
CHANGING LIFELONG LEARNING PARADIGM AND THE DIGITAL LEARNING AGE

Aniko Kalman, Budapest University of Technology and Economics, Department of Technical Education, Hungary

The structural and system-level determinants of the European institutional strategy and practice of lifelong learning (LLL i n higher education

Knowledge production and innovation are important drives of economic growth in the 21st century. Higher education forms its role along new conceptional and operative standards in order to meet challenges. Fundamental, ongoing and embedded commitments are taking social responsibility, the improvement of quality, enhancing performance and providing “best value”.

There are growing social expectations towards higher education and scholarly work. Political and social support for universities, crucially relying on public funding and tuition fees, may be maintained on the basis of assessability of their performance through the improvement of quality. In this process, the provision of learning opportunities for age groups no longer belonging to that of university students (adults) is gaining importance.

Social integration and *system integration* are parts of the institutionalisation of lifelong learning. It is necessary to accumulate and reproduce the social capital of learning and achieve cooperation in both the range of service providers and the network of the programmes. This is promoted by partnerships, mutual learning, tutoring, assessment, the mediation of knowledge and information, and communication, marketing and PR, peer, team and networking activities as strengthening new forms of operation.

On the social level, it is desirable that the lifelong learning paradigm becomes integral part of human resource development and gains strategic importance in the economy, overcoming the barriers of rhetorics. Generally, universities make efforts to implement lifelong learning but support of state control is also necessary for this.

In the institutions, the primary task is the clarification of regulatory frameworks and shift from the periphery to the centre through enhancing the LLL knowledge of leaders and convincing management. This is how lifelong learning may be realistically embedded in institutional strategies.

Due to globalisation and the rapid change of the operational environment, community culture, ways of thinking responsive network economy, as well as cooperation processes and devices have become important success factors.

The starting point is the breaking up of large structures and the implementation of a work culture based on cooperation. Digitalisation plays a significant role in these processes. This may be accompanied by an increase in the efficiency and effectiveness of the academic community, and raising awareness of the quality and pleasure of research, learning and work as a social value.

Network-based work culture, aimed at the coordination of transformation and the gaining ground of the methods of cooperative value creation for the sake of high-level, breakthrough initiatives and strategic decisions is an important factor in the process of restructuring.

Universities focusing on lifelong learning adapt their operation increasingly to the social and economic environment of lifelong learning, responding to the changes and opportunities in the learning environment, undertaking greater role in regional development and are typically more open and flexible with regard to their educational strategies.

During the implementation of LLL, institutions follow a multilevel development path, which may be described at adaptational, organisational and cultural levels. The organisation of lifelong learning mostly represents the adaptational level while structural transformations are also indispensable to attain cultural changes.

In order that universities should attain this level, they must develop a new way of thinking and acquire an institutional culture that regards all kinds of education as part of lifelong learning. To this are connected the recognition of preliminary knowledge. The contribution of universities to the implementation of lifelong learning is realised by the interpretation of classical activities of continuous further training activities towards an inclusive and responsible university conception.

European institutional methodology of Lifelong Learning (LLL in higher education)

The promotion of lifelong learning develops the knowledge supply, innovation and competition capacity and system-level operation. In higher education institutions, the starting point is the implementation of a work culture based on cooperation. Learning by cooperation and its forms (project-based and problem-based learning) are increasingly becoming established forms of learning. The assessment of education shifts in the direction of evaluation of learning outcomes.

Students increasingly move towards self-directed learning experience: learning-by-doing or experiential learning which massively supports or even replaces learning-by-reading and learning-by watching.

In reality, transformative learning is not a form of learning but the essence of learning itself, and this essence is only present to a lesser extent in other forms of learning. Naturally, there is

no need for every kind of learning to be transformative but transformative learning is present in everyone's life.

This may be called the culture of lifelong learning. From the aspect of the culture of lifelong learning, informal learning is essential because there, the integration of learning and practice as well as reflective practise are also present.

It is conceptually important that the traditional teacher-centred model should be replaced by a learner-centred approach. A new requirement in the operation of institutions is the strengthening of learner support, learner-centred education and student services. Students require the development of a flexible, accessible and creative environment, the development of efficient career orientational and guidance services and the evaluation of the performance of LLL activities.

For a comprehensive restructuring, systematic methodological preparation is needed. To accelerate methodological reform is one of the priorities in the implementation of the development strategies of the institutions and the promotion of lifelong learning.

Its implementation starts with the survey of teacher competences. It is an important task to prepare, convince and inform teachers: to develop an operation which improves the flexibility of learning, wide access and the development of partner relationships in cooperation with the instructors.

There is progress in the field of the methodological trainings for instructors – a growing rate of participation: universities launch units dedicated to learning innovation and supply of courses offered for instructors. The results of well-performing departments have repercussions on both research and management, there are more and more examples to follow, thus teacher competences appear as values in the cultural and organisational transformation of the institution, as well.

A method, more and more extensively applied, which promotes the flexible and personalised learning of students is the organisation of multidisciplinary, short- or medium term projects representing intellectual challenge motivated by practical challenges.

Strengthening of students' entrepreneurial mindset in the framework of courses concerned with innovation and entrepreneurial behaviour and with the help of instructors with extensive experience and a comprehensive way of thinking is linked to this.

The rapid development of information society appears in the education sector. It is a natural requirement to strengthen an interdisciplinary approach through the application of new teaching methods and ICT.

