

Higher education transformation towards lifelong learning in a digital era – a scoping literature review

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*The article has been adapted and the authors have been changed for learning purposes

Abstract ...

Keywords ...

Introduction

Lifelong learning is a topic that has been widely discussed in the twenty-first century and with increased importance following the outbreak of the COVID-19 pandemic. The ongoing shift to a knowledge society requires professional development and reskilling that preferably should be technology-enabled (Jaldemark, 2020). Furthermore, the role of lifelong learning in the educational system needs rethinking and new forms adapted to a digital era (Zgaga et al., 2019). Many educational reforms have been introduced, relating to the formal, non-formal, and informal aspects of lifelong learning from a life-wide perspective (Burbules et al., 2020; Roche, 2015). Here, regional and international policies, as well as skills and employability, are seen as important for lifelong learning (Rambla & Mirana, 2020). Reforms have also linked lifelong learning to societal development which has resulted in that transnational organizations, and countries all over the world have involved the concept of lifelong learning in their policy documents (Bostrom, 2017; Lee & Jan, 2018; Volles, 2016). There are various motives for lifelong learning in these policy documents such as social development, increased employability, global competition, and sometimes also the aspect of personal development (Jaldemark, 2020). Most policy documents also aim to transform the current educational system to open up new opportunities for lifelong learning (Schuetze & Slowey, 2020). One example suggests, 'The right to education needs to be broadened to be lifelong and encompass the right to information, culture, science and connectivity' (International Commission on the Futures of Education, 2021, p. 4). At the same time, the intentions of Bologna to widen and open universities may have been of limited success (Holford, 2014).

An ongoing transformation with a policy development that links to another global societal trend is rapidly emerging digitalization. Acknowledging that there are downsides and messiness related to digitalization (Selwyn, 2016), there are also opportunities. The emergence of digitalization also intersects with the new stronger focus on lifelong learning. From an educational perspective, digitalization changes the conditions for teaching, learning, and communication between humans. These new conditions enable new innovative ways of combining places and time modes to facilitate the idea of any place and anytime (Cook & Grant-Davis, 2020). This trend has a strong impact on educational systems in general and higher education in particular. The creation of innovative and transformative opportunities enables both asynchronous and synchronous teaching and learning activities in formal, informal, and non-formal educational settings (Jaldemark, 2020; Matheos & Cleveland-Innes, 2018).

Digitalization and lifelong learning are common themes in the discussion of the transformation of higher education. Policies are one approach in supporting transformation as they highlight the need to be up-to-date with the impact that the ongoing digitalization has on working life. Further, the role of Higher Education (HE) is important in a changing society. This has led to ideas for transforming the role of higher education both in national educational systems and on a global level. Recently, the COVID-19 pandemic has further accentuated the need for fully online solutions, and a richer technology enhancement of higher education (Carius, 2020; Mozelius, 2020). This is an educational shift that also requires new pedagogical and collaborative learning approaches.

The combination of a stronger emphasis on lifelong learning enabling policies, and the emerging digitalization creates new conditions for lifelong learning for twenty-first-century citizens. Therefore, this study aims to discuss the transformation of contemporary higher education in light of the rising emphasis on continuous lifelong learning and the rapidly emerging digitalization. The ongoing transformation discussed above has been formulated in the following research question: *Which key themes of lifelong learning emerge from higher education literature?*

Background

Based upon a historical and growing literature, the main construct in this study is the transformation of lifelong learning and higher education. Seminal ideas about these two interrelated phenomena and a rationale for studying them together are presented here below. This is a research area initiated long before the outbreak of the COVID-19 pandemic (Schuetze & Slowey, 2013; Yang et al., 2015). However, the pandemic has further highlighted the need for technology-enabled lifelong learning and how to address its challenges (Davidović, 2020; Ivenicki, 2021). In several ways, the pandemic has acted as a catalyst for the development of technology-enabled lifelong learning and the transformation of HE (Kift et al., 2021; Mozelius, 2022). The adjustments of lifelong learning to HE structures during the pandemic add evidence to the argument that learning design and its distribution ought to change. Well-planned and relevant changes in HE, in combination with the need for lifelong learning, could certainly have valuable outcomes. The overall research question that guided this literature review was the exploration of key themes of lifelong learning, if any, were emerging in HE reforms.

