.
- Geertz, C. (1973) *The Interpretation of cultures*, New York: Basic Book.
- Haave, H. M. and Vold, A. T. (2018) *Knowledge management in action: A case study from Norway*.
- Irgens, E. J. (2011) *Dynamic and learning organizations: management and development in a changing worklife*, Bergen: Fagbokforl.
- Kolb, D. A. (1984) *Experiential learning: experience as the source of learning and development*, Englewood Cliffs, N.J.: Prentice-Hall.
- Morgan, G. (1998) *Images of Organization*, Executive ed. ed., London: Sage Publications.
- Remenyi, D. (2012) *Case Study Research: The Quick Guide Series, Case Study Research*, Reading: Academic Conferences Publishing International.
- Schön, D. A. (1987) *Educating the reflective practitioner*, San Francisco, Calif.: Jossey-Bass.
- Schön, D. A. (1991) *The reflective practitioner: how professionals think in action*, Aldershot: Avesbury.
- Senge, P. M. (1992) *The fifth discipline: the art and practice of the learning organization*, London: Century Business.