

The learning society

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1. Introduction

Great Hall of the People, Beijing, October 2017: the opening speech of the 19th Chinese National People's Congress. Although more than 2000 delegates are listening carefully to the long-awaited speech of President Xi Jinping, very few were expecting the turn it took: In his three and a half hour long opening address, almost one full hour was solely dedicated to education. Almost a quarter of his entire speech was devoted to the importance and prioritization of education for the development of China (Buckey and Bradsher, 2017).

This was a wake-up call. The attention for education, lifelong learning and the performance of national education systems is omnipresent. It is prominently on the agenda of the United Nations, the OECD, the European Commission, the World Economic Forum and on the table of many governments, academics, and think tanks around the world. Why is education so prominently on the agenda today? Why is it that the quality, efficiency and effectiveness of national education systems have entered one of the most competitive arenas in the world: the arena of international (economic) competition among nations? The answer is that as we live in a world in transition (the accelerating speed of technology, climate change, demography, aging population, migration waves); there will be winners and losers and the performance of national learning systems will make the difference.

Crises like the Corona crisis accelerate historical trends and processes," says Yuval Noah Harari arguably. Either way, today a great opportunity emerges: The necessary systemic adjustment to more adequate learning systems gets a unique momentum. The emergence of new learning systems can be shortened by embracing these novel developments. The common objective of lifelong learning is for everyone to be able to successfully cope with a world in constant transition.

The OECD skills strategy formulated five priority challenges for the new lifelong learning system in Flanders (Belgium): (1) developing a learning culture; (2) reducing skill imbalance; (3) strengthening skills use in workplace; (4) strengthening the governance of adult learning; and (5) improving the financing of adult learning. Not only does the present paper elaborate on these by developing concrete formulations of these challenges, also the common purpose is clearly defined: if *lifelong learning* is the answer, what is the problem then?

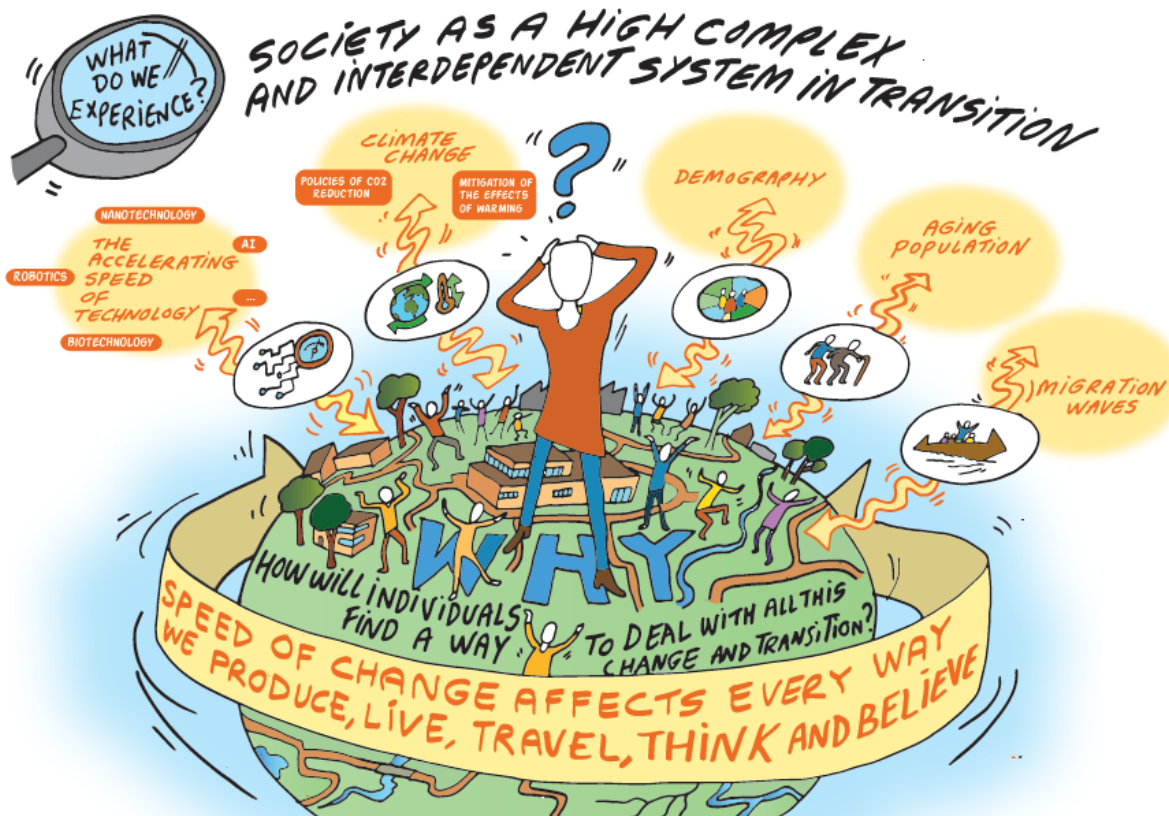
Based on this skills strategy, 4 well-defined challenges are formulated and further translated into 10 concrete assignments for Flanders. This was the result of an extensive consultation of the field, emerging from over a hundred hours of interviews with regional actors, stakeholders and international experts. Also, outsiders with a vision on the future of work, technology, society and learning were interviewed, called *remarkable people*, a method borrowed from foresight theory to make sure the future is brought into this vision paper. These challenges and assignments have all been approved by the Flemish government (12/06/2020) and are at this moment further operationalized to ensure a comprehensive action plan.

