

# **Networked aspects of lifelong work-integrated learning - the BUFFL case**

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## **Abstract**

The increasingly digitalised and continuously changing working life needs a continuous lifelong professional development that preferably is networked and work-integrated. This study builds upon university teachers' and course participants' experiences from a technology enhanced project called BUFFL. A pilot project that combines truly work-integrated learning with lifelong learning, in a strive to address the contemporary need for continuous professional development. The important aim in the BUFFL project is to develop a model for collaborative, flexible, and lifelong professional development. A new and interesting concept in the BUFFL project was to involve concept of Bringing Your Own Data for activities in course modules. The aim of this study is to describe and discuss the lifelong work-integrated learning in the BUFFL project from a networked learning perspective. Data were gathered from e-mail interviews with teachers, e-mail conversations between teachers, facilitators and course participants, and from course evaluations. Results from the data sources have been grouped into three main themes in an inductive thematic analysis. Findings show that in academia, in industry, and in the in between a potential is found in the form of collaborative learning. A networked collaboration that should involve the theories from academia, combined with real-world-problems in the workplace, to achieve a fruitful meeting between academia and the industry

## **Keywords**

Networked learning, Lifelong learning, Work-integrated learning, Bring your own data, BYOD

## **Introduction**

In the industry, the working-life of the professional is today characterized by continuous changes and digital embedded work conditions combined with a moving professional competence needed for handling complex business relations and tasks (Vithayaporn, 2021). A working-life that also requires the ability by both the individual worker and the company not only to identify what knowledge and competences need development, but also know how to participate in such professional development activities (Jaldemark et al., 2021). Using the words by Littlejohn et al. (2019), it is important to address that 'Once professionals have reached a particular level of expertise, they continually need to learn new concepts or develop novel forms of practice' (p. 3). In this way, networked lifelong learning becomes an always present and integrated part of a work practice situated in the knowledge society.

Acknowledging an ongoing discussion concerning the definition of the concept of networked learning (NLEC, 2021), in this paper, the concept is defined as the learning activities which connect university teachers with a learning community (Goodyear et al., 2004) and the contexts in which the involved teachers participate (Rydberg & Sinclair, 2016). This paper reports academia teachers' and course participants' experiences from an online project called BUFFL, a networked work-integrated lifelong learning project between academia and industry in Sweden. The aim with the project is to by means of collaborative, flexible, lifelong learning activities develop professionals working in bank organizations or insurance companies. One main idea in the project is that the course participants use their own devices and bring their own data (BOYD) displaying challenges and problems experienced in their work-place. The BUFFL project and how we operationalize the concept of BOYD is described in further detail below.

## Aims and research questions

The aim of this paper is to describe and discuss the lifelong work-integrated learning in the BUFFL project from a networked learning perspective. Two research questions are posed:

How do teachers and course participants describe possibilities for networked learning when academia meets the industry?

How can these possibilities create spaces for networked learning which combine theory and practice in real-world cases be understood?

## The BUFFL project

The acronym BUFFL can be translated from Swedish to English as 'Industry development at bank and insurance companies through flexible lifelong learning'. The project was a pilot with three phases that partially intersected and were repeated on several occasions over two years. In summary, the BUFFL project combined work-integrated learning with lifelong learning, addressing the increasing need for continuous professional development. In the BUFFL project, professional development was designed and defined as technology enhanced online learning with a flexible integration in the employees', i.e. course participants', daily working life. This was a must, since all of the course participants worked full-time. For this reason, the courses were divided into course modules given at a lower study pace (Mozelius, Olofsson & Håkansson Lindqvist, 2021).

A fundamental concept in the BUFFL project was the less well-known interpretation Bringing Your Own Data for BYOD. Research on bringing your own data is rare, but there are a few studies that report promising results from research workshops that have tested the concept (Roos et al., 2014). In the design of teaching and learning activities that involve authentic real-world problems, it is of great importance that companies and organisations involved provide genuine data. A design rule for course design in the BUFFL project was that all of the course modules included at least one assignment related to theory in the provided literature, and at least one assignment was based on the involved companies' and organisations' own data (Jaldemark & Öhman, 2020). Two main course themes were: 'Company evaluation' and 'Customer relationship'.

## Method

This study was carried out with a qualitative approach. The data were gathered from e-mail interviews, e-mails and course evaluations. Due to the pandemic the interviews were handled through asynchronous e-mail, with seven teachers in the BUFFL project as informants and who showed interest in participating. The analysed e-mails comprised communication between teachers, facilitators and project leaders in the BUFFL project. All of the course evaluations that were completed by the course participants at the end of the course were included. Results from the data sources have been grouped into themes in an inductive thematic analysis, following the six-step method described by Braun and Clarke (2006). In reflection, the findings may have been different if face-to-face interviews had been used, however, the combined data material present for the research questions posed relevant information.

