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Sustainable use of digital technology for informal workplace learning

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Introduction

- Digital technology introduces paradoxical tensions to the workplace: opportunities and threats that employees and managers must learn to cope with (Kokshagina & Schneider, 2022).

- Negative effects: information overload, bad work experiences, privacy breaches, negative emotion (Yu et al., 2023), technostress (Pirkkalainen et al., 2019).

- Digitalization can further increase the learning demands of employees (Collin et al., 2024) and workplace learning situations are not always sustainable (Lemmetty & Collin, 2020). Digital technology not only extends the possibilities for informal learning but also demands skills (Watkins et al. 2018).

The aim of this study

- To increase our understanding of the use of digital technology in everyday work and learning and finding sustainable ways to use digital technology at work, ensuring it supports informal learning, without causing excessive burden or stress.

Key concepts

- **Informal learning,** integrated with everyday work activities and interaction (Eraut 2011) and thus to the use of digital technology.

- **Digital technology,** the digital services, resources, and tools the participants used at work or in work-related learning.

- **Sustainability**, point of view social and human sustainability -> **sustainable workplace learning:** continuous, enduring and proactive, wellbeing of employees considered (Hays and Reinders, 2020; Collin et al., 2024)

Digital work practices and environments

Digital work practices:

Karhapää, A., Hämäläinen R. & Pöysä-Tarhonen, J. (2023) Digital work practices that promote informal workplace learning: digital ethnography in a knowledge work context, Studies in Continuing Education, DOI: 10.1080/0158037X.2023.2274596

Digital work environments:

Karhapää, Rikala, Pöysä-Tarhonen & Hämäläinen. (2024). Digital environments as sites for informal workplace learning in knowledge work. (manuscript accepted for publication).

Research questions

1) What kinds of challenges relate to the use of digital technology for informal workplace learning?

2) How these negative aspects can be managed and reduced?

Methodology

- Digital ethnography (Pink et al., 2016) provided suitable tools, engaging with the digital environments of the workplace and capturing mundane activities and meanings behind them.

- Rich accounts of digital work environments and practices.
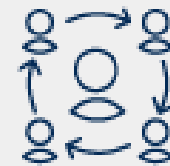
Research setting

- The workplace studied had 70 staff members and comprised one unit of a public sector training organisation in Finland.

- Distributed work, remote work. Accustomed users of digital technology and it was inseparable part of workplace learning.

The research data collected 2021-2022.

Type of data	N	Pages
Observations in:		
● **Online meetings and gatherings (formal/informal meetings virtual coffees)**	23	Fieldnotes: 24 pages and two screenshots
● **Online forums and chats (2 Yammer groups, 2 Teams group channels, and 2 Teams chat threads)**	6	Fieldnotes: 44 pages and three screenshots
● **Days at the workplace**	2	Fieldnotes 5 pages
Interviews	15	176 pages of transcript
Diaries (two weeks)	7	35 pages text and pictures

Analysis

- Ethnographic content analysis (Coffey 2018).

- Open coding. Atlas.ti assisted to code the versatile data.

- Analysing the actions and speech of people in digital environments in their everyday work.

- Identifying challenges and solutions related to the use of digital technology for informal workplace learning and analysing them from the perspective of sustainability of learning.

Preliminary results

- **Challenges** related to the use of digital technology:

➢ distraction

➢ information overload

➢ learning demands

➢ leadership paradox (the use of digital technology needs leadership and autonomy).

These challenges could affect to wellbeing of the employees or transferability and usability of learning and knowledge, and thus undermine the sustainability of informal workplace learning

- **Solutions**:
- ➢ developing shared practices of the workplace (peer support),
- ➢ modifying the digital tools and environments (adjusting settings and notifications, personalizing)
- ➢ choosing the ways how to engage in various digital environments (choosing the digital channels to follow, information avoidance)
- ➢ regulating the learning demands (choosing what and when to learn).

Conclusion

- Sustainability of workplace learning is an emerging concept. As the digital technology has an increasingly important role in workplace learning, it is essential to consider the sustainability of the use of digital technology.

- In this study we examined how digital technology can be used for informal workplace learning, considering the well-being of employees, as well as transferability and usability of learning and knowledge. The results of this study can assist in developing more sustainable practices for using digital technology for workplace learning.

Lähteet

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Thank you!

Questions?

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