In addition to the focus provided by the OECD skill strategy, there is also prominent attention for how this change needs to be realized. **Systemic change - affecting all components of the learning system** - is brought forward as the present system nor the governance of lifelong learning is fit for purpose as it is now. The priorities for policy makers are: efforts for systemic change prevail, all government departments and policy domains are involved transversally, a top down clear policy orientation is matched by a bottom up grass roots support system for experiments and innovation including the use of technology. Also, partnerships are to be facilitated and stimulated, and data driven segmentation of the learning population is given absolute priority. Stakeholder consultation enables a change process and the introduction of a legal status of “learner” could simplify the complexity of derailed labor regulations. In the next sections we elaborate on the why, the how, and the what of the lifelong learning system as it is ‘under construction’ in Flanders.

2. Why: The importance of lifelong learning

Although the knowledge society and its dependency on the potentials to create scientific and technological knowledge is around for some while, what is new is: the accelerating speed of technological developments (of artificial intelligence, robotics, nano technologies, bio technologies, to name a few), climate change (of both, the policies of CO₂ reduction on the way we produce, travel, work, and live as well as the mitigation of the effects of warming), demography and aging populations in most parts of the world, and migration waves, mostly as a result of the former. Although global prosperity is increasing, it is not evenly distributed, and the speed of change affects every way we produce, live, travel, think and believe.

Figure 1: Society as a high complex and interdependent system in transition



How will **individuals find a way** to deal with all this change? “These high-speed changes, including the rise of the world’s waters, will alter life irrevocably within a more familiar time-frame: All this will happen during the lifetime of a child who is born today and lives to be my grandmother’s age, 95.” (Magnason, 2020). Individual citizens will have to find a way in a life full of transitions at work and in private.

The industrial era has long passed, **the context has completely changed, but learning systems have not adapted accordingly**. The current learning system flourished in decades when an initial diploma was the final stage of learning through classroom-based education. This diploma meant social and economic leverage to grow as a citizen in an industrial era. Nowadays education itself is in many ways still organized as an industrial production process with groups of students sitting in classrooms, in time schedules similar to working hours, having a school bell indicating work starts and partitioned in batches that proceed through the production process by age. Passing to the next step in the process depends on an average score on all disciplines and so on. However, the above-mentioned uncertainties of demographic evolution, globalization, migration, technological developments, and climate change pose very different challenges.

A new learning system will allow us to address successfully **future challenges**: for example, the European ambitions towards a green economy and society (*Green Deal*), the major technological challenges, such as robotics and AI, the universal digital interaction and the platform economy. Regions aim to play part in the knowledge economy deploying

technological breakthroughs and innovations in areas such as energy, climate, food, digitization, health, commitment to labor mobility, circular economy and industry 4.0. For an economic fabric such as Flanders that is export oriented, global, open and connected this means also, that STEM, language skills and cultural diversity are of the essence.

All generations and all inhabitants should be addressed. When the social and economic leverage for every citizen exists, when the framework is facilitated, when we have truly learning organizations, where obstacles are removed and innovative solutions are developed, a truly **learning society** becomes possible. A learning society in which every citizen can grow again in this new societal context. In the next section we look at the ‘what’ question: what is a dynamic lifelong learning system?

