Methods to Support Knowledge Transfer in Participatory Interventions to Ensure Sustainable Interventions

Ipsen, Christine; Poulsen, Signe; Gish, Liv

Published in:
Conference abstracts - Work, Stress and Health 2015: Sustainable Work, Sustainable Health, Sustainable Organizations

Publication date:
2015

Document Version
Publisher's PDF, also known as Version of record

Link back to DTU Orbit

Citation (APA):
A case study of knowledge work and working life conducted in five large knowledge intensive companies (KIC) showed that tacit in-house knowledge was available regarding work-related problems, causes and solutions. However, it was typically shared individually, informally and randomly. This knowledge transfer practice supported single loop learning processes resulting in trouble shooting. The findings led to another case study of knowledge work and prevention of work-related stress. The study was based on the assumption, that a structured collective process of explication of individual tacit knowledge of problems, causes and solutions among employees and managers would create an opportunity for double loop learning and thus ensure sustainable preventive interventions. The intervention program (PoWRS - Prevention of Work Related Stress), comprising different methods, was thus designed and tested in six large KICs. The study showed that the program was applicable supporting the explication process and gave rise to organizational-level changes. Knowledge intensive small and medium sized enterprises (SMEs) experience similar problems like large KICs regarding high demands at work, poor planning, project pressure and work load. A new case study focusing on SMEs was therefore initiated with the aim to apply the PoWRS program in a smaller organizational setting. This paper presents the result from the two intervention projects both applying the PoWRS program focusing on: What are the gains and challenges for the employees and managers when local in-house knowledge transfer forms the basis for an organizational-level intervention?

**Methods:** Both studies were explorative studies of six and four case companies, respectively, which each conducted a six months intervention process with the aim of developing and implementing preventive changes. These were formulated based on a collective and collaborative process where local knowledge was explicitted. Overall, four explication tools were applied addressing both employees and managers:

1) A Fishbone workshop aimed to explicate tacit individual knowledge by asking all participants two questions regarding what creates enthusiasm and stress at the work-place. The individual answers were clustered on a wall-paper for everyone to see and became collective explicit knowledge
2) Interviews of all participants conducted by the in-house facilitators framed the explication of the individual knowledge about work-related causes and potential solutions to the problems identified in the Fishbone workshop.
3) Group or department meetings constituted the frame for dialogue and bringing knowledge together
4) A visualization object (e.g. different colored balls in tubes) was used to visualize the employees’ perceived progress of the intervention. By rating the individual experience enabled transfer of individual explicit knowledge to the collective. This then formed the basis for collective decisions for adjustments of the intervention and supporting activities. The ongoing evaluation supported a collective communication of the progress and enhanced collaborative activities in the organization.

**Results:** the study shows that the experienced gains based on knowledge transfer and explication of knowledge are:
- New or increased understanding of individual and group problems among both managers and employees generated from the Fishbone workshop
- Establishment of collective knowledge regarding work related causes and identification of solutions based on knowledge explication at the individual interviews and collective department meetings. The new knowledge leads to a decision of organizational level intervention activities, representing a collective double loop learning process
- Increased collective understanding of individual and group enablers and barriers and the premises for what works in sustainable organizational interventions in terms of stakeholders and activities generated from interviews as well as the visualization object. The new knowledge leads to adjustment of the supporting activities and management support:
- Awareness participants that local knowledge is available and when explicitted can support sustainable organizational level solutions and commitment
- Awareness among participants that each person has a role to play and that their personal knowledge is valuable and useful to the group or department

The study also showed a number of challenges when applying the listed tools: 1) Reluctance from employees and managers when personal knowledge becomes explicit as people are uncertain how the different participants will handle it. 2) Distributed work over distances like time and space, makes it difficult for the managers to ensure that the explicitted knowledge becomes common knowledge

**Conclusion:** Explicating tacit knowledge applying the different participatory methods in the PoWRS program show a number of benefits such as increased understanding of the work place related problems and organizational level changes, representing a double loop learning process supporting sustainable interventions. The
study also shows that explicated knowledge can induce an uncertainty and complicate a common process. Managers thus need to be aware of how explicated knowledge is dealt with and ensure an open dialogue. The insight gained from the study address the need for further work on participatory activities and methods to ensure explication of knowledge and thus sustainable interventions with increased proximity and the relevant managerial activities.

Chair: Christine Ipsen, Technical University of Denmark (DTU), Gregor Jenny, Dr. Sc. ETH and Andrew Noblet, Professor, PhD, Deakin University; Presenter: Christine Ipsen, Technical University of Denmark (DTU); Discussant: Gregor Jenny, Dr. Sc. ETH and Andrew Noblet, Professor, PhD, Deakin University

CORRESPONDING AUTHOR: Christine Ipsen, PhD, Department of Management Engineering, Technical University of Denmark, Building 424.1, DK-2800 Kgs. Lyngby, Denmark. chip@dtu.dk