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# Dialogic Leadership and ICT-intensive Workplaces: How to Enhance Learning Potential

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**Abstract.** Work organisations face demanding challenges, such as expectations to be creative, innovative, agile, competitive, efficient and adept at using employees' knowledge while understanding and taking care of employees' wellbeing. Organisations are actively implementing new ICT systems and environments because they seem to increase the effectiveness of interaction and collaboration, workplace learning and work performance. Employees are expected to learn and to innovate continuously. Thus, managers often need to be social acrobats, combining basic tasks, managing projects and creating and meeting innovative goals. Work units may be potential and versatile learning and development spaces, but at the same time, existing routines, traditions and power relations in organisations create different kinds of boundaries and conflicts. Dialogic leadership might be one of the key factors in successful modern organisations. Dialogic leadership is a prerequisite to meeting the challenges mentioned above. In this paper, we examine the potential and challenges of dialogic leadership and learning when adopting and using e-Calendar (eC) in one of the Dinno programme's professional case organisations.

**Keywords:** learning potential in work contexts, dialogic leadership, application of technologies, participatory action research, cooperative and dialogic development.

## 1 Introduction

### 1.1 Background: dialogic leadership and ICT in the Dinno programme

Modern work organisations face demanding challenges, such as expectations to be creative, innovative, agile, competitive, efficient and adept at using employees' knowledge while taking care of employees' wellbeing. Work has become more knowledge-, professional-, network- and virtual-based in many professions. As a result of this trend, employees and managers are continuously facing new learning challenges. Managers need to be social acrobats in order to combine basic tasks, manage projects and set innovative goals [1]. They also need to be social architects in order to foster learning and innovation [2]. We suggest that dialogic leadership is the crucial factor in handling these contradictory challenges.

This paper is based on the *Dialogic leadership promoting innovativeness* research programme (Dinno project 2012–2014, [www.dinno.fi](http://www.dinno.fi)) funded by Tekes (the Finnish Funding Agency for Technology and Innovation). The Dinno project is a multidisciplinary programme, combining theories of creativity, innovativeness, learning, motivation and leadership [3]. Tekes funds working life development and research projects having significant novelty and research with applicable results, bringing together different research branches of science. The organisations subscribing to the programme represent both the private and public sectors. These organisations range from local government (educational, social and health sectors, municipalities) and state (professional expert organisations) organisations to private enterprises (service and professional organisations).

The research task of the programme is to determine *how dialogic leadership can enhance the creativity and innovativeness of organisations*. The programme strives to promote innovativeness, sustainability of working life, productivity and competitiveness by combining various multidisciplinary scientific and theoretical viewpoints. The main themes include: 1) dialogic leadership, power and responsibility, especially in terms of organisational restructuring, 2) *dialogic and innovative learning spaces, especially in technology-intensive work environments*, 3) dialogic skills of leaders, especially in challenging situations, 4) dialogic career management, especially downshifting and 5) dialogic development methods as sources of creativity and innovativeness.

Work processes in many sectors depend heavily on technical mediation. Technology has changed working methods, communication and knowledge management in different types of work and service units. Organisations are actively implementing new ICT (information, communication and technology) systems and environments because they believe they will increase the effectiveness of interaction and collaboration, workplace learning and work performance [4]. At the same time, routines, traditions and power relations in organisations create different kinds of boundaries and conflicts [5, 6] between various actors. This trend also challenges traditional leadership and management. In this paper, the focus is on theme two of the Dinno project. The research task is to determine *what kind of prerequisites and preconditions ICT-intensive work organisations create for dialogic leadership and innovative learning spaces*. Particular attention is paid to the challenges related to employees' skills and attitudes toward using a new application and organising work processes using that application.