3. What is lifelong learning in a changing context?

The boundaries between learning, living and working blur for everyone. This interwovenness, together with the speed of change through technology and digitization, super diversity through migration and demography and climate change ensure that not only skills change. The way in which we learn, the time, the frequency the place where and who learns all change. Innovation and expansion in learning is necessary. After all, not only the labor market, but the entire society is subject to change and transition. The changed environment presupposes a different interpretation of learning and this for everyone regardless of status (both employee, and entrepreneur). Since uncertainty means it is impossible to predict the evolutions coming our way, successfully dealing with change and transitions is becoming increasingly important. The **purpose of learning** focuses not only on employability and just-in-time skills but also on learning how to deal with these (and future) transitions. A transition can take different forms: transitions towards the labour market (from unemployment to employment), within the labour market (other job in the same or other company, new statute), as well as within the private sphere (caregiver, able to adapt to new technology for online tasks (online banking)). Hence, the purpose of learning in such a context is the ability of each person (M / F / X) to deal with transitions proactively and intrinsically motivated:

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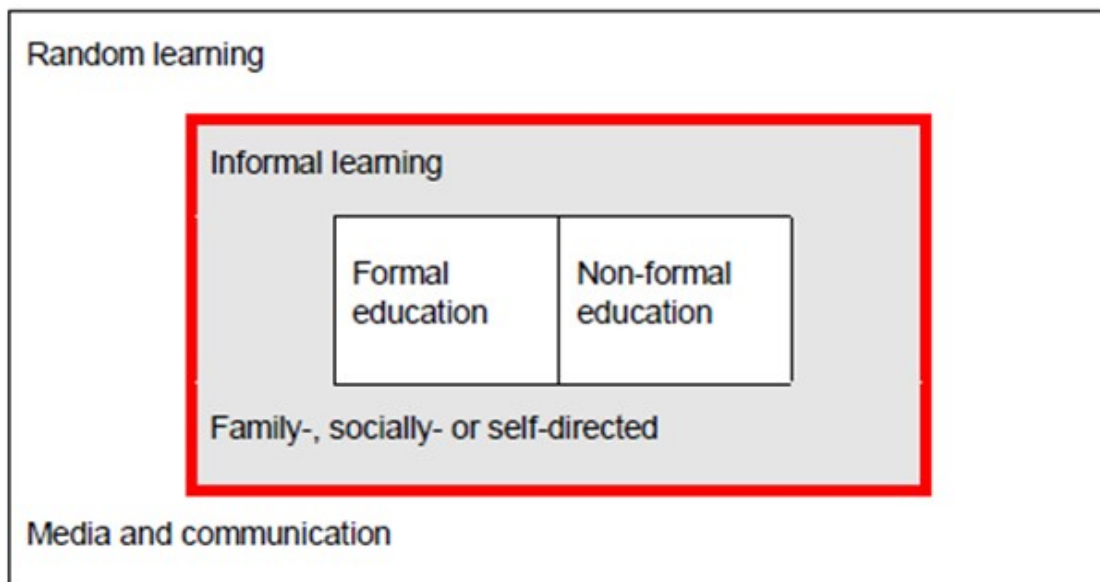
By analogy with healthcare, the first important ambition of learning is that people no longer learn curatively and reactively during a transition, but also learn **proactively** and preventively in order to successfully tackle a transition. Proactivity means being able to adapt or deal with it before it is too late: **Proactively acquiring the skills to set goals and identify learning pathways to achieve such a set goal**. Acquiring this skill should allow each and every one to determine - either independently or with support - what is then required, what reskilling, or

upskilling is necessary or even if a broad formation for life, or a 21st-century skill or soft skill is necessary to achieve the next goal.

The corona crisis shows where the possibilities lie. Nurses who are retrained at a record rate to become specialists in intensive care units, or nurses that are shared among hospitals. Not only in health care, but also in the retail sector we see that employees are shared and that changes and crash courses for a new job become suddenly possible. The Decathlon sports equipment chain makes personnel available to a food retailer such as Colruyt. After a short retraining, many employees temporarily step into other organizations or other sectors.

In international literature (European and North American) and literature of international institutions (European Commission, UNESCO, OECD) there seems to exist a consensus on the concept of lifelong learning based on three principles as mentioned above (1) the learner takes the central stage; (2) learning is focused on coping with transition and; (3) learning takes place in different forms and contexts. Specifically it is widely recognized that people can learn life-wide in different contexts and settings, so not only at school, but also at the workplace, in family settings, during leisure activities, by participating to community life, and so on. In addition, international literature recognizes variety in the finality of learning, the time of learning and the way of learning. In the following paragraphs we describe these core elements of learning in a rapidly changing contexts.

Figure 2: The learner is intrinsically motivated



Source: Eurostat (2016)

First of all, the learner takes the central stage. Learning is done by a person and starts from the individual. Moreover, learning is only successful if it starts from the intrinsic motivation of the **individual**.

