# Lifelong learning and the transformation of higher education: A preliminary framework built on networked learning experts' perceptions

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### Abstract

Societal development in the 21st century has had an impact on competencies needed in working life. Such development includes a continuous professional development, and a lifelong learning process where higher education institutions are an essential partner. Contemporary lifelong learning has multiple purposes such as increased employability, organisational development, global competition, and also hopefully involves the aspect of personal development. This paper aims at reporting preliminary results focused on lifelong learning and the current transformation of higher education, posing the following research question: How can a preliminary framework for lifelong learning based on networked learning experts' perceptions of the transformation of higher education be designed? Eight experts from six different global regions, known for their research and publication records in higher education, lifelong and work-integrated learning, were invited to participate in this study, which involved multiple data collection methods. Data analysis involved staged thematic analysis with multiple coders and inter-rater verification and negotiation. The preliminary findings note the current state of the analysis based on the perceptions expressed by these experts in interviews. These findings consist of the following elements: Lifelong learning, Pedagogy, and Technology. These elements are each represented by a circle that intersects with the transformation of higher education and are seen to be surrounded and impacted by three different levels: the individual, organizational and societal levels. These levels interplay with the elements of Lifelong learning, Pedagogy, and Technology as driving forces in the transformation of higher education. How these driving forces will continue to have an impact on higher education, and how higher education steps up to take on these challenges warrant further research.

### Keywords

Delphi study, higher education, lifelong learning, networked university, professional development

### Introduction

Societal development in the 21st century has had an impact on competencies needed in working life. This development has included organisational as well as technological development. This ongoing development of the society have led to tight links and intersections between digital resources – such as networks, resources, systems and tools – and settings such as education, leisure and work. This development blurs the boundaries between content, place, technology, time and social settings (Jaldemark, et al., 2021). It embraces continuous professional development, and lifelong learning processes where higher education institutions are an essential partner (e.g., Littlejohn, et al., 2019).

According to the International Commission on the Futures of Education (2021), "the right to education must assure education at all ages" (p. 24). Moreover, education at all ages also need to fulfil different purposes. Therefore, contemporary lifelong learning initiatives need to enable the fulfilment of various multiple purposes such as increased employability, organisational development, global competition, and hopefully also involves the aspect of personal development (Jaldemark, 2021). As pointed out by Billett (2010), continuous professional development with a human capital approach could better be defined as lifelong education. Compared to lifelong learning, this concept provides a holistic description of personal development with a capability approach (Boyadjieva & Ilieva-Trichkova, 2018). Billet's notion also emphasises the important role formal higher educational settings have to offer recurrent opportunities for participation in professional development. To sum up, important tasks for higher education institutions are to deliver opportunities for high quality professional development and to prepare learners for lifelong learning (e.g., Blaschke, 2021; Lock et al., 2021).

This new extended role for higher education requires rethinking including new pedagogical approaches, to support networked and technology enhanced learning (Zgaga, et al., 2019). An essential part of the rethinking of higher education should be to open up for truly work-integrated learning with flexible and personalised study schedules, where learners solve real-world problems related to their everyday lives. With the idea of a work-integrated learning, new pedagogical approaches would be needed such as technology enhancement and facilitation by qualified instructors (Gordon, 2014). This transition of higher education has already begun in many parts of the world. In the current study, this transition is explored through the perceptions of experts from different global regions. Thus, this paper presents the preliminary results from an ongoing Delphi study that have been analysed and synthesised to a framework for further development of lifelong learning.

## Aims and Research Question

The paper aims at reporting preliminary results from a Delphi study focused on lifelong learning and the current transformation of higher education. These results are reported in terms of a framework that potentially could be applied by higher education institutions in lifelong learning initiatives. It answers the following research question:

How can a preliminary framework for lifelong learning based on networked learning experts' perceptions of the transformation of higher education be designed?

### **Methods**

This study of transformation in support of lifelong learning used a Delphi Method to collect qualitative data. A Delphi method uses a series of data gathering activities to capture the perceptions of purposefully chosen experts on the topic under review. This method "has been used in an array of different contexts, where expert knowledge is needed to inform decision making or to understand a phenomenon in greater depth" (Brady, 2015, p. 2). Our data gathering techniques were desired around a system of recursive communications to create progressive interpretation via critical reflection, examination, and discussion by participants and researchers: "Delphi studies have been useful in educational settings in forming guidelines, standards, and in predicting trends" (Green, 2014, p. 1).