## **1.2 Theoretical frameworks: dialogical leadership and learning**

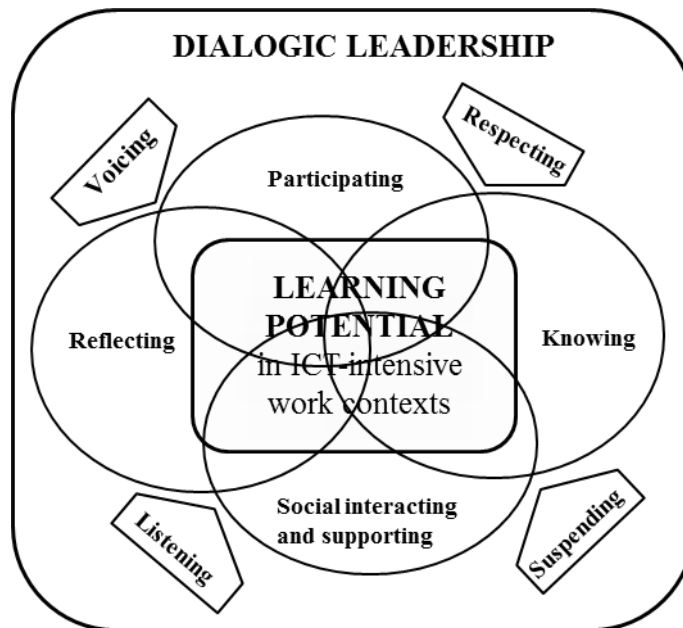
Employee participation and workplace innovations have a key role in efforts to achieve a more sustainable working life, improved performance and competitiveness for organisations. Innovativeness can be increased by wider employee participation, the sharing of knowledge and motivation [e.g. 7,8].

The Dinno project is based on theories of creativity, innovativeness, learning, motivation and leadership [e.g. 7, 8, 9, 10, 11, 12, 13]. The programme creates a multidisciplinary theoretical framework of dialogic leadership to be used in promoting workplace innovation. In addition, Dinno project combines societal, organisational, workplace and individual perspectives. The theoretical framework can

be used to identify the preconditions, obstacles and catalysts of organisational creativity and innovativeness.

Dialogic leadership provides an opportunity to reconcile the needs of organisations and their employees. Its central principles are appreciative interaction, listening and the equal participation of different groups of employees in the development of activities [11, 13]. Dialogic leadership increases organisations' capacities for renewal and innovativeness, and simultaneously offers the necessary preconditions for employee wellbeing, skill development and enhancing work capability.

According to the theoretical framework, organisations are examined as potential but contradictory learning spaces [14, 15]. The main modes of organisational learning are participation, knowing, social interaction and supporting and reflecting [12, 14, 16]. All these modes take place in individual, communal and organisational contexts. Figure 1 summarises the modes of learning potential and dialogic leadership in ICT-intensive work contexts.



**Fig. 1.** Modes of learning potential and dialogic leadership [11] in ICT-intensive work contexts [modified from 14].

When implementing and using new technologies, the challenge is to recognise, coordinate and develop these modes of learning potentials. Dialogic leadership is one of the key factors in successfully meeting this challenge. The critical questions from the point of view of dialogic leadership and ICT-mediated work processes are:

- *Are the management and organisational cultures promoting participation or withdrawal?*

- *What are the possibilities and forums for participation, learning and development?*
- *How is the knowing constructed, developed and shared?*
- *What are the forms of social interaction and is there enough support?*
- *Are there possibilities for reflection?*

Implementing and using ICT systems takes place through *participation*. It is essential to coordinate the operations, interpretations and meanings in an effective way. The crucial issues are: 1) whether ICT systems promote or inhibit participation and 2) determining what kind of participation they allow. Employees can be active or passive participants, social interaction can take the form of participation or withdrawal and the organisational culture might be permissive or compulsive [14]. We believe that through dialogic leadership, it is possible to promote active participation and a permissive culture. However, we wonder whether ICT systems and technological applications promote active and meaningful participation.

In the current global economy, the generation and assimilation of knowledge would appear to be indispensable to the success of any organisation. According to Blackler [16], knowledge in organisations takes the form of *knowing*, which refers to the situated, mediated, temporary, pragmatic and contested nature of knowledge. Today, knowing is heavily ICT-mediated. Technical applications and programmes have speeded up the exchange of information, created easier access to information and allowed many people to access information simultaneously [4]. The challenge for organisations and managers is to create relevant forums and spaces for the generating, interpreting, combining and sharing of knowing.

