The Emergence – and Collapse – of Results From Knowledge Management Initiatives: A Case Study From Norway

Tone Vold and Hanne Haave
The Inland Norway University of Applied Sciences, Norway
tone.vold@inn.no
hanne.haave@inn.no

Abstract: Training and turnover represent two major costs in an organization. A few years ago, the director of education of a company in Norway introduced different ways of reducing the training period and the turnover. By utilizing what he had learned in the knowledge management courses, he managed to dramatically reduce the training period, and also the turnover was reduced. Utilizing principles like Communities of Practice (CoP) (from Lave&Wenger) and using techniques from Liberating Structures (see: Liberatingstructures.com) the co-workers developed and implemented a form of apprenticeship. Using CoP's allowed the co-workers to cooperate on how the learning and training should be done, and the Liberating structures were tools to get people talking. When implemented this reduced the training period significantly. Also the turnover rate dropped. However, they discovered another problem; some of the mentors had outdated knowledge and thus trained the students to some extent to work based on outdated information. When the director of education were engaged in other tasks and did not closely follow up the process further, the mentorship and communities faded and now only occur occasionally. How is this possible? How can a "perfect" system fail? How can these initiatives that were so successful just fade away? Changes in organizations need to be founded properly in the organization in order to be sustainable. Changes introduced by individuals need thus to be implemented in such a way that it is not relaying on the individuals, but is adopted as a part of the strategy and execution of strategy in the organization. This paper present possible explanations as to how the change did not sustain, and also present suggestions towards how this can be set up to be more sustainable. We will present views from employees and managers. This data are collected through interviews.

Keywords: knowledge management, organizational change, mentorship

1. Introduction

At the Inland Norway University of Applied Science, Norway, we have since 2007 offered a study of a total of 30 study points in Knowledge Management. Four courses of each 7,5 study points make up the study program.

The motivation to take study programs in higher education can be of different kinds. From asking students attending the study program on the first seminar, they answers can be divided in three major categories; to use the study as a part of obtaining a bachelor degree, to get a "refill" of knowledge, and to utilize what they learn back in their organization.

As lecturers in higher education, it is important to provide our students with usable knowledge. Much research has been done to activate students in order for the students to maximize their learning outcome. One of the activities that has been developed is for instance Flipped Classroom (REF).

However, despite our efforts as lecturers and our students efforts to learn and bring back to their organization, it may still be other factors that interrupt or distort what the students try to implement from his learning.

In this paper we describe our investigations regarding one of the students that introduced changes to his workplace after his education. However, the changes did not last and even if some of the changes still is implemented, it does no longer have the same impact.

To maintain the student's identity we will refer to this person as "student X" and as a male, when this is appropriate.

Firstly we will present the theory we have chosen to enlighten our study, then we present our data collection method. The results will then be presented and discussed, before we conclude and suggest further investigations.

2. Theoretical backdrop

Knowledge Management is about capturing, sharing, making use and sense of knowledge, according to Davenport (1994) (REF). Knowledge management (KM) has been given many definitions over the years, ranging from "the management of anything classified as knowledge" (McAdam & McCreedy, 2000), to von Krogh et al (2000) that means knowledge cannot be managed directly, and calls it "knowledge enablement". Amongst the many definitions of Knowledge Management, we have chosen one by Feghali and El-Den (2008) : "The set of activities which focus on the initiation, creation, capture, transformation, retention, and access of opinions and ideas imbedded in a group's memory and intellect satisfying a set of predefined goals and objectives." Although this definition is regarding "virtually-cooperating group members"(Feghali & El-Den, 2008), we reckon that it is suitable as a general definition as it encompasses the main idea of the general perception of KM.

Within KM there are also some tools and techniques like forming and using Communities of Practice (Lave & Wenger, 1991; Wenger, 1998), similar to what Hildreth and Kimble (2002) claim regarding utilizing knowledge in order to create, nurture and sustain knowledge.