## Findings

With a focus on how academia meets the industry in networked continuous professional development the results from the thematic analysis have been grouped into Pedagogy, Technology and Combining theory and practice.

### Academia meets the industry - Pedagogy

When industry met the academia in the BUFFL project, the course participants seemed satisfied with both the course design and the course content. In the evaluation questionnaires, the course participants described that they had appreciated the possibility to analyse and to reflect upon their own experiences from the industry in comparison to the course literature. One of the course participants noted: "I am really pleased with the course content and the way the teachers have designed the course. The theme of the course has been interesting and provided me with knowledge that I already have begun to use in my daily work". Several course participants also spoke of the course seminars as interesting and rewarding. Some course participants complained about the scarce feedback both in formative and summative aspects. One participant expressed that "I had really wanted much more feedback on my work in order to know if I had done it correctly or not, I have never studied at university level before which makes it difficult for me". The different opinions expressed by different course

participants might be related to prerequisites and previous university studies. The same explanation might be applied to the contrast between some applicants strongly claiming that the course literature in English was challenging while the vast majority found it relevant and interesting. One participant explained: “The specialist literature was difficult, it is hard with literature in English, I had to read it several times”.

According to the teachers, opportunities for networked learning were seen in the form of mentorship in order to support course participants: “Subject-wise, I think that it [mentorship] is a good idea for participants. A mentor can be a teacher or someone who is an expert in the area in the company at hand. This way, we could achieve better continuity when the courses end. However, it is possible to reach the same effect by creating one or more networks with the course participants”. Here, mentorship could involve support for course participants as well as for teachers to collaborate in study challenges in university studies as well as expert competence in the area in focus in the industry. Another teacher sees networking, although unsure of the meaning of mentorship per se, as providing opportunities for sharing experiences in the form of mentorship: “I am not really sure what you mean by mentorship. However, a group for discussing experiences, etc. could be of help”.

### **Academia meets the industry - Technology**

When the academia met the industry, challenges were seen. Technology failure was evident. When technology failed, it resulted in participant reactions such as: “... it was impossible to connect to Zoom through my computer that I use in my work at the bank office”. Some course participants described problems with both connecting to video conferences and also experiences of poor sound quality. Some of the problems were related to imbalances in security levels, for example strict firewalls in the partner companies. Other participants highlighted the frustration generated by the university’s non-functional course portal. Furthermore, the initial access to the university web was problematic: “...a relatively messy process to access the web portal”. Initial login procedures did not go smoothly, and as pointed out by a participant in an email before quitting a course: “I don’t understand why it is more complicated to login to a university than to my Internet bank”. Even for teachers, the level of the technology provided by the university was seen as insufficient: “In my finance course, I use different virtual platforms where I do exams and assignments efficiently... Sometimes I need to develop my own homepage for creating a cloud for the course participants to be able to do a case study”. This could be said to be an imbalance in technology between industry and academia, but also within academia.

### **Academia meets the industry - Combining theory and practice**

Also for the more specific parts of industry and academia integration, and how to combine theory and practice, answers were generally positive. One course participant had the opinion that “... the course has provided me with the facts that I before just have had a ‘feeling about’” and another mentioned that “It was interesting to build hypothetical scenarios that can be learnt from and then implemented in my ordinary workplace”. There was also an appreciation for how “the course had a clear connection to the organisation I work for” and for the BYOD concept, and to have discussions and to get feedback on “...the own data that were included in the course”. There was also a participant who pointed out that there had been “A lot of interesting things that have opened my eyes about how we should handle knowledge internally in the company, I will continue to read about subjects like core competencies and expert knowledge, I think that will help the company”. Regarding theory, one of the participants claimed that: “...some of the articles gave me important input to my understanding of central questions in relation to the continuous development of our company”. On the other hand, there were also less affirmative answers such as: “some of the articles were too theoretical and lacked contact with a basic level and for that reason didn’t contribute that much to my understanding”. Thus, the theoretical input from academia sometimes provided value-added, but was sometimes too challenging for the course participants.

## **Discussion**

The aim of this paper was to describe and discuss the lifelong work-integrated learning in the BUFFL project from a networked learning perspective. Two research questions are posed: 1) How do teachers and course participants describe possibilities for networked learning when academia meets the industry? and 2) How can these possibilities create spaces for networked learning which combine theory and practice in real-world cases be understood?

