

SI-DRIVE
Social Innovation: Driving Force of Social Change

SOCIAL INNOVATION IN EDUCATION AND LIFELONG LEARNING

STATE OF THE ART SUMMARY

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Introduction

This document provides a summary of the state-of-the-art report (Deliverable 4.1) of SI-DRIVE related to a policy field specific study on social innovation in the area of education and lifelong learning with a distinct focus on governance systems. It addresses current challenges and corresponding practice fields of social innovation and illustrates social innovation projects in the educational field. It has to be stated that education in this case is embedded in the comprehensive European concept of lifelong learning (LLL) which includes all learning and education phases “from the cradle to the grave”. We will use both terms because especially in the non-European countries the focus lies much more on a traditional understanding of education than on lifelong learning.

Based on the overall research question and related to the SI-DRIVE key dimensions¹, the concept of social innovation, societal needs and challenges, one objective of the report refers to the co-evolution of governance structures and social innovation practices and projects within the educational policy field. The report summarizes how the policy field’s governance system influences social innovation practice fields and projects and, vice versa, how it is influenced by them. Thereby, in congruence with the SI-DRIVE key dimensions, governance, networks, actors, process dynamics, resources, drivers and barriers, conflicts, and roles of different actors have been elaborated in detail. The report also shows which kind of social innovation practices in which practice fields and in relation to specific societal challenges and social needs can be identified.²

With its emphasis on the (governance) context of social innovation in the policy field, the underlying full report describes current and future challenges of the policy field and the societal consequences, strategies/objectives to tackle them (on a European and non-European level, and on the level of the countries involved in the policy field of SI-DRIVE).

The following report will summarise the societal challenges, social needs and practice fields of education and lifelong learning in Europe and other global regions. It will describe the European and global governance background in general, its barriers and drivers and the role of technology in this policy field. First insights concerning national differences are a first attempt to show the variety and different prioritisations. To sum this report up the conclusion are added by further research implications of SI-DRIVE.

¹ The key dimensions are described in the literature review developed in work package Theory of SI-Drive: Howaldt, J., Butzin, A., Domanski, D., & Kaletka, C. (2014). *Theoretical Approaches to Social Innovation - A Critical Literature Review*. A deliverable of the project: 'Social Innovation: Driving Force of Social Change' (SI-DRIVE). Dortmund: Sozialforschungsstelle.

² For a more general overview of Social Innovations in the European Union see BEPA Bureau of European Policy Advisers (2010).

EDUCATIONAL CHALLENGES

From a **European perspective** the Europe 2020 Strategy defines **overall challenges** with a close relation to education and lifelong learning, which are (1) *ageing societies*, (2) *skills shortages* in the workforce, and global competition, but also the high (3) *unemployment rates*. Since the European labour markets are nationally diversified and dynamic, education and employment are directly interlinked: Skills, competences, and qualifications that are regarded necessary by societal and economical participation and have to be adjusted continuously. To handle these changes, people need to be prepared and equipped with sufficient flexibility to step into the variety of basic skills, including literacy, numeracy, foreign languages, science and digital skills, but also international social competencies. “*Transversal skills*, such as the ability to learn and take initiative, will help people deal with today's varied and unpredictable career paths. *Entrepreneurial skills* will help contribute to employability of young people in particular, as well as supporting new business creation. Furthermore, it is important to better identify and manage the availability of required skills, competences, and qualifications, and to help preventing skills gaps and mismatches. Effective communication between the labour market and the education and training sector is vital” (www.ec.europa.eu).

Education and lifelong learning is seen as the main pillar for future employability and social inclusion. Currently, many European regions are characterised by high (youth) *unemployment*. Hereby, a large number of highly educated workers lack the possibility to find a proper job position. The reasons for this phenomenon cannot be longer exclusively explained by the financial and economic crisis Europe stepped into several years ago. It is also partially due to the national education systems in Europe, which in some terms seem to be *outdated and which have lost their ability to match and provide global labour market requirements*. To tackle this, several European organisations such as EACEA (Education, Audiovisual and Culture Executive Agency) provide European citizens with lifelong learning concepts, which are foremost addressed in their programs (see former Lifelong Learning Programme of Leonardo da Vinci, Comenius, Grundtvig, and Erasmus; now combined under the current Erasmus+ programme). But the idea of lifelong learning (LLL) goes far beyond the concept of continuing education. It includes a comprehensive understanding of learning of the individual and includes competences and support measures to manage one's own individual learning biography. In this sense, it is one of the key future challenges to enable generations to assume responsibility and be flexible in adjusting and broadening their own competences.

On the other hand, Europe deals with a further phenomenon, which at the first glance seems to be implausible, when regarding the high unemployment rate, namely the *skills shortage*. Skills shortages occur, foremost, in several Western European regions. It is not nationwide, and does not affect all branches, but certainly the mathematics, information technology, natural sciences, engineering-related occupations (STEM³, high technology). When taking a closer look, it becomes obvious that the high unemployment rates and the skills shortage have several reasons, but one common denominator: insufficient education and a mismatch of education and company demands. To approach the described challenges in the context of today's education in Europe, new pathways should be taken into consideration. Improving education and lifelong learning does not solely mean to assure better employment possibilities for young and elderly people. A better-educated society reduces societal disparities, ensures a better inclusion of vulnerable and marginalised groups and builds an overall societal cohesion, contributes to economic growth and the improvement of better lifestyles within the EU. *Such overarching ideas and concepts, addressing societal challenges within education and lifelong learning and leading to new and better practices than existing ones, are here considered social innovations in the policy field of education.*

On a **global perspective**, many similar challenges can be identified within different world regions. In many countries, the transversal topic is not about providing education, but rather ensuring its quality and equal opportunities in terms of access to it. Policy directives in all the educational fields are formulated, for the formal education sectors (primary, secondary, tertiary education) but also with a broader lifelong learning perspective: from early childhood to the edge of transition from school to work and further on.