Another way of sharing knowledge is to organize mentorships (Filstad & Blåka, 2007; Irgens, 2011). Mentorships will contribute towards newcomers are faster up to speed with their work.

However, going from "ordinary" training where the new staff are learning by doing and experiencing (Dewey, 1938) to mentorships, require that the staff take part in the change process. In order for the change to be sustainable, the potential mentors need to be included in the process, according to Filstad and Blåka (2007). Being included and empowered to take part in a development process that will influence one the way they work and how they receive and treat newcomers.

At the Inland Norway University of Applied Sciences we have for some years, particularly in the KM study, utilized student active methods such as Flipped Classroom (Nematollahi, St John, & Adamas-Rappaport, 2015). Flipped Classroom is according to Fezile and Gulsum (2016) "an active, student-centered approach that was formed to increase the quality of period within class". Bishop and Verleger (2013) has defined Flipped Classroom to be "a student-centred learning method consisting of two parts with interactive learning activities during lesson and individual teaching bases directly on computer out of lesson". The idea of flipping the classroom, is about scaffolding the learning process (Carbaugh, Doubet, & Tomlinson, 2016). When the student prepare for the lessons in before hand and can work with the issues presented in the curriculum under supervision of the lecturer, it is easier to reveal what the students' struggles lie. It is important to understand where to focus effort regarding the curriculum, and by working with the course content, it is possible to organize for supporting the students where they find it hard to understand. Research done at our university suggest that this focus do enhance the students learning outcome as the exam result increased by a whole grade from one year to another when introducing Flipped Classroom (Vold et al., 2017).

Also techniques from "Liberating Structures" have been used (Lipmanowicz & McCandless, 2013). Particularly "1-2-4-All" which allow all the students to be active. This method is about first contemplating on one's own, then in pairs and then as a group of four and then one will present to the rest of the class.

Also it is possible to learn from the learning. This "metalearning" (Schaul & Schmidhuber, 2010) (Ward & Meyer, 2010) is also about to make the individual be aware of "the learning in a given context and control of the learning in that context" (Biggs, 1985). In this context it is about learning not only the curriculum, but also about learning how to teach others about a subject. For instance may the Liberating Structures be an example of a way one can learn to teach others about something.

3. Methodological approach

The methods used in this study is a case-study, where we have studied how an organisation had developed their apprentice-trainingprogram. The case-study approach makes us better understand how the participants interact within the context. We also get a possibility of developing so-called thick descriptions of the case and the situation (Geertz, 1973; Remenyi, 2012). The study is a follow-up of an earlier pilot-study where one informant was our sole source. His function has been that of a gate-keeper that has given us access to the organisation and the data that we find relevant (Remenyi, 2012). We now wanted to investigate how the apprentice-trainingprogram were coming on in the firm, and why it did not work out.

We visited our informants' workplace. On beforehand, we had established an understanding with the firms management to do interviews with some of the employees. In addition to group-interviews with two of the managers, we performed semi-structured interviews with one of the apprentices, one of the mentors and one of the two team coordinator of the firm.

Visiting the premises of the firm also gave us the possibility to observe how the workplace is organized and get an impression of the atmosphere in the organisation.

When collecting the data we have focused on capturing the informants understanding of the organizational events, their experiences and what they have learned from it. The data analysis have been conducted by using both empirical and theoretical categories relevant to understand how the processes of individual learning and organizational changes have taken place.

4. Results and discussion

When interviewing our student (Student X) the first time he reported on a successful introduction of mentorships (Haave & Vold, 2018). Student X have used methods from "Liberating Structures"(Lipmanowicz & McCandless, 2013) and organized similar to Communities of Practice(Lave & Wenger, 1991; Wenger, 1998). His goal was to facilitate for a better introduction of their newcomers and reduce their training period. as this represent a major cost in the company. According to Filstad (2016), it is a major cost to any company the time it takes for a newcomer to be fully integrated at work. Hence, to reduce this time will be beneficial to the company. Hence, as one of the respondents claimed: "The mentorship is something that will prevail. There is a lot of discretion; one cannot read up on everything."