When industry meets academia, in regard to pedagogy, both teachers and course participants see opportunities for supporting networked learning through mentorship. Mentorship provides opportunities for networked learning in groups of teachers as mentors, but also for course participants in industry. When technology is in

focus, teachers and course participants see challenges in accessing technology, where challenges were seen in complicated login procedures and different levels or insufficient levels of technology. These challenges are in turn hindrances for possibilities for networked learning for participants and teachers, but also between teachers and participants which are necessary to bridge networked learning between industry and academia. Finally, combining theory and practice provide opportunities for participants to use their own data in real-case scenarios and theoretical knowledge which is relevant for theory. However, in reflection, when academia takes over and the theoretical base becomes too strong, networked learning can be said to decrease, i.e. when practice and theory are too far from each other and are not combined to support learning.

## Conclusion and lessons learnt

In conclusion, the continued work in exploring how to continue to support WIL when academia meets industry can be seen in: equity, value-added and BYOD. In regard to equity, it will be important to find the balance in networks for supporting networked learning in academia and industry. How academia and industry meet in between, will need to take place on equal terms. One issue will be finding a balance between theory and practice, in which learning may be too academic for industry and too practice-based in industry for academia. For networked learning to take place, both sides must meet in the in between in order to support the contribution of networked learning. When academia meets the industry, there appears to be a value-added through networked learning. In academia, industry and in the in between a potential is found in the form of collaborative learning. Collaboration which includes the theories from academia combined with real-world-problems in industry can be seen as a fruitful source of collaboration and which joins academia and industry. Participants from a company work together with real-word problems from the workplace. Problems that are not completely solved in a course module can be passed on to participants from the same company in another course module, or to a later version of the same course module. Long-term mentorship for networking in academia and industry, may offer many different motives for networking and networked learning. Bring your own data offers possibilities for supporting teachers' and course participants' use of authentic, real-world data. From a WIL context, industry gains access to academic content and theory can be applied to create knowledge directly in practice. Here, technology which supports bring your own data will be a key factor. Technology in academia may have to step up in order to meet technology in industry for supporting networked learning for teachers and course participants. These efforts may also be important insights for redesigning in a long-term mentorship model for networked learning in academia and industry.

## References

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Goodyear, P., Banks, S., Hodgson, V., & McConnell, D. (2004). Research on networked learning: An overview. In P. Goodyear, S. Banks, V. Hodgson, & D. McConnell (Eds.), *Advances in research on networked learning* (pp. 1–9). Kluwer.
- Jaldemark, J., Håkansson Lindqvist, M., & Mozelius, P., Ryberg, T. (2021). Editorial introduction: Lifelong learning in the digital era. *British Journal of Educational Technology*.
- Jaldemark, J., & Öhman, P. (2020). Developing a hybrid and networked educational approach to lifelong learning for organisations and employees. In the 12th International Conference on Networked Learning (Vol. 12, pp. 1-4).
- Littlejohn, A., Jaldemark, J., Vrieling-Teunter, E., & Nijland, F. (2019). Networked professional learning: An introduction. In *Networked Professional Learning* (pp. 1-11). Springer, Cham
- Mozelius, P., Olofsson, A.D. & Håkansson Lindqvist, M. (2021). Academy meets the Industry – a Study of the User Perspective on an Online Continuous Education in Banking and Insurance Companies. In *Proceedings of the 14th International Conference of Education, Research and Innovation, ICERI 2021*.
- Networked Learning Editorial Collective (NLEC). (2021). *Networked Learning: Inviting Redefinition*. *Postdigital Science and Education*, 3, 312-325.
- Roos, M., Gray, A.J., Waagmeester, A., Thompson, M., Kaliyaperumal, R., Van Der Horst, E., Mons, B. and Wilkinson, M.D., (2014). Bring Your Own Data Workshops: A Mechanism to Aid Data Owners to Comply with Linked Data Best Practices. In *SWAT4LS*.
- Ryberg, T., & Sinclair, C. (2016). The relationships between policy, boundaries and research in networked learning. In T. Ryberg, C. Sinclair, S. Bayne, & M. de Laat (Eds.), *Research, boundaries, and policy in networked learning* (pp. 1–20). Springer.
- Vithayaporn, S. (2021). Organizational effectiveness enhancement through the lens of lifelong learning. *ABAC ODI JOURNAL Vision. Action. Outcome*, 8(2), 98-115