³ STEM: Science, Technology, Engineering, and Mathematics.

In many non-European countries, more public funded pre-primary provisions are needed. The OECD policy directive says that “early childhood education and care policy need to be systematic and integrate the different forms of early childhood provision, allow universal access, and enjoy a strong and equal partnership with the rest of education system” (OECD, 2012, 22). From the OECD perspective but also based on the national reports of SI-DRIVE, well-being, early development and learning should be placed at the core of all early childhood interventions in which, child agencies and parents should play a significant role. From a social innovation perception educators and services should have the autonomy to provide a plan and curricula for the children in their care. In order to develop broad guidelines and curricular standards stakeholders, staff and family should be included. Another OECD policy direction is to create a governance structure which is necessary for system accountability and quality assurance. “Reduce child poverty and exclusion through fiscal, social and labour policies, and increase resources for children with additional learning rights within universal programmes” is also recommended in this respect by the OECD.

According to educational expert’s feedback from the different world regions a mix of skills for the labour market has to be acquired beyond initial education. More high skilled workers are needed than before and therefore a guide to skills development is necessary so that high quality in education and training programmes can be achieved. Equity by ensuring access to and success in quality education for all is an important factor as well as cross-border skills policies and facilitating entry for skilled migrants. Not only addressing the development of relevant skills is of importance. Activate skills supply and encouraging people to offer their skills and to put them to effective use are some other policy recommendations from the OECD and the involved experts.

Lifelong Learning is an important part of educational policies and politics and has been the focus of holistic analysis in the last years. It is often reduced to the adult learning phase beyond initial and formal learning. Anyway, “... international data show how wide the variations between countries are in terms of adult participation in formal and non-formal education, with very marked differences according to the qualification levels of the adults, and also by age” (OECD, 2012, p 72). Only a third of adults across OECD countries participate in non-formal education.

To highlight some worldwide assented policy recommendations: It is important to manage equal school choice to avoid segregation and increased inequalities. “Policies should be designed and managed to balance choice availability against negative equity consequences” (OECD, 2012, p. 109). Moreover, funding strategies are needed to guarantee access to quality early childhood education and care for disadvantaged families. The SI-DRIVE analysis and policy report underlines that it is also necessary to address low performing and disadvantaged schools: Strengthening and supporting school leaders, ensuring effective classroom learning strategies and prioritising the connections between schools, parents and communities. A shared vision on the nature of increasingly diverse populations, to improve the diversity of student teachers and to promote awareness of contextual specificity and preparation for teaching diverse student populations in teacher programmes (to attract and qualify students better) are also of importance. Reinforcing learning the host language for immigrants and actively engaging immigrant parents and communities in education are also recent policy recommendations to reduce disadvantages.

For OECD, **innovation and knowledge management** is an essential part in education policies as well. With its “Innovation Strategy” the OECD looks especially “at how education systems can best use and develop skills for technology, including through technology-rich innovation” (OECD, 2012, p. 116). Key findings are, for example, that wide-ranging skills, including soft-skills, are important for a person or an organisation in order to be innovative and that schools are poor in using the key motors of innovation (research knowledge, networking, modular restructuring, technological advance). Also, the use and activity in open educational resources have increased in many OECD countries (OECD, 2012, p. 120), which is of huge importance for ensuring the access to high-quality learning.

Education and lifelong learning as key challenges

To overcome the recent and future challenges in a mid and long term perspective, a continuous improvement of education and lifelong learning is a key challenge for European societies and the global world. Formal primary, secondary, tertiary education and further kinds of education and training could be better framed within the concept and strategy of lifelong learning (LLL). Lifelong learning has been one of the guiding

principles in the development of education and training policies since the adoption of the EU Education Council Conclusions on a Strategy for LLL during the 1996 Irish Presidency. The EU Lifelong Learning policy should be seen in the wider context of the Lisbon Agenda and, by now, Europe 2020. Both the underpinning philosophies and actual objectives (strategic and operational) as well as the programme architecture and content aim to *use education and training as a key lever* in making the EU more competitive, providing more social cohesion and enhancing growth.

In the framework of the transition from an industrial to a knowledge-based society and its corresponding concept of Lifelong Learning as a European strategy to improve European competitiveness, lifelong learning has to be seen and implemented as a middle and long-termed competitive factor (Lisbon Strategy, Europe 2020) being an answer to constant and profound technological, social, economic and demographic changes. The lifelong learning perspective, covering all kinds of learning (including non-formal and informal learning) is the background for the strategic objectives of the framework programme “Education and Training 2020” (ET 2020) addressing – in line with the Bruges Communiqué⁴ for vocational education and training VET - the following recent challenges:⁵

- making lifelong learning and mobility a reality,
- improving the quality and efficiency of education and training,
- promoting equity, social cohesion and active citizenship,
- enhancing creativity and innovation, including entrepreneurship, at all levels of education and training.

Breaking down these objectives, the EU especially is interested in the improvement of the following challenges and targets of mainly formal education but also lifelong learning - which could be seen as well as the **main practice fields** of social innovation in education and lifelong learning **defined by the European Commission**:

- Increasing early childhood education
- Reducing the number of early school leavers/drop outs
- Reducing the number of people with insufficient abilities in reading, maths, and natural sciences
- Increasing the number of people to complete tertiary education
- Increasing the quantitative and qualitative participation of people in lifelong learning
- Increasing mobility and flexibility.