The need for lifelong learning

At a time when societies are increasingly dynamic, socio-economically complex, and globally connected, the need for technology-enabled lifelong learning grows stronger (Hansen et al., 2020). This is one of many contemporary reform requests put forward that HE institutions must address. Learning across humans' entire lifetime is captured in the term 'lifelong learning', and has been defined by Jarvis (2014) as a process where humans of any age, and with a broad range of interests acquire new knowledge and skills. Established teaching institutions can be seen as one delivery mechanism but not the only one (p. 53). HE institutions can play two roles in the field of lifelong learning. First, these institutions can ensure that graduates of formal, credit, and accredited programmes are empowered with the skills required to be a lifelong learner. These same institutions can also offer continuing and extension education courses and programs designed for the needs of prospective and current lifelong learners. The delocalization of education programs through the affordances of digital resources and technology-enabled learning applies when designing for lifelong learning as well as traditional programs. This fact alone positions HE institutions to be central, however, not the only purveyors of lifelong learning.

Delors et al. (1996) provide seminal thinking in four pillars of learning as fundamental principles to embrace lifelong learning. This work applies in both roles of HE for lifelong learning identified above. Learning to know means that education should provide the cognitive tools required for an individual to better comprehend the world and its complexities, and to have an appropriate and adequate foundation for future learning. Learning to know can be understood as a synonym for learning to learn in order to benefit from the opportunities offered by lifelong learning. Learning to do focuses on acquiring professional qualifications and soft skills such as the ability to cope with diverse situations and to work in a team. Education should provide the skills to help enable individuals to effectively participate in the global economy and society. Learning to live together focuses on developing an understanding of others and the reality of interdependence relating to human rights, democratic principles, intercultural understanding, and peace and harmony at all levels

of society. Learning to require that education provides self-analytical and social skills to enable individuals to develop to their fullest potential as a whole person: psycho-socially, affectively, and physically. Together, these four pillars form a base for lifelong learning (Delors et al., 1996).

Current trajectories of higher education reform

For Broucker et al. (2016), HE reform, sometimes called *transformation*, will include a reformed public sector. Williams (2016), who identifies a need for a more socially appropriate response from education, presents a contrasting view. This view implies that education cannot only be seen as maintaining the status quo or in support of the elite but instead towards the greater good of society. There are opportunities for education to better align with the needs of students and society, which can be seen in both views. Multiple societal transformations, acting as a catalyst for HE reform, are identified in published literature (Bryce et al., 2016, Duderstat, 2009; Keeling & Hersh, 2011). These transformations include:

- information access and quality
- cost-containment and affordability
- globalization of human activities
- employment sector transformation
- twenty-first-century core capabilities
- continuous technology expansion and integration
- changing student demand, demographics, and resulting needs.

The need to reform HE to align with societal changes is well articulated in government documents and academic literature (Jones, 2013). A systematic approach to turning such demands into reforms, with an evidence base to guide such action, underpins this study. The previous work of Slowey and Schuetze (2002) who identified a new way of seeing HE in reference to society is also of importance. According to Slowey and Schuetze (2002), HE and its traditional forms of delivery are often missing attention, and do not acknowledge the needs of more diverse learners. These researchers suggest that it may be this attention to diverse needs that will embrace the needs of lifelong learners, putting the university campus into what can be called 'lifelong learning mode' (Slowey & Schuetze, 2002, p. 324). A move towards a lifelong learning mode of delivery can address the broader demands for change in HE coming from government agencies and the students themselves. A diverse HE system will address the needs of diverse students and the required competencies in diverse, dynamic societies (Cleveland-Innes, 2020).

Method ...

Findings

of the 26 publications in focus in this study, the largest number of publications were published in 2018 (8), followed by 2016 (6) and 2019 (6). In 2020, there were four publications, and two publications in 2017. The publications show a wide variety of contexts: Australian, Canadian, Chinese, European, Russian, South African, South Asian, and the US. Regarding methodology, several publications can be described as position publications (6); publications presenting models/frameworks (3); and literature or policy reviews (6). The empirically based publications are qualitative (5); quantitative (3) or mixed methods (3). An overview of the 26 publications is presented in Table 1. As noted above, after a quality assessment according to the inclusion and exclusion criteria, we selected these 26 publications for further close reading. In the findings from the thematic analysis, the following seven themes emerged: *Policy perspective* (4), *Value perspective* (3), *Employability perspective* (2), *Reform perspective* (5), *Collaborative perspective* (4), *Student perspective* (3) and *Workplace learning and Professional development perspective* (5).