The reason Student X offer us is that he wanted the process to be "owned" by the ones that could be mentors. As there were no personal benefits tied to the new organization of training newcomers, he claimed it was important to him to make the potential mentors contribute towards the new regime and thus feel an ownership to the process. This is coheres with the theory presented above regarding development processes (Filstad, 2016; Filstad & Blåka, 2007).

Knowledge sharing has been very important to our student and he reports on utilizing the very methods used in the KM study program in order to support the work on organizing mentors for the newcomers. This support the idea of metalearning from student active methods (Biggs, 1985).

However, student X also report on the mentorship to have somewhat deteriorated

Our investigations at the company and our Student X spring of 2019 showed that the mentorship was still active, but our respondents at the company could inform us that the different mentors taught the newcomers slightly different things. This was confirmed by one of the newcomers that stated: "all the mentors have different ways of doing things" and "Different practices with mentors lead to important things are forgotten".

One respondent claimed: "It was a "hit and miss" with the mentorship as they who became mentors were the ones that where tired of their job". Being a mentor offered them something different to do.

It was also a difference in how they took care of their "apprentices". Some mentors were on "speed-dial" for their "apprentices" 24/7, and some were unavailable as soon as the "apprentices" were able to work on their own. If e.g. the mentors were assigned to different shifts than their "apprentices", the way they followed up and were available to their "apprentices" varied.

One explanation is offered by our Student X is that he himself has been reassigned to other tasks. The "turnaround" regarding reduced training time for the newcomers had received some attention in the management. Hence, the senior manager had reassigned the responsibility for the training to the second in command and moved our respondent (Student X) to other tasks.

This change of who is in charge of the training may have had an impact on the further execution of the mentorship. As the one that had a passion for developing the organized training was taken off the task, or

"reassigned to other tasks", and a "new" person took over the training, the difference in ownership to the task may have become an issue.

As this person no longer works in the company, we have no possibility to ask him personally. However, our respondents claim that this may be the case. The operational manager claim that our Student X struggled and did not get a break. The one taking over our respondents task regarding training newcomers, were not dedicated to this task and did very little to follow up on the different aspects of the training. This coheres with the theory on securing ownership to tasks, by including and involving persons in the development process (Filstad, 2016; Filstad & Blåka, 2007). Originally, we mentioned this theory regarding how to include the mentors on how to be mentors in a mentorship program. However, it seems to be applying to being responsible for a task as well.

According to Student X, he has been reassigned this task by the new management. He has also received a promotion and is now a part of the leadership team. His leader confirm that he believes it should be assigned to the person who had a passion for it and actually succeeded with the task in the first place. The leader has also suggested that he should develop it further as he still seem to have an ownership to the training. This as our Student X claim: "One way to developing a learning culture is to accept making mistakes". Reassignment back to our respondent (Student X) may contribute towards re-establishing ownership and thus a focus on how to improve the mentorship. Also, the new management seem to have a renewed interest in the task as well (Filstad, 2016; Filstad & Blåka, 2007; Irgens, 2011). As the senior manager claim: "It will always be a challenge to get the employees to have the right mind set and perform self management. When and where can I get help. To err is acceptable, but you have to learn from your errors". This may also be supporting the new take on the training of newcomers and a huge step towards becoming a learning organization.

5. Conclusion

The first success of the mentorship arrangement was due to a thorough process of involvement of potential mentors through CoP's and involvement processes. When the training was reassigned to a person in the management who had little or nothing to do with the development of the training, the follow up on the training regime seemed poorly. As a result of this, the different mentors have different approaches towards the mentorship task.

Our investigation show that it seems important to have an ownership to a change process, not only as a worker, but also as a manager. If the management have little or no attention to a task and the responsible for a task lack the necessary ownership, it may be hard to follow up on the task in question, here: the training of newcomers (Filstad, 2016; Irgens, 2011).