More generally, the main issues address the integration or re-integration of disadvantaged groups mainly into initial education, vocational education and training and other areas of lifelong learning. The diversity of groups and learners requires tailor-made solutions and respective actions. Following this argumentation, it is a clear issue that the engagement of various kinds of actors is needed. Education and lifelong learning players act on European and national levels. Governance describes processes at all levels regulated by laws, norms, action programs, projects etc. Thus a governance system includes all-important bodies influencing decision-making processes.

SI-DRIVE: Identified social needs and practice fields

In line with the already described societal challenges the SI-DRIVE experts identified national and regional social needs and related practice fields, covered by different social innovation activities. But first it has to be mentioned that SI-DRIVE is differentiating between “practice fields” and related “projects and initiatives” in the following way:

- A “**practice field**” is a general type or “summary” of projects and expresses general characteristics common to different projects (e.g. micro-credit systems, car sharing)

⁴ The Bruges Communiqué on enhanced European Cooperation in Vocational Education and Training for the period 2011-2020 (EC 2010).

⁵ http://europa.eu/legislation_summaries/education_training_youth/general_framework/ef0016_en.htm

- A “**project/initiative**” is a single and concrete implementation of a solution to respond to social demands, societal challenges or systemic change (e.g. Muhammed Yunus’s Grameen Bank which lends micro-credits to poor farmers for improving their economic condition, different car sharing projects or activities at the regional-local level).

The European and global key challenges already described are reflected in various national examples, both practice fields and concrete social innovation initiatives in education and lifelong learning provided by the SI-DRIVE partners. A great conformity can be found in the social needs and the related practice fields of education and lifelong learning, but with country-specific foci and priorities and sometimes different terminologies. Parts of a more general practice field are considered a practice field of its own in other countries, and a selective alignment of social practices to social needs is not an easy task. Additionally, there is also a focus on public driven innovation activities and on the formal education area. Social Innovation is mainly connected to the third sector and vulnerable groups, with limited funding and a general lack of an incubating environment (national and local).

The *main current strands* summarising the practice fields of social innovation identified by the policy field experts of the consortium are

- interrelations with and impacts on *formal education* (early childhood education, lifelong learning),
- *informal / non-formal learning* and the challenge of acknowledging and certifying such learning outcomes,
- *eInclusion* (guiding people to the digital world and promote digital literacy, integrating citizen in digital media access and usage) as a promising “vehicle” for personal development, active citizenship, social inclusion and employability with high potential for certain regions and target groups,
- the matching process between *industry demands* and education and lifelong learning offers,
- and strongly required solutions for new learning arrangements and appropriate pedagogic principles.

Based on country and regional reports, the following main social needs and related practice fields of social innovation activities can be summarised at this point:

Skills shortages, miss-match, lack of professions and skills, competences:

- Occupational orientation, early pupils career planning: improving the orientation towards natural sciences, skilled crafts, overcoming gender segregation and stereotype orientations, improving the added value of vocational education and training (e.g. as an alternative to tertiary education)
- Strategic partnerships of education and economy, labour market needs integration
- Entrepreneurship education and promotion
- Continuous updating of skills, competences and capabilities, including low-skilled workers
- Transition management: From school to work, from outdated to new occupations, redeployment and retraining.

Improvement of participation in education and extended learning biographies:

- New strategies and structures for lifelong learning
- Variety, accessibility, recognition of non-formal and informal learning
- Early childhood, preschool education
- Empowerment instead of / through education

Improvement of learning possibilities and options / expansion of educational opportunities:

- New learning arrangements, interactive education (e.g. peer-to-peer, creativity promoting learning environments, individualised and modular training programmes)
- New digital and virtual learning environments (e.g. “Digitalisation” of schools, e-learning, blended learning, open education and learning)
- Excellence education, elite support
- Fostering specific learning contents: Sustainable education, entrepreneurship education, green skills, and others

Improvement / reforms of formal educational systems and institutions:

- Updating education institutions and programmes: New secondary school, full-day school arrangements, curricula and management reforms, and others
- Quality improvement, setting of new educational standards
- Collaboration of educational institutions, transnational cooperation (platforms), collaboration of public institutions with civil society organizations (local, regional, national and international)
- New mechanisms for collaboration and decision making: pupils, parents integration
- Development of social activity and responsibility of young people
- Pupils support: career guidance, preventive programs, counselling of pupils at risk, prevention of school dropouts
- Rural areas integration, improvement
- New financing schemes, improving infrastructure of schools, educational materials, access to ICT
- Improving mobility (on the basis of EQF, NQF, Credit-systems ECVET, ECTS)

Social inclusion of vulnerable groups / equal opportunities:

- Reduction of educational disadvantages
- Digital inclusion
- Specific learning arrangements and networking for education of vulnerable groups (migrants, handicapped and disadvantaged people, ...)
- Prevention of School Violence
- Basic education and second chance education, training guidance (qualification, apprenticeship, language courses)
- Diversity-competence in schools

Attraction of teachers and increasing competences of teachers / trainers:

- Attraction of young professionals to educational sector
- Alternative forms of educational activities and training (towards consultant, mentor)
- Quality of training for teachers
- New teaching practices (e.g. active learning, andragogy)
- Specific teaching competences: pedagogical techniques, IT competences, vulnerable groups.