This is in line with the UN definition of lifelong learning (2016) Lifelong learning is the "ongoing, voluntary, and self-motivated pursuit of knowledge for either personal or professional reasons. Therefore, it not only enhances social inclusion, active citizenship, and personal development, but also self-sustainability, as well as competitiveness and employability." The intrinsic motivation is also important for the distinction that can be made with incidental or random learning. Incidental or random learning may occur as a by-product of day-to-day activities, events or communication that are not designed as deliberate educational or learning activities". Learning can be distinguished from non-learning by the absence of a purpose or intention to learn. That intention may vary from professional purposes, for purposes within the private sphere or learning itself .

Related to this the purpose of learning is mentioned. There are two major schools of thought on the importance, meaning and purpose of participation to lifelong learning. The first and most dominant school stresses the strengthening of economic competitiveness in an increasingly changing knowledge-intensive society (mainly driven by the economic paradigm). A second school proclaims that it is better to live in a society characterized by strong social cohesion and active citizenship (mainly driven by UNESCO: humanist perspective). The purpose of lifelong learning as mentioned above combines both perspectives, because the ability to deal with transitions is a precondition for being and remaining employable on the labour market.

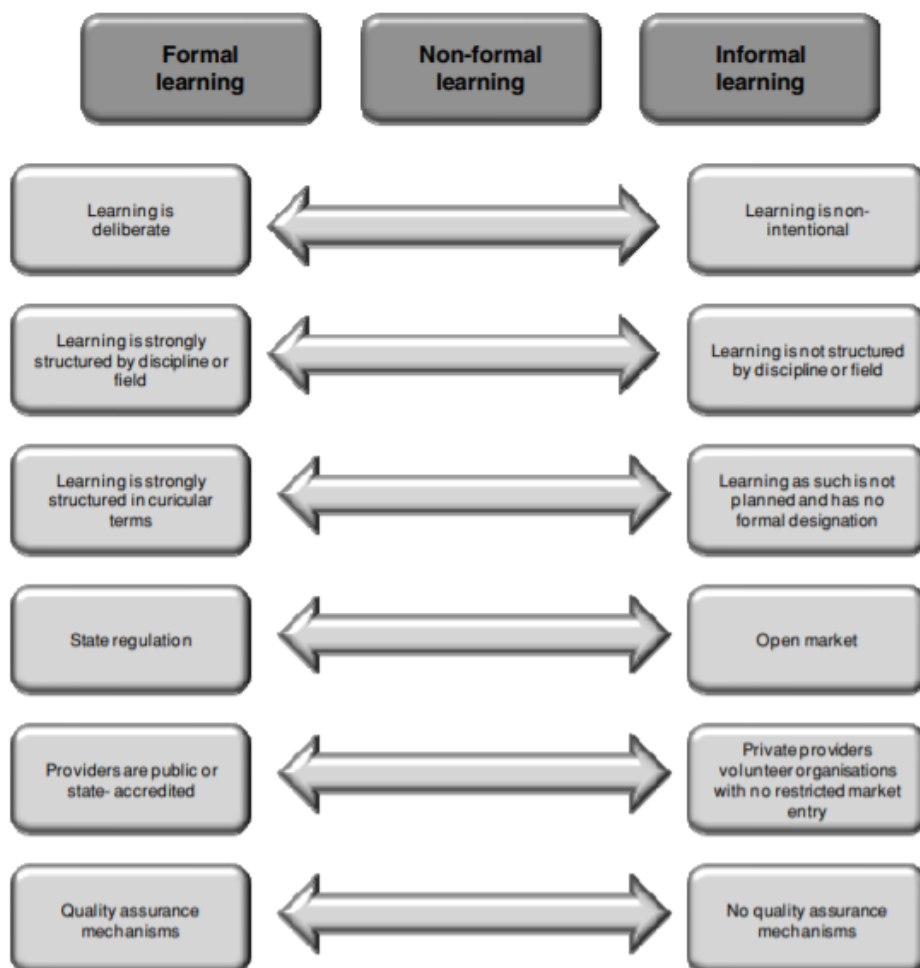
Secondly, learning aims to support individuals in transitions regardless of where those transitions take place. In this sense, the interpretation of lifelong learning transcends labour market-oriented, classic learning and it has an important role in dealing with social changes. Delors and colleagues (Unesco, 1996), introduced already an integrated vision with four dimensions: (1) learn to know (learning to know - a broad general knowledge with the opportunity to work in depth on a small number of subjects); (2) learn to do (learning to do - to acquire not only occupational skills but useful the competence to deal with many situations and to work in teams); (3) learning to be (learning to be - to develop one's personality and to be capable to act with growing autonomy, judgment and personal responsibility); and (4) learning to live together (learning to live together - by developing an understanding of other people and an appreciation of interdependence).