*Social interaction* and collective learning processes play an important role in organisational learning [e.g. 5, 14, 15, 17, 18]. It has also been found that employees choose to learn how to use ICT systems in informal learning situations by asking peers and solving problems together with colleagues while working [4]. Individual and collective meanings are negotiated and developed during social interaction. This negotiation process might also create negative rationales for conventions and routines [5]. *Supporting* is one critical factor in meaningful interaction and learning. It includes peer support and encouragement to participate. The organisational culture may be competitive or cooperative [see cooperation strategies 5]. Dialogic leadership plays a crucial role in promoting cooperation and in supporting organisational cultures [11].

*Reflective* processes are key factors in learning. Reflections should take place in individual, collective and organisational contexts [14, 15, 19, 20]. Reflection means evaluating participation, which may take the form of breaking assumptions, questioning or inquiring. It is crucial to create forums and spaces for reflection, as well as to make reflection an integral part of work and development processes [5, 14, 15]. Reflection is crucial when applying and using new technical solutions. However, do ICT systems promote or inhibit reflective processes?

In this paper, we will examine the crucial modes of organisational learning and the principles of dialogic leadership, focusing on implementing and using a new ICT application in one of the Dinno project's case organisations. The focus is particularly on the challenges related to employees' attitudes and skills in using e-Calendar (henceforth eC) and on how eC enables the organising of work processes, mutual

schedules and services. We will present a short case study example where the modes of participating, knowing, interacting and reflecting are challenged by a new technological application — the eC.

## **2 Methodological framework: participatory action research and case study**

The research data for Dinno project is generated using both quantitative and qualitative methods, such as participatory action research and case studies, an innovativeness questionnaire, thematic seminars and workshops, individual and group interviews, letters and diaries and reflective conversation [3].

Alongside the actual research programme activities, a number of more practically oriented participatory action research projects are carried out, with a special focus on dialogic leadership, participatory and creative development methods, performance and quality of working life. The data consists of the personnel's descriptions of everyday life and activities, work and interaction in work communities. The case study discussed in this article is one of the professional case organisations in the practically oriented participatory action research project.

The case study tells about a new professional organisation that was established during one of the Dinno programme's action research project at the beginning of 2011. Arguments about the restructuring process were based on economics; a lack of resources forced five independent service units from various municipalities to join together to establish a new organisation. There had been various organisational changes during the dialogic development project. For instance, the professional organisation was divided into two functional areas, the southern and the northern areas. Two responsible managers were assigned to those geographical areas.

As is typical for action research processes, this development project was centred on the collaborative development of the practices of work communities, with the purpose of finding solutions to problems brought up by the local actors. The most important development forums and spaces for dialogue (concerning eC) have been the organisation's development group, the managers' meetings, the meetings of the southern and northern areas, the meetings of the teams and the development discussions between managers and employees.

## **3 Results: challenges related to applying e-Calendar**

In this new organisation, there was an absence of mutual forums or systems to plan and schedule services, and actions. There was also a lack of co-operation between managers and employees, both on an individual and a team level. The main challenges were focused on the great geographical distances between five service units. The organising of work processes and management could not depend on face-to-face interaction anymore. New working and communication environments necessitated the use of electronic systems to communicate and schedule mutual actions and work processes.