Discussion

The overall research question that guided this literature review was the exploration of key themes of lifelong learning. In returning to the research question, which key themes of lifelong learning, if any, are emerging in HE reforms? As noted above, after a quality assessment according to the inclusion and exclusion criteria and discussion, 26 publications were selected for further close reading. The review of the 26 publications resulted in seven themes and in the selection of five publications. Together, we viewed these five publications as encompassing multiple societal reforms pushing toward the reform of HE (Bryce et al., 2016; Duderstadt, 2009; Keeling & Hersh, 2011).

These publications can be said to represent and characterize global themes regarding challenges in creating a closer connection between lifelong learning and HE of interest for continued and deeper study and the transformation of HE (Kift et al., 2021; Mozelius, 2022). The five publications chosen can be said to apply to both roles of HE for lifelong learning. The publications can also be linked to Delors's (1996) seminal thinking in four pillars of learning: *learning to know*, *learning to do*, *learning to live together*, and *learning to be* as fundamental principles for embracing lifelong learning. Together, these four pillars form a base for lifelong learning (Delors, 1996).

Learning to know means that education should provide the cognitive tools required for an individual to better comprehend the world and its complexities. This also involves acquiring an appropriate and adequate foundation for future learning. Learning to know can be understood as a synonym of *learning to learn* in order to benefit from the opportunities offered by lifelong learning. Here, the publication by Boyadjieva and Ilieva-Trichkova (2018) provides a theoretical outline of the heuristic potential of the capability approach in conceptualizing lifelong learning and the capacity of this approach to guide empirical studies on lifelong learning. This approach is of importance for learning to know for empirical studies on how individuals can learn for future learning, i.e. learning to learn.

Learning to do focuses on acquiring professional qualifications and soft skills. This involves the ability to cope with diverse situations and to work in a team. This pillar of learning states that education should provide the skills to help enable individuals to effectively participate in the global economy and society. In their publication, Weil and Eugster (2019) argue for a stronger relationship between HE research and CET professional activity such as more collaborative engagement between HE and CET. This is most likely necessary to include the importance of applied, practitioner research in professional fields. Furthermore, Kasworm (2020) argues for a rethinking of the mission of HE with a specific focus on adult undergraduate students who more often are workers as well as students. Both of these publications are related to the learning pillar of learning to do in practice as students and as practitioners.

Learning to live together focuses on developing an understanding of others, along with the reality of interdependence relating to human rights, democratic principles, intercultural understanding, and peace and harmony at all levels of society. This learning pillar could be said to be manifested in the publication by Jamaludin et al. (2020), which presents the challenges seen in HE. This publication acknowledges the need for a new, dynamic HE ecosystem and Education 4.0 as a sustainable ecosystem LL in HE.

Learning to be requires that education provide self-analytical and social skills to enable individuals to develop to their fullest potential as a whole person: psycho-socially, affectively, and physically. Baptista's (2016) publication draws upon European policy, presenting LL for economic development, personal development, social inclusiveness, and democratic understanding and activity in HE. All of these aspects note the importance of policy for creating a holistic view for supporting individuals' lifelong learning throughout their lives as learning to be.

Conclusions and next steps

The research question has been answered by the findings in this literature review, leading to deeper insights into the necessary changes for the transformation of HE. The limitations of this study regard the search of publication solely in Google Scholar. Future studies may comprise searches in several databases. Important issues for future research will be to identify the necessary conditions for lifelong learning when striving for a Higher Continuous Education and how lifelong learning fits into the current digital trends of HE reforms. Five of the 26 selected publications in this study will be further used and analyzed as part of a Delphi study (Brady, 2015). This study will involve leading researchers in the field of lifelong learning in the expert panel. The Delphi study has the aim of providing a knowledge contribution regarding how technology-enabled learning could support lifelong learning, in the ongoing transformation of higher education. Each of the panel members will read two of the publications as food for thought in a focus group discussion.

All of the identified key themes seem relevant for further work in the Delphi study, where 'The Workplace learning and professional development perspective' could be an interesting separate study. While the 'Student perspective' is the theme with the least findings in this study, on the other hand, it is one of the most important for further investigation. One idea here might be to combine the 'Student perspective' with the 'Collaborative perspective' in a future study. Finally, the findings in the 'Policy perspective', the 'Value perspective', the 'Employability perspective', and the 'Reform perspective' are the findings that more directly can add value to the ongoing Delphi study.

References ...