Similar to the report by Delors and colleagues (Unesco, 1996), Schuetze and Casey (2006) distinguish four ideal types of lifelong learning, each of which puts forward a different system of education, learning and working and ultimately promotes a different learning society: (1) emancipatory or social justice model ('lifelong learning for all ', see UNESCO, 2015; (2) the cultural model ('lifelong learning for self-fulfilment '); (3) the open industrial-society model ('lifelong learning for all who want, and are able to participate '); and finally (4)

the human capital model ('lifelong learning for employment '). By referring to transitions within the spheres of learning, living and working, the different finalities or purposes are included.

A third characteristic concerns the question: what are the options for dealing with these transitions as the transitions are life-wide and continuous. In other words, lifelong learning covers both vertical learning (throughout the life cycle) and horizontal learning (across a wide range of life domains). Learning takes place independently of a predefined form or place of learning. Education and educational institutions are no longer the unique place of learning. This means that transitions are supported by a wide range of learning opportunities. In addition to formal learning, there is also informal and non-formal learning, as well as different forms of workplace learning and digital learning.

Figure 3: Different forms of learning



Source: Werquin (2010)

Considerable debate still exists on the different types of lifelong learning. Of particular importance is not so much the demarcation between the types of lifelong learning, but rather the interrelation between the different dimensions of lifelong learning. The current debate on lifelong learning focuses on how the different learning processes of formal, non-formal and informal learning¹ can be linked by recognizing the learning outcomes (knowledge, skills, etc.) acquired by non-formal and informal learning. The wide range of different forms of learning is incorporated into the lifelong learning system as they are all beneficial to coping with continuous change (see Figure 3).

To conclude, leading international institutions (European Commission, UNESCO, OECD) agree upon the issue that lifelong learning means lifelong learning from the first years of life till after retirement (cradle to grave). As changes in life occur more frequently, support for transitions is preferably done for each individual and most of all proactively. The speed of change requires for individuals to have sufficient adaptive capacities to be able to prepare and adapt successfully to individual and social changes. The ability of citizens to adapt is a necessary condition for this.

Moreover, learning can take place both inside and outside the regular education system. It is recognized that people can learn life-wide in different contexts and settings, so not only learning at school, but also at the workplace, in a family context, during the leisure experience, by participating in community life, and so on. A final important characteristic is that learning can only succeed if it starts from the learning gap or the learning question of the individual. 'Tailor-made and personalized' is the starting point and means that learning is guided **by the person and ownership lies there**. This means that various learning environments adapt to what someone wants to learn and how someone wants to learn and stimulate the learning. The content of the learning is tailored to that personal question. The next section describes on how this can be realized through 1) focus on 4 challenges and 10 assignments and 2) methodology for implementation.

¹ CEDEFOP (2014). Terminology of European Education and training policy. Second edition. A selection of 130 key terms: https://www.cedefop.europa.eu/files/4117_en.pdf.

en opleiding (ET 2020): <https://op.europa.eu/en/publication-detail/-/publication/f349e9ff-9cb8-4f73-b2f6-0a13452d22b4/language-nl>

¹ OECD (2007). Qualification systems. Bridges to lifelong learning, OECD, Paris.

¹ European Commission (EC) (2000) A Memorandum on Lifelong Learning (Brussels: European Commission).

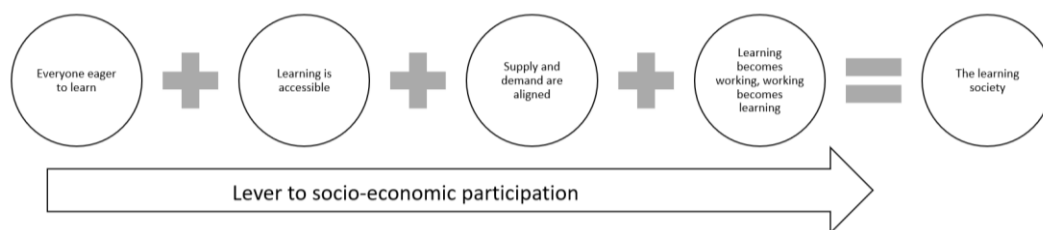
Commission of the European Communities, CEC (2001). Communication from the Commission. Making a European Area of Lifelong Learning a Reality: <https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2001:0678:FIN:EN:PDF>

¹ Unesco (2012). International Standard Classification of Education ESCED 2011, Unesco institute for Statistics, Montreal: <http://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf>

4. How can lifelong learning become reality: focus on four challenges for a new learning system

The four priority challenges are: (1) Making everyone eager to learn; (2) making learning accessible; (3) properly match supply and demand; and (4) learning becomes working and working becomes learning. Within each challenge and the associated assignments (10), attention is always paid to socio-economic participation. Lifelong learning should contribute to work as the main lever for socio-economic participation and inclusion. These four challenges and the ten associated assignments necessarily form a coherent whole to realize the learning society through this new learning system. We must address all four challenges if we are to reach the learning society. This means an approach in which each part of the system is tackled and in which everyone contributes for a part and is thus prepared to adjust the whole as a system while learning.