These social needs and practice fields vary in their importance within the different countries. This will be the overall and guiding structure and the basis for the mapping of social innovations in education and lifelong learning. It will be reconsidered after the analysis of the global mapping of 1.000+ cases done in SI-DRIVE in order to reduce the number to the most relevant and distinct ones.

MAIN EUROPEAN AND GLOBAL POLICY FRAMEWORKS FOR EDUCATION AND LIFELONG LEARNING

The policy field of education and lifelong learning is characterized by diverse national education systems in the European Union and in other world regions. While the formal (primary, secondary and tertiary) education systems are largely centralized (with intermediary support institutions and a few with decentralized responsibilities), the organisation of vocational education and training as well as lifelong learning for adults shows a more decentralized structure, with local municipalities and/or the industry sector playing a more influential role in the development and promotion of learning opportunities.

Continuous improvement of education is a key challenge for European countries and the global world. Many policy frameworks have been launched to improve education and lifelong learning on different levels and policy fields, e.g.:

European:

- The Europe 2020 strategy defines benchmarks related to education and lifelong learning in early childhood education, early school leavers/drop outs in VET, tertiary education, lifelong learning, studying and training abroad
- Education and Training 2020 (ET 2020) is a new strategic framework for European cooperation in education and training that builds on its predecessor, the ET 2010 work programme, http://europa.eu/legislation_summaries/education_training_youth/general_framework/ef0016_en.htm
- The Erasmus+ programme 2014-2020 is focusing on all the different learning areas, youth and sport http://ec.europa.eu/programmes/erasmus-plus/index_en.htm
- Entrepreneurship 2020 Action Plan: It establishes entrepreneurial education and training to support growth and business creation; removes existing administrative barriers and supporting entrepreneurs in crucial phases of the business lifecycle; and reignites the culture of entrepreneurship in Europe and nurturing the new generation of entrepreneurs (http://ec.europa.eu/growth/smes/promoting-entrepreneurship/action-plan/index_en.htm)
- Rethinking Education: Invest more in education and training, to modernise the education system to be more flexible in how it operate to respond to the real needs of today's society (http://europa.eu/rapid/press-release_IP-12-1233_en.htm)
- The Bruges Communiqué: a package of objectives and actions to increase the quality of vocational training in Europe by making it more accessible and relevant to the needs of the labour market (http://europa.eu/rapid/press-release_IP-10-1673_en.htm)

Global:

- OECD Today 2013: The report presents key findings and policy directions for education policy on the ground of figures and benchmarks.
- The World Bank's Education Strategy 2020: Learning for all – investing in people's knowledge and skills to promote development
- UNESCO Education for all: Global monitoring report that reviews how much the Education for All (EFA) movement succeed and evaluates if and how the goals set up in Dakar 2000 were reached (in the field of early childhood education, universal primary education, youth and adult skills, adult literacy, gender parity and equality, quality of education).

- The Global Education First Initiative (GEFI): is launched by the United Nations Secretary-General to accelerate progress towards Education for All goals and the education-related Millennium Development Goals (MDGs) (www.globaleducationfirst.org)

European governance system

Policy on education and lifelong learning in the **EU member states** is dominated by the Open Method of Coordination by several measures, mainly the **European Lifelong Learning (LLL) and Europe 2020 strategy**. Beside national or regional disparities, education and lifelong learning are seen as the basis for democratic and societal participation, inclusive and prosperous societies – not only focusing on skills and jobs but also on social inclusion and abilities to learn (esp. in the adult phase). The main objective is to **improve the quantitative and qualitative participation** in education and lifelong learning. The main challenge is to build up **new learning and teaching structures** to improve education and lifelong learning (from early childhood to retirement, from the support of vulnerable groups to talent management), to create new and sustainable access and structures for all the people to education (incl. finance).

Beside the European Framework activities on education and lifelong learning, each EU country is responsible for its own education and training systems. EU policy is designed to support national actions and programs and bind them under an umbrella addressing common challenges (e.g. Bologna Process, European Qualification Framework).

Education and lifelong learning players act on European and national levels. Governance describes processes at all levels regulated by laws, norms, action programs, projects etc. Thus a governance system includes all-important stakeholders influencing decision-making processes. The EU offers a forum for exchange of best practices, gathering and dissemination of information and statistics, as well as advice and support for policy reforms. In order to ensure the successful implementation of the strategic framework Education & Training 2020 (ET2020), the EU also relies on Working Groups, composed of experts, nominated by member countries and other key stakeholders. This work is part of a broader cooperation, known as the Open Method of Coordination, which aims to promote mutual learning, exchange of good practices, fostering national reforms and developing EU-level tools. The close relationships between the European Commission agencies and institutions and the member states institutions (namely the Ministries and Agencies of Education) are fostering the implementation of European measures at the national, but also the regional and local level (concerning concrete educational and lifelong learning strategies, e.g. EQF, ECTS, ECVET and others).

“A series of European initiatives in recent years have provided strong stimuli, comparison and policy guidance to help Member States strengthen equity in their education systems in a way that would ensure both quality and fairness. These include:

- The Council Recommendation on Roma integration measures;
- The Council Conclusions on the social dimension of higher education;
- The Communication on National Roma Integration Strategies up to 2020;
- The Communication on early childhood education and care;
- The Council Recommendation on reducing early school leaving;
- The Council Conclusions on the social dimension of education and training;
- The Working Document on education and mobility/migration;
- The Communication on Efficiency and Equity in European Education Systems.”
(ec.europa.eu/education).

