Non-commissioned Officers' learning through Work in the Finnish Army

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Abstract

Lifelong learning and competence development is crucial to organizations' success in today's world. As part of public governance in Finland the Finnish Defence Forces view themselves as a learning organization and workplace learning is considered to be a central tool for competence development in the military. A case study about learning through work was conducted in one army unit's three companies. The case study was a part of a larger study analysing networked learning in the conscript-training companies of the Finnish Defence Forces. The study aims to bridge the located research-gap by providing theoretical insights on the collective and individual workplace learning practices of instructors. Theoretical tools offered by knowledge-creation theory and cultural-historical activity theory were used. The knowledge-creation metaphor of learning views learning as collective artefact-mediated activity to produce something new. Cultural-historical activity theory highlights the meaning of culturally-mediated tools and artefacts in moulding the object of activity. A second important point of entry for the study was the realisation that studying individuals learning activities required to situate the learning individuals in their activity system. Drawing from these theoretical foundations workplace learning was understood as object-oriented activity in which tools and personal networks of the subjects play a major role in the individual and collective learning processes. Combining the theoretical foundations with analysing documents and norms concerning competence development in the FDF provided the starting point for an abductive process the researcher used to state the research questions. The analysis focused on the agency of the non-commissioned officers and the expansive and restrictive features of the studied companies as well as the tools, artefacts and personal networks important to learning. Empirical data was collected with semi-structured interviews and egocentric network interviews. The data was analysed with phenomenography and the visualised egocentric networks were analysed qualitatively. The preliminary results suggested that the organization viewed itself as expansive and supportive towards learning. However social affordances and active guidance towards learning were lacking. Active agency was required to succeed in the studied military organization and certain tools were well-known and commonly used in competence development, but new tools were not actively developed. It seems that there is a need to actively create and consolidate new learning practices. Personal networks play a major role in the instructors learning and they can be surprisingly broad and different, which suggests that they are carefully and personally constructed through one's work history.

Keywords

Knowledge-creation, Cultural-historical activity theory, Workplace learning, Personal networks

Research Context

Today individuals' learning and development in their work is seen as an important goal in the maintenance of well-being even on a national level (Billett & Pavlova 2005). Along with other sectors of public governance in Finland the Finnish Defence Forces (FDF) view organization's capacity to learn effectively as an important predictor of success. Traditionally the competence of soldiers in the FDF has been gained by extensive basic training. However due to large structural changes in the FDF's training system major changes have taken place (Halonen 2007). The competence development of the Finnish Army's non-commissioned officers (NCO) is based on guided workplace learning and in-service training. Consequently there are growing demands on the conscript-training companies as supportive sites of learning. Traditionally experienced instructors have guided

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the novices, but the new concept of guided workplace learning puts a strong emphasis on planning individual learning pathways and extensive monitoring of the learning outcomes.

The paper is based on a larger military pedagogical research-project, which studies the networked learning in the conscript-training companies of the FDF (Mäkinen 2012; 2013). Traditionally the field of competence development in the FDF has been approached by theoretical themes of organizational learning (Halonen 2007) and pedagogical leadership (Nissinen 2007). However, thus far research on grassroots-level learning processes and practices in the FDF is lacking. This paper aims to bridge the located research-gap by providing theoretical insights on the collective and individual workplace learning practices of the instructors. The newest instructors-group of the FDF, namely the NCOs, were the sampled participants. A common misunderstanding is that learning of the individuals automatically accumulates into competence of the organization (Adler & Cole 1993). The organization needs concrete practices and mechanisms with which the new information and knowledge of the individuals can be used to benefit the collective activity. This research project aims to identify such practices and mechanisms that are genuinely used to develop the worker´s competence.