Figure 4: The challenges of a renewed learning system every part of the system is necessary



Challenge 1: Everyone eager to learn

From the conversations with stakeholders we have learned that the motivation to learn increases when a clear goal is set. Goals can take many forms, these are professional objectives, objectives in the private sphere as well as learning on itself can be an objective (the joy of learning). Motivating everyone to formulate objectives is therefore a first assignment. Where can that motivation be fueled? Everywhere. Contexts range from childcare to nursery and primary education, from secondary education, in the professional sphere as well as in a wide range of organizations such as youth, sports and socio-cultural associations, libraries, local authorities. In all these contexts, new activities, tasks, projects can arise for which objectives are formulated and where learning can take place. However, simply focusing on contexts to stimulate motivation and learning eagerness is not enough. The way in which this is done is also important. Preferably with a great sense of initiative or learning self-initiative. And this self-initiative is most commonly stimulated in learning organizations. That is why a second assignment focuses on encouraging learning organizations. Organizations are not only the context of the individual but are themselves also encouraged to learn. Many organizations already have a leading role and can invite other companies to follow. This long-term socializing

effect of both assignments can be enhanced by socially committing to learning eagerness. This means that the minimum conditions for everyone are created in such a way that there is always an intrinsic motivation to learn (assignment 3).

Challenge 2: Learning is accessible

The OECD Skills report shows that lack of time is one of the main obstacles for participation in lifelong learning. Moreover, there is a strong Matthew - effect on participation in learning and the use of incentives for lifelong learning. Assignment 4 therefore consists of creating an accessible, high-quality and varied offer. An offer in itself is not enough, it must also be known and used. Accessibility can be increased for example by making it more time efficient. Technology and data can make learning time efficient in that (1) place-and time-independent learning becomes possible (2), by tailoring and providing possibilities in which a range of which speed and degree of difficulty can vary (3) through the setting of the learning. The extensive use of e-learning modules or online offers show only a small part of the possibilities that technology can offer (e.g. instructional videos via YouTube, complete online offer of colleges and universities in Flanders). In this way, 5G technology is promising.

In addition to various forms of digital learning, dual learning (dual learning in adult education and higher education) or workplace learning is also more time-efficient for everyone, because learning takes place while working. The combination of dual learning and technology is also possible, whereby an online module can be consulted and applied directly with an employer. These different learning forms and combinations of learning forms in addition to classroom learning ensure that different roles in training and coaching emerge, change and shift. The fifth assignment therefore focuses on redesigning guidance *to* and *in* learning. Different roles such as knowledge transfer, coaching, feedback, ... can be taken up by different people and cooperation becomes the norm. New initiatives such as the dual teacher or the hybrid career form starting points, as do existing initiatives such as various forms of coaching or guidance (career and learning shops) and digital tutor models.

Challenge 3: Supply and demand are aligned

The learner takes the central stage means that learning is tailored and personalized. This also means that various learning environments adapt to demand and that the learning offer is optimized in terms of content and form. For this it is necessary that the learning question is known. That question will change more quickly as transitions occur more frequently. The demand differs according to the transition, which does not always occur at the same time in the life of individuals. In addition, individuals differ greatly from one another due to, among other things, their experience with learning, available time or family situation. Assignment 6 provides insight into the demand of individuals more widely than the existing segmentation based on

position on the labor market or education level. A possible new segmentation of citizens is under discussion, which makes it possible to respond much better to the demand of citizens.

Given that much of the time is still spent on the labor market or in organizations, assignment 7 focuses on gaining insight into the changing demand of organizations. Not each organization is simultaneously confronted with the same transition. Digitization creates the need for knowledge about different technologies (Internet of things, cyber security), and the circular economy (3D printing) for the use of new materials, which creates different questions. A large part of private study programs is already focused on change, although this remains a mismatch between supply and demand. It is therefore necessary, as included in assignment 8, that the supply dynamically follows the demand and the variation in that demand. The first offer of micro credentials by universities of applied sciences is a starting point, a greater leap is possible by, for example, having programs composed by a group of companies.