Drivers and barriers

Drivers and barriers are one key variable for empirical work done within the SI-DRIVE project. The aim is to identify those factors which are conducive to the success of a social innovation initiative, the diffusion of an

approach or to a practice field as a whole. The policy field experts provided their perspective on drivers and barriers already for this report.

The European Union policy is characterized by the Open Method of Coordination (OMC)⁶ which can be seen both as a driver and a barrier for (social) innovations in education and lifelong learning. Based on the identification of common objectives, measuring instruments (statistics, indicators, guidelines), and benchmarking using OMC, the European Commission sets new signals and orientations, or better frameworks for its member states. Beside the fact that these inputs are not legally binding, they have a strong recommendation character for initiating and pushing national developments. For instance, the lifelong learning impulses already launched within the Lisbon Strategy became a kind of mainstreaming within the educational strategies of the member states.

Most European countries have made progress in defining unified and overarching lifelong learning strategies. But research on LLL has already shown that one common and homogeneous European model of LLL does not appear to be practical (LLL 2010 project and others). By highlighting and making use of a European *framework* of lifelong learning (in line with the open method of coordination philosophy) social innovations can be developed, up-scaled and used to unlock the potential of SI to both overcome system barriers (by links between and integration of different learning areas and institutions, national and regional-local LLL policies, etc.) and implement and support effective and efficient regional education and LLL structures, mainly for the benefit of the learners and the learning process.

Different European governance “drivers” for the improvement of education and lifelong learning in the member states are:

- **general policy inputs** like the Lisbon Strategy, Bologna Process, Bruges Communiqué and now EU 2020 are not only providing a development framework, but concrete benchmarks for education and lifelong learning (see list above);
- **programmes and project funding** (LLP, Erasmus+) are fostering transnational innovation and innovation transfer;
- European **institutions** (esp. CEDEFOP, EUROFOUND, EACEA) and **exchange / project platforms** (adam and eve);
- European **cooperation platforms**⁷, **expert workshops** on specific topics (like e.g. green skills and digital inclusion) and **umbrella organisations** (like the EAEA) are embedding stakeholders and experts from the members states and different economic sectors, science and NGO's; fostering not only the integration of scientific, economic and education experts, but also civil society, networking and public-private-partnership in a broader sense;
- concrete **instruments** like the European Qualification Framework (EQF) and the related development of National Qualification Frameworks (NQF) as well as the European Credit Systems ECTS and ECVET are fostering not only mobility, but orientation on common and comparable standards, and others.

These activities include stimuli for innovative projects and activities as well as support and guidance – concerning content, financing and ideas. This is not only done by “soft governance,” but also through concrete selection criteria for funding of projects (projects are funded only when contributing to given themes and topics of the call).

Role of Technology

Technology is playing a crucial role for the access and improvement of education and lifelong learning. (1) Information and communication technology plays a role in spreading learning contents and (2) setting up communication, information, support, and diffusion platforms for innovations. (3) Education overarching

⁶ See http://europa.eu/legislation_summaries/glossary/open_method_coordination_en.htm.

⁷ Even some of the European Technology Platforms have education and training on their agenda: e.g. Working Group “People” of the European Steel Technology Platform (e.g. recently dealing with Social Innovation and Technology, Talent Management).

learning shows long lasting experiences in technology supported learning and many new pedagogical approaches can be considered social innovations. The perspective of social innovation research offers a new instrument to scrutinize the intersection of these three strands. Beside eLearning and blended learning the IT applications are huge and offer many opportunities for social innovations. The following paragraphs - taken from the literature on digital social innovation with regards to education - sketch some recent developments – without claiming completeness or a prioritizing order.

Community based learning: For instance so called „maker communities“ and „fabLabs“ are providing “open hardware” technological infrastructure (like 3D printers) for community based problem solving. “FabLabs” are open laboratories (as learning and productions spaces), embedded in a community of people supporting the idea of sharing expensive tools for individual production. While addressed problems to be solved with that infrastructure are mainly in the technological field, the “making” approach can be regarded as a learning oriented social innovation, as it refers to a new configuration of social practice – it is a strand of the “sharing economy”. Recent developments in maker communities have highlighted the potential of these spaces and communities as learning frameworks. Bria (2014: 27) indicate connections between “open hardware” movements and learning opportunities, as production oriented learning and peer learning are leading ideas of shaping these spaces. This is an emerging field of technology supported lifelong learning that obviously is in configuration.

Open knowledge platforms: Open knowledge platforms and digital commons are identified as one of five emerging fields of digital social innovation by Bria (2014: 11). Digital resources could support educational purposes, the exchange of knowledge and the publishing of research findings (Bria 2014: 26).

New pedagogy for ICT based learning: ICT connecting people for learning purposes have seen remarkable developments in the last decade – interweaving a helix of technological and pedagogical developments. Starting from offline training arrangements (“computer based training”), the internet offered (and demanded for) new pedagogical approaches making use of the added pedagogical potential of its power to connect people, present content and allow interaction between learner and learning content in a way non digital media could never offer. Concepts like connected learning, incremental learning, peer learning or crowd learning are emerging and create new learning opportunities. Seeing this from the institutional perspective, MOOCs for example are regarded as new distribution platforms for providers of educational content and offer both – new pedagogies and new business models. Millard/Carpenter (2014) suggest that “learner empowerment” (...) “personalised education” (...) “access to education, lifelong learning, and reducing costs to society” are primary social challenges addressed by digital social innovations in the field of learning.