The system-level model of lifelong learning

In a modernising, globalising and digitalising higher education environment, the exploration of the correlations involved in the relation of the Knowledge Triangle and Lifelong Learning requires a systematic approach

At the beginning of the 2000s, comprehensive European Union higher education institution development projects investigated the system-level implementation of lifelong learning. Their results led to the reinterpretation of the education + research + innovation model.

In countries which are leaders in innovation – like in Finland, in particular –, a convincing example of this process is the presence of the Triple Helix model (universities – enterprises – public sector) and the Knowledge Triangle model (research- education-innovation), which formations underline the importance of reinforcing the synergy between different university functions.

As the basic assumption of the Knowledge Triangle, education is not only an input unit in the relation of R +D + I human resources, and similarly, innovation cannot be limited to being a simple output result of education and R + D activities. To focus it to two operational elements: the Triple Helix – underlining the importance of the fourth element, i.e. people-, and the Knowledge Triangle, which may promote a progressive balance between the functions and needs of universities, provide the basic components of a regional innovation ecosystem, where universities may become driving forces in social change.

The Knowledge Triangle may be the key to the renewal of university culture but universities delay in determining the priorities of key success factors like the development of new, research-based knowledge, new approach for better use of existing and new knowledge and a new entrepreneurial mindset for knowledge creation and innovation.

Investigating the impact of the Knowledge Triangle on university operations reveals that the greatest challenge is presented by university management culture. How can university autonomy in the renewal of society, be maintained while answers should be found to the often severe economic difficulties? How can the importance of continuing fundamental research be emphasized while academic life should be supported in finding answers to great social challenges? How can the university sphere be steered in the direction of academic excellence while emphasis is being shifted to the more rapid and even more productive implementation of research-based innovation?

The mechanisms promoting lifelong learning in the scenes of knowledge consumption and transfer

As a result of research investigating non-formal and informal learning in relation to adaptation and development, a picture of scenarios and habits of knowledge consumption may be formed., taking into account the mechanisms playing role in the development of the systems supporting and promoting lifelong learning.

Learning is continuous and sustainable by internal motivation, a strive for understanding, problem-oriented thinking and a continuous motivation for deepening, checking and renewing knowledge. It is necessary to identify interpretations and solutions which help to understand what continuous learning means for the target population and how it can be efficiently implemented.

The possibility of the development of the ability to develop (“learning how to learn”) is among the conditions of learning to be created. Speaking about their motivation, the interviewees put the earning of a higher education degree in the first place. It is remarkable that formal education is more attractive in general, too, while non-formal trainings have a lower popularity. In the evaluation of efficiency, however, the efficiency of non-formal trainings at the workplace takes the lead: the majority of respondents considered self- education and on the job learning the best. The signs of the formation of a new culture of learning can be identified. An important asset in continuous learning is the methodology of learning and learning support, including the application of information and communication technologies.

In many cases, new technology is constrained to traditional or routinely reproduced frameworks. Under such circumstances, little is known about efficient learning and teaching, and students hardly know their own learning styles or the supply of technological tools and methods.

Through their everyday activities, teachers have substantive impact on the development of motivation for lifelong learning. In this respect, it is an important step to strengthen customer-centeredness in institutions, including the modification of the idea about or the image of the learning human as a customer.

The scenes of lifelong learning are the different institutions of the relevant region which exert an influence through a new type of tasks and operations. This may lead to improved university mission statements, new activities and contact attitudes. Such are the confirmation of the role the university plays in regional adult education, the development of the education of adult education experts, the preparation of resource maps, the development of partnership peer-learning activities and cooperation with home and foreign service providers, joining already operating networks.

The effect of the increasing cultural and social challenges in the world of education and labour, and their projections in LLL research processes

The lifelong learning approach, which reinforces education and university research as social service while the latter, in turn, helps lifelong learning as an institutional mission.

Connected to this, new elements appear in education as a mindset responsive to network economy, the knowledge of the processes and devices of cooperation as success factors, the development of the quality and pleasure of learning and work, the creation of a network-centred working culture and new methods creating cooperational values and the recognition of the initiatives resulting in a high level breakthrough.

Due to the social and economic changes, student needs are shifted from information transfer to learning based on experiential and student activities, including how young experts can become innovators and entrepreneurs.

Where education is closely integrated with research and innovation, teaching and learning also contribute to added value more: students may understand multifaceted problems with a comprehensive insight. A new network culture and the enhancing of the efficiency of the university community are important for successful implementation.

The higher education institutions that may mostly be described as closed institutions must be transformed into open, service providing institutions. A part of this is sharing knowledge with participants in the region so that it can become the driving force in the knowledge region.

Innovation cooperation with the business sector comprises the widening of business contacts, PR and marketing, as well. The development of networking elements is an important component in the process together with the strengthening of already existing connections.

The teaching culture of lifelong learning requires new teacher roles

As an element of strategic value creation in adult education, the professionalization of the methodological culture of learning support is gaining higher status. It is an efficient device if such a qualification system is integrated into the quality control system of the university. The improvement of instructor competences becomes a priority in institutional development. For this, financial investments are also needed but the creative application of information and communication technologies and the exploration of internal sources such as the spread of the methods of informal knowledge acquisition, the exchange of best practices and the strengthening of the internal processes promoting this are of great help.

In the transformed learning space, it becomes necessary for higher education to apply the methods, working forms and system of tools of constructive methodology. Cooperation-based learning methods, a problem-solving ability and learning through experience should be incorporated among the methodological tools.

Resources

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