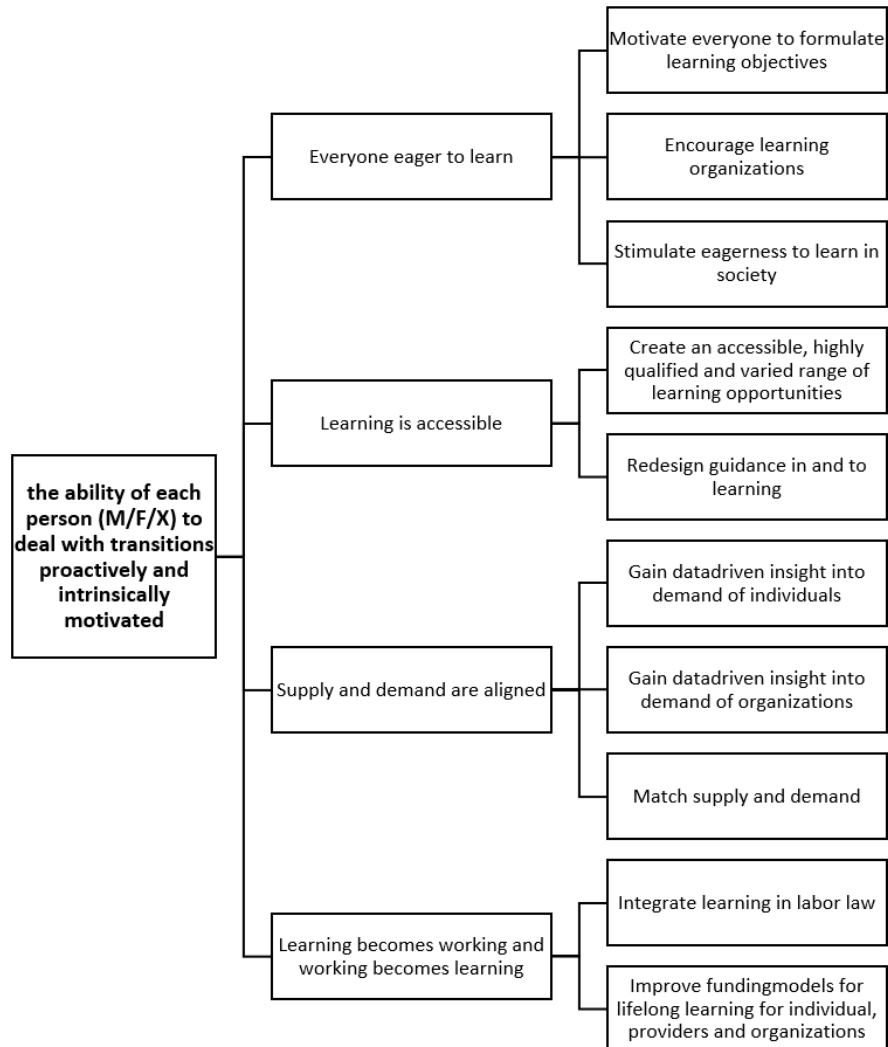
Challenge 4: Learning becomes working and working becomes learning

In an industrial era, the right to education was enshrined as a universal right to make people grow. Every industrial revolution has brought profound changes, embedded in new rights. This cannot and should not be any different with the fourth industrial revolution. Learning is an integral part of our human development, mainly but not only for the economy, jobs and labor market. We learn from birth to death and the spheres of life of learning, working and living are increasingly merging.

The European pillar of social rights leverages a fundamental change in learning in labor law, in particular the introduction of a universal right to (lifelong) learning. Today, only productive working time counts as a unit for social rights building. This needs to be changed. The right to learning must be guaranteed for everyone, regardless of the status (employee, entrepreneur, jobseeker, volunteer). In addition, new economic activities are emerging that are not yet integrated, but to which the universal right to learn also applies (e.g. freelancers). There is also a need for a new social statute under which everyone becomes a learner, regardless of the current statute that currently applies. Assignment 9 therefore aims to integrate learning into labor law.

In addition, everyone agrees that lifelong learning is a shared responsibility between citizens, organizations and government. Financing mechanisms should also reflect this shared responsibility and guide lifelong learning and partners. Improving funding for lifelong learning is included in assignment 10.

Figure 5: A renewed learning system: Overview of challenges and assignments



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5. How to address the learning society- Methodology for implementation

The **systemic change - affecting all components of the learning system** - is needed because if one component is not delivering, the whole system fails. For instance, if schools and universities offer training and education that doesn't match the needs of companies, the whole system fails to produce a competitive advantage for the nation. Or, in another example, if individuals that want to acquire a new skill, for instance digital skills, but cannot attend a course that fits the schedule of working persons, the whole system fails to deliver.