THE NATIONAL LEVEL: FIRST INSIGHTS

Governance structures

All in all, the national **governance** structures for *formal* education are mainly centralised and hierarchical, focusing political power largely at the federal government level (central governmental top-down legislation and directives) and splitting different (sub-) responsibilities on an intermediary level. This intermediary level is characterised by government supporting agencies, centres and institutes for education or certain areas of formal education (institutes or agencies like the school inspectorate in Romania and regional governments or better province governments within a country, like the ones in Germany and Austria). The decentralised execution through the local level (municipalities) is the rule, while, more or less, first new responsibilities are appearing. First, trends of empowering and encouraging the local level can be found in Germany, Bolivia, Nordic and Balkan countries. Participation of the civil society also plays a significant role, mainly through parents' and students' representations, but also employers' associations as well as employment services. A special focus of civil society involvement is on education for vulnerable groups.

To underline that the governmental structures are more or less following the same principle, for instance, even in Russia but also in Oman the centralised government is supported by intermediary institutions (Educational Evaluation Department (EED), Educational Supervision Department (ESD), Oman Accreditation Council (OAC)⁸) and Regional Directorates as well as the local level (e.g. self-management of schools) is encouraged for taking over own decisions to improve and speed-on performance in education, but also to take over civil society activities (like the Omanis Women Association establishing own kindergartens). Also, there are first initiatives to bring stakeholders together and confront them with societal challenges and inconsistencies of the education system, social innovations or private initiatives for solving these problems are seen as "suspicious", resistance against horizontal and bottom-up initiatives.

A large number of independent organizations or councils are implemented at all levels (federal, regional, organizational). The main responsibilities of these institutions include the approval of local legal acts and staff of the educational institutions, veto on administration's decisions, distribution of extra-budgetary funds and decisions on specific issues of school life (working hours of educational institutions, school uniform, food, duty at school, holidays, etc.). It includes also the necessity to expand the private sector in the sphere of preschool education supply (kindergarten places).

Furthermore, there are a lot of foundations, guidelines, and modernisation or innovation programmes running mainly to improve the system and to focus more at lifelong learning, esp. in the former European Eastern-bloc countries. These countries have undergone wide-ranging reforms in their education systems and have set up comprehensive education programmes and strategies to improve education and lifelong learning. For example, the Baltic States are very active in implementing modern structures to improve and coordinate lifelong learning (e.g. Estonian Lifelong Learning Strategy 2020 and Foundation Innove, National Lifelong Learning Strategy in Latvia), to connect education with the knowledge-based society and innovation, to develop a new digital culture and active civic participation. The lifelong learning strategies are located at every learning and education phase, providing that responsibility for ensuring lifelong education is shared by the state, local governments, legal entities (private entrepreneurs, social organizations), and inhabitants.

Social Innovation on the rise

Social Innovation is a term that usually does not appear in the education and lifelong learning sphere, but there are first indicators that it could become a more reflected concept. Again, the Baltic States seem to become a forerunner in this respect (e.g. the Lithuanian Innovation Strategy for 2010-2020 with the promotion of technological, non-technological social and public innovation; Estonian strategic documents create favorable conditions to develop and create social innovation and technological solutions in education). In Latvia a non-governmental Social Innovation Centre (SIC) was set up in 2010 to strengthen and disseminate knowledge on

⁸ <http://www.oac.gov.om/>

social innovation and social entrepreneurship, promote international and national experience exchange and establish networking for social innovation. This includes civic participation and the promotion of civil society participation in policy (documents and legal acts), promotion of active citizenship, creative and culture industries, regional development and local government capacity building. But these activities are strongly depending on grants allocated by the European Commission and national public authorities, and even in the Baltic States there is still a lack of support and coordination mechanisms.

In the Czech Republic a working group focusing on social innovation issues has been established by the Ministry of Labour and Social Affairs (consisting of representatives of public administration, innovation hubs, and universities) taking stock of international experience on social innovation and setting up an operational programme, funded by the European Social Fund. But it has to be seen if this would include also social innovations in education and lifelong learning.

In Russia social entrepreneurs as a new type of actors in educational politics are emerging, promoting social innovations in education in a collaborative way with non-profit and business actors. Even being a new movement (with low acceptance in the Russian society) it can be seen as a significant contribution for educational improvement (in 2012 40% of social entrepreneurs worked in education, science and scientific services, see country report chapter 6). The further development in social innovation will depend on a new and clearly defined legislative framework related to the activities of social entrepreneurs and the implementation of social innovations and strategies of the public policy in this sphere.

In both education and lifelong learning, alliances between public, private and civil society actors are rare. There is a need seen for partnerships in building up 'territorial employment pacts' (contractual arrangements established between companies, VET providers, trade unions, municipalities etc.). Pacts of this kind are well established in all Austrian federal provinces and can serve as role model (www.pakte.at). These provide, for instance, trainings for vulnerable groups in danger of losing their jobs or to help improving the employability of unemployed.

Even though there are national disparities and different priorities, it seems that there are more or less common challenges for education in the countries we have looked at so far: outdated, not effective and inefficient, not well developed education systems (dominated by structural rigidness, bureaucratic obstacles and ideological blockades, esp. the former Eastern-bloc countries in Europe and the non-European countries in South America, Russia and the Gulf States but more or less in every country involved in this report); necessity of early childhood education, improvement of the quality and recruitment of teachers; socially inherited education (social selection of access and success, support of vulnerable groups: e.g. indigenous people, migrants, lower social class, low-skilled workers); youth inclusion and transition from school to work; skills shortages and mismatch of professions and skills, entrepreneurship education and promotion; disadvantaged rural areas; missing and improvable collaborations between the public, private sector and civil society. In Latin America education is very much based on poverty and social heritage (social inequality, disadvantaged rural areas), therefore educational social innovation activities are very much related to this fact as well as to conflict management and school violence. Educational communities, sometimes with the support of non-governmental organisations, are the main innovators. Civil society and citizen empowerment are of high relevance for social innovations in this field.