Two service units had previously used an eC. The challenge was to integrate the eC into a new organisation as a modern way of working and co-operating. The main challenges of the application and development processes appear in the figure below:

<p><b>Attitudes, emotions, routines</b>  <i>“No one wants to use the new system. There is a fear of losing control and losing independence.”</i></p> <p><b>Skills and support</b>  <i>“I am sure that we will find internal trainers among our own staff. We must take care that they have enough time to do their jobs and support each other.”</i></p> <p><b>System problems</b>  <i>“There are many difficulties in using the new system — problems with equipment, computers, programmes and mobile phones.”</i></p>	<p><b>Motivation</b>  <i>“It was noticed — the lack of internal motivation to learn a new system. Not everyone uses it.”</i></p> <p><b>Principles, commitment</b>  <i>“There are different ways and principles of using the eC system.”</i>  <i>“Not everyone puts all the relevant information in eC on time; it affects the other people badly.”</i></p>
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These problematic issues concerning eC were discussed in several dialogical learning arenas and forums. Managers experienced very important to create collective principles to eC. They wanted to stress the importance of the commitment to the eC system and wanted to investigate the personnel’s support needs. Managers took the problems related to the eC seriously and wanted to solve them. Based on the principles of dialogic leadership and learning, all personnel were given an opportunity to share their experiences of applying the eC. Supportive discussions occurred twice in the development group, twice in the service unit staff and once in employee – manager development discussions.

The reflections were very important because many problems emerged. The quantity of problems decreased, but the major problems remained: some of the employees did not want to use the eC system, some major mistakes had been made because of a lack of knowing and negative attitudes and a lack of commitment was reported. Some employees hid their lack of their knowledge about eC from managers and colleagues. This was the main reason they did not want to use the system. Because of this, some clients were negatively affected. For example, some appointments relating to specific services and clients vanished from the system. Some users even cancelled their own appointments. Because of these problems, people believed the whole system to be unreliable. After these reflections, agreements were made between managers supporting personnel. Each one emphasised the employer’s obligation to use eC and to act according to the mutual principles. Managers stressed the commitment to eC.

From the point of view of dialogic leadership and learning, *participation* is not even possible if the solution, programmes, connections or devices do not work, or if the employees do not have the relevant skills, instructions and equipment to use them. A crucial aim is to map out and break the barriers to participation, which may be related to attitudes, motivation, a lack of skills, a lack of leadership or rigid organisational structures. It is important to notice what kind of *knowing* the

participants have or should have when implementing a new technical solution. Employees also need to know the arguments for a new application. It is important to create spaces for generating and sharing knowing as well as to recognise the knowledge gaps. In our example, the employees who used the eC earlier had valuable knowledge that was used as a collective learning resource during the development process. It is also important to facilitate forums for *social interaction*, *support* and *dialogue*. Knowing, creation, learning processes and social support take place during social interactions. Shared meanings and understanding are crucial when developing collective work processes and operations. In the case example, the participatory action research project created a dialogic forum for different professionals and new workmates. The prerequisites for adopting new technological applications and learning new skills are the capability and possibility for *reflection*. Time and space are needed for individuals and communities to question, consider and evaluate work processes, behaviour models and habits and judgments.

When employees are expected to adopt new work tools and change their ways of thinking and acting, managers need dialogic leadership skills. They should listen to the employees, respect employees' experiences and viewpoints, suspend the self-evident ways of thinking and routines as well as voicing all the members of work community [11].

## 4 Conclusions

The benefits of ICT systems include speeding up the exchange of information, ensuring easy access to information, allowing many people to access information simultaneously and making it easier to reach people. However, the implementation of new ICT applications often results in problems and failures as the applications do not always work as planned [4].

The case study illuminated the learning and dialogical leadership challenges related to implementing a new technological application—the eC. ICT systems have huge potential when developing work processes and managing knowledge. However, there are also many challenges to be aware of. Based on the preliminary data and the analysis of the case example, when implementing new technical applications, the focus should be on meaningful participation, possibilities for generating and sharing knowledge, supportive interactions and spaces for reflection. Referring to Isaacs [11], dialogic leadership is carried out by listening, respecting, voicing and suspending. The development project presented in the case example is based on these principles. Participating, knowing, interacting and reflecting create potentials for learning and these potentials for learning can be achieved through dialogic leadership.

The research task for theme two is to discover the possibilities and attempt to solve the problems ICT-intensive work contexts create for dialogic leadership and dialogic learning spaces. We are at the beginning of our research journey. The next step is to generate more data via the innovativeness questionnaire to discover more about the relationship among ICT systems, dialogic leadership and learning.



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