5.1 Further research

The senior manager has reassigned the training of newcomers to our respondent, who is now a part of the management himself. This should point towards a renewed success for the task. It will be interesting to follow up our Student X and his work on re-establishing a mentorship that works maybe even better than previously. With the ownership in place both with the owner of the task and a re-establishment with the mentors, it will be interesting to see if this will improve the training. The fact that the leadership is also attentive to this task, can also be a positively contributing factor.

References

Biggs, J. B. (1985). The Role of Metalearning in Study Processes. *British Journal of Educational Psychology, 55*(3), 185-212.

Bishop, J., & Verleger, M. (2013). *The Flipped Classrom: A Survey of the Research*. Paper presented at the 120th ASEE Conference & Exposition, Atlanta.

Carbaugh, E. M., Doubet, K. J., & Tomlinson, C. A. (2016). *The differentiated flipped classroom : a practical guide to digital learning*. Thousand Oaks, Calif: Corwin.

Davenport, T. H. (1994). Saving IT's soul: human-centered information management. (information technology)(includes related information on the use of human-centered information). *Harvard Business Review, 72*(2), 119.

Dewey, J. (1938). *Experience & Education*. New York: Touchstone.

Feghali, T., & El-Den, J. (2008). Knowledge transformation among virtually-cooperating group members. *Journal of Knowledge Management, 12*(1), 92-105. doi:10.1108/13673270810852412

Fezile, O., & Gulsum, A. (2016). Flipped Classroom Approach. *World Journal on Educational Technology, 8*(2), 98-105. doi:10.18844/wjet.v8i2.640

Filstad, C. (2016). *Organizational Learning: - from knowledge to competency* (2. utg. ed.). Bergen: Vigmostad & Bjørke.

Filstad, C., & Blåka, G. (2007). *Learning in organizations*. Oslo: Cappelen.

Geertz, C. (1973). *The Interpretation of cultures*. New York: Basic Book.

Haave, H. M., & Vold, A. T. (2018). Knowledge management in action: A case study from Norway.

Hildreth, P. M., & Kimble, C. (2002). The duality of knowledge. *Information Research, 8*(1).

Irgens, E. J. (2011). *Dynamic and learning organizations: managment and development in a changing worklife*. Bergen: Fagbokforl.

Lave, J., & Wenger, E. (1991). *Situated learning - Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Lipmanowicz, H., & McCandless, K. (2013). *The surprising power of liberating structures : simple rules to unleash a culture of innovation*. S.l.: Liberating Structures Press.

McAdam, R., & McCreedy, S. (2000). A critique of knowledge management: using a social constructionist model. *New Technology, Work and Employment, 15*(2), 155-168. doi:10.1111/1468-005X.00071

Nematollahi, S., St John, P. A., & Adamas-Rappaport, W. J. (2015). Lessons learned with a flipped classroom. *Medical Education, 49*(11), 1143-1143. doi:10.1111/medu.12845

Remenyi, D. (2012). *Case Study Research : The Quick Guide Series*. Reading: Academic Conferences Publishing International.

Schaul, T., & Schmidhuber, J. (2010). Metalearning. *Scholarpedia, 5*(6), 4650. doi:10.4249/scholarpedia.4650

Vold, A. T., Bergum, S., Ranglund, O. J. S., Kiønig, L. V., Bakken, G., Kaloudis, A., & Braun, R. (2017). Student input – a case of an extended flipped classroom. In.

Von Krogh, G., Ichijåo, K., & Nonaka, I. (2000). *Enabling knowledge creation: how to unlock the mystery of tacit knowledge and release the power of innovation*. Oxford: Oxford University Press.

Ward, S. C., & Meyer, J. H. F. (2010). Metalearning Capacity and Threshold Concept Engagement. *Innovations in Education and Teaching International, 47*(4), 369-378. doi:10.1080/14703297.2010.518429

Wenger, E. (1998). *Communities of practice*. Cambridge, UK: Cambridge University Press.