Concerning social innovation, the ground and incubation structures are missing. Despite the increased general awareness of **social innovation**, its recognition and policy support in education and lifelong learning is still low. Social innovation is not a widely spread concept and therefore there are no national, regional or local policies and subsidies which aim to support it. As a kind of hypothesis there is an emerging tension that seems to hinder social innovation development: While the formal education system is too rigid and too centralized, the non-formal and informal lifelong learning of adults is too decentralized and not structured enough. In other words: on the one side formal education is highly regulated with different responsibilities, not working together with actors from other education areas or actors outside the education system, on the other side lifelong learning of adults, continuous vocational education and training, non-formal and informal learning are mainly market or company driven or characterised by diffuse or voluntary responsibilities and missing transparency and counselling.

CONCLUSIONS

The policy field education and lifelong learning is characterised by different national education systems in the European Union and in other global regions. While the formal (primary, secondary and tertiary) education systems are more centralized (with intermediary support institutions and a few with decentralized responsibilities) the organisation of vocational education and training, as well as further lifelong learning for adults, is relatively more decentralised (regional or local municipalities and/or industry sector related).

There are more or less the same challenges and social needs in every global region, differing mostly by the status of development in the (formal) education system, there is an undeveloped potential of social innovation in education and lifelong learning in general. Not only because the term is not known and used, but because the concept of social innovation is not aware and executed systematically. Social innovation between public policies and government on the one hand and market and economy demands on the other hand (see figure below) could bridge both perspectives and new structures for the improvement of education and lifelong learning from the learners' perspective and actual requirements. The listed social needs and the related practice fields in the next chapter are a first orientation for describing, analysing and unlocking the potential of social innovations in this policy field.

When considering social innovations in education and lifelong learning, it should be stressed that most of them are innovations created within the context of the formal education system and are initiated, funded and (partly) conducted by the responsible public institutions. Overall, social innovations and the underlying concept are not really a central issue in educational programs, and consequently they are not systematically supported. There is a concentration on the formal education system and not on the huge lifespan of other parts of lifelong learning for adults. But since the adoption of the Lisbon Strategy, EU-countries have a more explicit focus on lifelong learning while non-European countries do focus on formal education and (partly) on vocational education and training.

Therefore, social innovations, or the development of new social practices in education, are mostly developed within the given formal structures and frameworks. Innovations going beyond or changing given formalities, structures and procedures are mainly restricted to given (legal) leeway or the necessity to change formal and legal structures (incl. law). Consequently, within the global mapping prior attention has to be paid to grassroots initiatives and their relation to public driven ones.

In line with the improvement of lifelong learning as a strategy aiming at improving competitiveness in the middle to long-term (Lisbon-Strategy, EU 2020 Strategy), it can also help to address technological, social, economic, and demographic changes and challenges. Social innovations in education and lifelong learning focus on new practices, mainly at the regional-local level, because it is in the region and its localities that success or failures of policies become apparent. The regional-local level is seen as the level for basic growth, employment and competitiveness in a knowledge based society and a prerequisite for coping with constant and rapid changes in economies and societies. Both rapid changes and new economic and social dynamics require that skills be constantly upgraded and adapted for everyone. Such continuous adaptation concerns not only new skills for new jobs but also one's resilience in coping effectively with critical life events (related to fragmented patterns of career trajectories, different life events, etc.). This, in turn, means that lifelong learning is also an opportunity for every individual who wishes to manage actively, and in a self-reliant way, the constant change in work and society. However, this cannot be reduced to a pure individual responsibility; rather new structures would be helpful in facilitating the individual learner in the achievement of new goals and his/her particular demands in an appropriate way, with a specific focus on adult learners.

Implications for future research in SI-DRIVE

The objective of the work package is to study and understand social innovations, their process dynamics, drivers and barriers in the (policy) field of education and lifelong learning. This will be complemented by strengthening and scaling up prototypical social innovations in this field and thereby describing innovation management approaches and standards in line with the overall results of SI-DRIVE with a distinct added value for both scientific and application-oriented stakeholders. Strictly education-oriented perspectives will include

- the relationship between European and national policies on the one hand and regional-local implementation on the other hand, including support and policy structures between them;
- the elaboration of prototypes and clusters for distinctive regions, which cluster different regional and local contextual conditions;
- to work out appropriate and comprehensive structures that overcome existing institutional and learning area borders, restrictions and separations and which are oriented at new integrated learning arrangements;
- to develop scenarios for a participative and dialogue-oriented ongoing social innovation process, embedding all relevant stakeholders, institutions and the inhabitants of the regions and localities.

Based on this, and on the results of the policy field report, further empirical research benefit from the main implications/hypotheses:

- **There is no visibility and evidence of the acceptance of an SI concept.** Social innovation outside of the formal education and lifelong learning system is still a black box, esp. in the non-formal and informal lifelong learning of adults, and could be a way to overcome existing innovation barriers.
- **Taking up the lifelong learning concept seriously** requires a paradigm change from an institutional to a learner perspective, reorganising institutional structures and requiring synergies between national and regional-local policies.
- Moving from the fragmentation of education and lifelong learning (with separate rationalities and target-orientations, different public responsibilities) to overarching and connected **new institution overarching governance structures** between centralised and decentralised public government, market and civil society driven structures could be beneficial. This means a common management of resources (infrastructure, staff, etc.), competences, learning offers and programmes to secure an improve efficiency for the learner and the regional-local area, and to increase efficiency (by a common use of resources).
- **Aiming at enriching the top-down governance with a bottom-up perspective** of learners and learning processes as well as with a social innovation process is warranted. In this respect, SI-DRIVE takes up the PREVALET project recommendation that the "... European Union is able to and wishes to promote inter-regional cooperation in the area of lifelong learning"⁹ that goes beyond "cooperative and voluntary policy learning and policy transfer between regional governments".