Eight networked learning experts from six different global regions, known for their research and publication records in higher education, lifelong, and work-integrated learning, were invited to participate in this study. Titled Linking Higher Education Transformation to Technology-Enhanced Lifelong Learning, the purpose of the study was to create a conceptual model identifying required higher education reform activity in reference to the need for lifelong learning. There were multiple collection and verification steps in the process. Participants were asked to:

- 1 complete an online survey,
- 2 read two articles, as assigned, on the subjects under investigation and as a mean to inform the subsequent data collection
- 3 complete an email interview,
- 4 verify, shape, and/or add to a data summary document, and
- 5 complete the process in a collaborative, group interview with other identified Delphi experts.

Data analysis involved staged thematic analysis with multiple coders and inter-rater verification and negotiation.

# **Preliminary Findings**

The following preliminary findings note the current state of the analysis based on the interviews with the networked learning experts and the perceptions expressed by these experts. These findings consist of the following elements: Lifelong learning, Pedagogy, and Technology. These elements are each represented by a circle that intersects with the transformation of higher education. This transformation is surrounded and impacted by three different levels of human actions. These actions occur at the individual, organizational and societal levels. These different levels interplay both within and between each other. Moreover, the levels also interplay with the elements of Lifelong learning, Pedagogy, and Technology as driving forces in the transformation of higher education. The framework is illustrated in Figure 1.



Figure 1. A preliminary framework for lifelong learning based on networked learning experts' perceptions of the transformation of higher education

The rough analysis of the data collected in the Delphi study links the relationship between higher education and Lifelong learning to several concepts which were expressed by the experts. Among these concepts, for example, the discourses of economy and employability were emphasised. Here, Lifelong learning was linked to issues of education as a means to be up to date with the needs of the labour market. Another discourse of Lifelong learning, according to the experts, linked issues such as citizenry and being an educated and erudite/literate person. In this discourse of Lifelong learning, as expressed by the experts, goes beyond employability. One example of this discourse emphasised critical thinking and that learning in itself has a value of its own. However, this learning does not necessarily have an immediate impact on economic or social issues. Several of the experts noted that this discourse of learning was related to being a citizen and building learning capacity in several aspects of life.

The element of Pedagogy in the relationship between higher education and Lifelong learning can be linked to several aspects. One aspect emphasised issues of self-direction in learning. In Lifelong learning, human beings should be able to steer and direct their own learning process. Thus, pedagogies applied should enhance self-directed learning. According to the experts in the network, this included the importance of motivation and the use of methods where learners are allowed to apply knowledge in real life situations, with a clear link between theory and practice. The element of Pedagogy also is linked to issues of inclusion and accessibility. Here the experts saw the importance of higher education institutions finding ways to include human beings from a lifelong perspective. Therefore, accessibility appears to be a key issue for Lifelong learning pedagogies.

In the relationship between Lifelong learning and higher education, Technology concerns several issues linked to affordances and the role Technology has to enhance and enable learning. As noted by the experts, in an era where digital technologies are evolving rapidly and are closely linked to many aspects of human life it is important for higher education institutions to discuss the role of Technology in education. Particularly, this discussion needs to include the link between learning and Technology. Accessibility and flexibility is also an issue which links Technology and the relationship of Lifelong learning to place and time. The potential of Lifelong learning, according to the experts was also emphasised as a link to how Technology enables learning by different combinations of place and time. This potential also concerned Technology and Lifelong learning in terms of applications/software, devices/hardware, and networks/infrastructure.

# **Concluding Remarks**

The aim of this paper was to report the preliminary results from a Delphi study focused on lifelong learning and the current transformation of higher education. These results were reported in terms of a preliminary framework that potentially could be applied by higher education institutions in lifelong learning initiatives. The research question posed was: How can a preliminary framework for lifelong learning based on networked learning experts' perceptions of the transformation of higher education be designed?

The framework was based on the preliminary findings, noting the current state of the analysis based on the interviews with the networked learning experts. The framework represented the following elements: Lifelong learning, Pedagogy, and Technology. These elements are represented by a circle that intersects with the transformation of higher education. This transformation is surrounded and impacted by three different levels of human actions. These actions occur at the individual, organizational and societal levels. As noted by the experts in the study, the elements of Lifelong learning, Pedagogy and Technology can be seen as driving forces in the transformation of higher education. Citizenry, economy, employability, inclusion and accessibility, and self-directed learning will be important issues for lifelong learning.

The preliminary framework has been fruitful in illustrating the perceptions of the networked learning experts and presenting the driving forces for lifelong learning and the transition of higher education. Continued development of the framework may result in further insights into the elements in the framework and the driving forces within and between the elements in intersection and interplay. How these driving forces will continue to have an impact on higher education, and how higher education steps up to take on these challenges warrant further research.

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