Next to the importance of systemic change, another important effort concerns the transversal engagement in a 'whole of government' approach. **Transversality** means that all domains and departments of government should be involved and aligned. Similar to a climate policy – that would fail totally if it would not involve the engagement of all government departments – a learning society cannot be realized by one department in its silo. Learning is important in all domains of public policy. It is easy to imagine the contrary: an non systemic change that does not involve other policy domains transversally: in such a dysfunctional world, one department would produce labor laws that impede learning, another policy domain would finance schools in a way that they optimize their resources by excluding working participants, still another policy domain would exclude learning technologies from its innovation policy and so on. Specifically, if learning takes place life-wide, the organization, legislation, financing and promotion of learning activities do not fall exclusively within the competence of the education policy domain. This is also the responsibility of other policy areas it is crucial that there is sufficient consistency in the policies, procedures and standards used by these various (governmental) actors involved. Following on this need for performant regulation, an analysis of current regulations, including existing instruments, will be made in the light of the new vision on lifelong learning. The main focus will be on what issues in legislation are hindering (obstacles) or reinforcing (levers) individuals, companies and education/training providers. Flanders will also be benchmarked for the various assignments against other excellent knowledge regions. This should result in a list of new regulations to be reformed or to be discontinued.

The realization of a new and lifelong learning system depends also on how well we can make change happen in the renewal of existing systems. Generally speaking, for societal renewal to happen two elements are necessary: A **top down** clear policy orientation and a **bottom up** support system for experiments and innovation. The top down is being delineated in this paper. The bottom up means that bypass processes have to be in place and have to be visible for grassroots innovative ideas to be supported. **Grassroots innovation** is a well-documented pathway in academic literature. It brings about many brilliant change initiatives, technological and non-technological, that create the energy, drive, momentum and positive energy from the field, absolutely necessary for change to happen. Apart from the effort to make the change systemic by aligning all actors, and to make sure on a government level all departments are

involved transversally, the ambition should be to support innovative ideas actively by a visible grass roots entrepreneurial process and policy that fits the purpose.

Furthermore and in addition to the previous paragraph, another element to bring about a learning society should be the facilitation of **partnerships**. In a VUCA world that is Volatile, Uncertain, Complex and Ambiguous, one of the most powerful sources of resilience and hence also of adaptiveness, flexibility and change, is the embeddedness of entities in a network that serves the same purpose. Networks are much more dynamic, adaptive and resilient than silos. It also means in a context of lifelong learning that schools should partner with companies to make sure their offerings match demand, or on a larger scale that sectors and industries partner with networks of schools and universities. Technology companies should partner with education providers, HR companies and public administrations. And so on. Facilitating partnerships is the way to go.

Learning for transitions in life is a very broad concept. Learning to do my job better or learning for another job is already very different for many people on very different levels. Let alone learning for a job in another industry or learning in the framework of a personal transition. And learning can be formal or informal, on the job, in class, online, in other social settings or in social activities. In the past, we had very few tools to tailor a learning path to the specific needs of the learner. Today, digitization offers so much data that with the help of new data analysis tools it enables the segmentation of learners into groups with similar needs. This is wonderful. One can imagine the segmentation to one individual to enable an offering that suites the specific needs of this one person. What a progress that would be. The segmentation of the whole of individual learners into groups with the same needs makes micro targeting possible. In other words: a data driven policy can bring tailored solution to each and every one who needs to learn something – and this during a lifetime. The priority however should be given to a **data driven segmentation** that identifies similar needs. It also means that resources for learning can be much better targeted at the specific needs.

With the increase in, new stakeholders in the public and private domain and the diversity in learning needs, there is a need to redefine responsibilities and to bring about coordination between the different stakeholders and partners. This need for **targeted consultation** is in line with the European Commission's approach. The goal of this approach is to make the decision-making process open and transparent and to engage citizens and stakeholders throughout the policy development and legislative process. The objective must also be to use knowledge and data objectively and reduce the impact measurement and regulation to a minimum for citizens, businesses and government. This approach results in maximum stakeholder involvement and maximum ambition around shared objectives. We bring the relevant stakeholders together for each assignment and generate input.

6. Conclusion

The learning society is not a far-fetched dream. It can become reality. Similar to the enormous value of a truly learning organization for the strategy and competitive advantage of an organization such as a company, a learning society can bring tremendous value to the competitive position of a nation and the wealth and welfare of its inhabitants. However - in both cases - a competitive advantage does not come just like that and is not easily acquired. Moreover, once acquired it is not easily maintained. If it would be easy, it could not be a competitive advantage. One of the most important efforts – again in both, organizations as well as on a societal level – is the one that brings consistency to align all components of the learning system to fit for purpose. Only in this scenario, the learning society in a world in transition will be realized.

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