The theoretical foundations of the study were drawn from the knowledge-creation metaphor of learning (Hakkarainen, Palonen, Paavola & Lehtinen 2004) and cultural-historical activity theory (Engeström 1987). Traditionally learning is studied with the help of two metaphors, namely the acquisition metaphor and participation metaphor (Sfard 1998). However as Hakkarainen and his colleaques (2004) argue, this is not a sufficient point of entry when trying to capture collective efforts to produce new knowledge. The knowledge-creation metaphor of learning attempts to combine the acquisition metaphor and participation metaphor by viewing learning as collective artefact-mediated activity to produce something new. Cultural-historical activity theory highlights the meaning of culturally-mediated tools and artefacts in moulding the object of activity. A second important point of entry for the study was the realisation that studying individuals learning activities required to situate the learning individuals in their activity system. This enabled the researcher to consider the social factors of activity as well; such as the community, division of labour and rules of the activity. Drawing from these theoretical foundations workplace learning was understood as object-oriented activity in which tools and personal networks of the subjects play a major role in the individual and collective learning processes.

Aims and Objectives

The aim of this paper is to present the research design and discuss the preliminary results concerning the NCOs' learning through their work practices. The main research question is: How do the NCOs learn through their work? The main question was divided into four sub-questions:

1 What kind of agency the company requires from the NCOs to succeed?
2 What kind of learning environments are the studied companies?
3 What kind of tools and artefacts are used to support workplace learning?
4 What kind of personal networks the NCOs have to support their learning?

Design

To get a better grasp of the studied phenomena the researcher familiarized himself with the documents and norms regarding competence development in the FDF, the earlier research results in the FDF, and also the theoretical foundations of trialogical learning and cultural-historical activity theory. Combining these foundations through an abductive process the researcher was able to state the aforementioned research questions. The research is a case study in one brigade-level unit of the Finnish Army located in southern Finland. The unit is made up of battalion-level units which in turn are divided into company-level units. The main task of the unit is to train peace and wartime troops for the FDF. The studied unit employs approximately 400 people. Empirical data was gathered with semi-structured interviews and egocentric network-interviews from the NCOs of three companies. The companies were chosen from different battalions to provide better potential for generalization of the results (Larsson 2009). The company commanders, the deputy company commanders and all the NCOs of the studied companies were interviewed. In all there were 16 participants. The egocentric network-interview provided the researcher a practical tool to analyse the NCOs' social environments empirically (Robins 2015, 20; Hogan, Carrasco & Wellman 2007; Palonen 2006). Also the company commanders of the studied companies were interviewed to gain a deeper understanding of the expansive and restrictive features of the companies as learning environments (Fuller & Unwin 2004). The research design also included quantitative question sheets to complement the qualitative data. Qualitative data was the main source of information, while quantitative data was used to complement it and to make the variations between the

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studied companies visible. The interview data was analysed with phenomenography (Marton 1988) to get a comprehensive grasp of the variation in qualitatively different understandings of the studied phenomena. The egocentric network data was visualized with CytoScape-software. This paper presents some preliminary results of the project to produce discussion of the company-level learning practices in the FDF.

Preliminary results

Generally the company commanders viewed their companies as expansive providing the support needed for learning. This was evidenced by the relatively high self-evaluation scores (4.7, 5.7 and 5.9 on a scale of seven) of their companies as expansive environments. However the interview data revealed that they felt the management of human resources challenging due to heavy workload and time constraints. Also there were not enough experienced instructors to supervise the inexperienced NCOs and the commanders felt that they had to give the NCOs too much responsibility for productiveness right away. The commanders valued self-leadership skills so that in challenging situations the instructors themselves would present alternative solutions to problems instead of just bringing the problems up. The NCOs also felt that the social environment was supportive, but active guidance was lacking. Both the NCOs and commanders felt that the yearly performance appraisal of the instructors was the primary tool for planning and guiding the learning practices. The results indicate that despite a supportive approach to self-development, possibilities to learn and develop were not actively put forth. The responsibility to develop was left mainly on the individuals and not actively supported. It would seem that social affordances towards participation and learning were not offered (Billett 2001; Billett & Pavlova 2005). Succeeding in their tasks required active participation and agency from the NCOs.