Against this background it has to be discussed in how far the lifelong learning concept and strategy (embedding formal, non-formal and informal learning throughout the whole lifespan from the cradle to the grave) could be combined much more with the concept of social innovation (**combining the lifelong learning concept with social innovation**). By focusing on education and learning – in the overarching context of lifelong learning – the strategy and concept of lifelong learning could be better combined with the social innovation concept, based on a double paradigm change (lifelong learning: from the institutional to a learners perspective, social innovation: from a top-down to an increasing bottom-up perspective of embedding all the relevant stakeholders in the innovation processes). **Learning, not schooling**, has to be the main reference as well as the learners' demands.

Only by embedding innovations in a comprehensive social innovation process will it be possible to overcome the main barriers to implementing of lifelong learning sustainably, e.g. as stated in the LLL 2010 project: "In some countries there is clearly some confusion over responsibility for the development of lifelong learning and/or lack of a strategy" (LLL, 2010, Executive Summary, p. 11). This illustrates that the confusion (existing at the national level) is much greater and much more practically relevant on the regional-local level. The LLL 2010 project stressed further that "whilst confusion over responsibility (and lack of strategy) seems to lead to lack of policy initiatives or limited development, (already) weak coordination may lead to important, but more piecemeal, initiatives." This suggests a clearly developed lifelong strategy which sets out the responsibilities of key agents is a prerequisite for the development of lifelong learning, but that the coordination of those responsible needs to be sensitive to local contexts" (LLL 2010, 2010, p.11).

⁹ Federighi et al., 2007: Learning among Regional Governments, p8.

Based on the state-of-the-art, successful lifelong learning has to go beyond existing institutional education and training structures to incorporate new overarching and comprehensive lifelong learning structures and systems (see Kruse/Schröder/Kaletka/Pelka 2010). Lifelong learning requires the implementation of a comprehensive learning approach, including all types of learning (formal, non-formal and informal) and learning arrangements (eLearning, blended learning, etc.) as well as objectives that foster employability and support flexicurity within a context of changing labour market needs. It also requires active citizenship including cultural, social and political participation.

As the *Progress towards the Lisbon objectives in education and training - Indicators and benchmarks 2008* underlined, the concept of lifelong learning shifts responsibility for education and learning to the individual, focusing on the development of individual capabilities and the capacity to learn. It implies a shift from traditional educational institutions to diverse learning opportunities that are more process and outcome oriented. The **learner perspective and the structural reform perspective**, which are addressed here, are the two underlying principles which will influence the state of the art.

Though the different EU and non-EU countries are focusing on different social needs and prioritizing various approaches to overcome these challenges, there is a common background of governmental structures, societal challenges, social needs and social practices. This seems to be a good basis for

- a common overarching framework of social innovation in education and lifelong learning – oriented at the five key dimensions of SI-DRIVE;
- the comparable mapping and analysis of different solutions via social innovation projects and initiatives for the same practice fields;
- looking at the same social needs from the perspective of different and combined policy fields (e.g. education and lifelong learning and employment, environment and climate change, reduction of poverty and sustainable development).

It became evident that social innovations and the concept behind them are not very visible and therefore not systematically supported. There is a concentration on the formal education system and not at the huge lifespan of other parts of lifelong learning for adults. Here is a clear difference between EU and non-European countries: While the EU has been mainstreaming lifelong learning in every member state since the adoption of the Lisbon Strategy, the non-European countries do not have an explicit lifelong learning strategy and orientation. Nevertheless, there is no holistic approach even in the EU member states, hence, working in silos (separated education areas) seems to be still going on.

Beside the common orientation on lifelong learning strategy as such, there is a diversity of approaches in lifelong learning policies as stated by the LLL 2010 project: “countries vary along a range of dimensions, no clear differentiations between ‘old’ EU countries and the new member states, post-communist states” are found (LLL 2010, Executive Summary, p 9f). Another important issue to be considered is fact that “there is a regional variation in access to education between cities, towns and rural areas” (LLL 2010, executive summary, p. 9) and access to learning is different for different population groups (disadvantaged, etc.). The SI-DRIVE approach will be in line with the outcome of LLL 2010 (LLL 2010, executive summary, p. 9f) that there is a “lack of a clear lifelong learning strategy ... seen as a barrier to effective co-ordination in many countries”.

Looking at the country and regional reports there is evidence that social innovation should focus much more on going beyond the borders of (still) separated education areas, explicitly by looking at transitions and demands from a learner’s (and not an institutional) perspective. The European programme Erasmus+ is going in this direction by combining research and strategy across the educational areas (in principle, but it has to be checked if this programme is supporting cross-border social innovation in practice). The management of change should be empowered much more by unlocking the potential of social innovation through effective participation of civil society and an integration of people directly concerned (top down *and* bottom up). The recent social innovation approach is focusing on empowerment of education and lifelong learning: with **“solutions for the people with people”**, with links to inclusive growth and new pedagogical approaches (e.g. intergenerational learning). This includes also economy actors and the establishment of sustainable collaboration with educational institutions on curricula and training programmes.

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