Studying tools and artefacts yielded expected results as both the commanders and the NCOs considered mentoring and tutoring to be the most meaningful resources to learning. Also various in-service training courses at the unit were considered as meaningful. Interestingly guidebooks and different standard operating procedures were considered as useful resources. Especially the newer guidebooks were considered to be of good quality. The intranet of the FDF was not considered as important in learning-related matters. Some NCOs and commanders felt that common training-evenings of the company and other collective training-related practices could be useful in developing new ways of training, but otherwise new artefacts and tools for learning were not actively developed. However the interview data suggested that the artefacts produced during the daily work were important tools of learning. The NCOs major learning experiences were connected to larger work-projects, which included producing standardized activity-guiding orders and documents such as written live-fire exercise plans. Thus the learning practices involved definitive material elements in addition to social factors.

The egocentric network analyses revealed that the NCOs had large personal networks of expertise. NCOs from two studied companies had relatively similar personal networks, but the network of the NCOs from the third company had a different structure. I highlight this by presenting a combined network of the three NCOs from the third company. The personal networks consisted of multiple contacts inside their own company (blue) some singular contacts in the Army unit (unit staff, maintenance and head of centre) (green) and differing personal networks that consisted of point of contacts (POC) in the FDF (grey) and civilians (yellow). This would seem to indicate that the NCOs are experts of their own training-branch (Figure 1).

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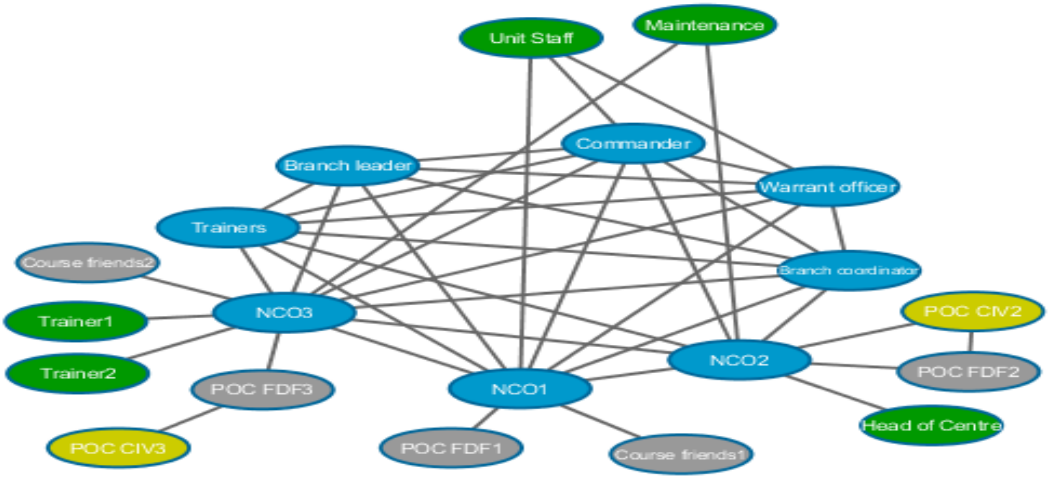

Figure 1. The combined egocentric networks of three NCOs serving in the same company.

The army as an organization is traditionally viewed as hierarchic and bureaucratic (Halonen 2007), but the networks of the studied NCOs were spread across the organization and did not follow the formal organizational structure. Also notable were the connections to course friends from in-service training. The NCOs held contact to these networks with the aid of WhatsApp. Otherwise technology did not play a major role in the learning practices. The network data suggest that meaningful personal contacts can be formed in various stages of career and these contacts may follow with the instructors for a long time, even when taking new positions in the organization. Communication with these contacts was not frequent, but still the NCOs considered them as meaningful to their learning.

The preliminary results suggest that strong and active agency is required to succeed in the studied military organization and certain tools were well-known and commonly used in competence development, but new tools were not actively developed. It seems that there is a need to actively create and consolidate new learning practices (Nissinen 2007). Personal networks play a major role in the instructors learning and they can be surprisingly broad and different, which suggests that they are carefully and personally constructed through one's work history.

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