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Link to publisher's version: <https://doi.org/10.1080/13511610.2017.1419336>

Citation: Kapoor K, Weerakkody and Schroeder A (2018) Social innovations for social cohesion in Western Europe: success dimensions for lifelong learning and education. 31(2): 189-203.

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Social innovations for social cohesion in Western Europe: success dimensions for lifelong learning and education

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Abstract

In addressing the EU2020 goals, skills shortage combined with increasing unemployment rates is to be primarily tackled in Western Europe; the common factor here is education. Education and lifelong learning (LL) are the key strands governing employability in the European labour market. Overarching concepts capable of addressing social challenges within education and LL that contribute towards better practices are seen as social innovations (SI). While SI in education is well founded in the developing countries, Europe is still in the process of gaining progressive momentum in this direction. In addressing various societal challenges, this study looks at observable trends in SI for education across Western Europe. About 30 innovations have been recorded across 11 countries that are essentially focussed on: social integration, alternative/new forms of education, digital learning, new learning arrangements, new LL strategies, early career planning, youth employment, quality improvements and new education standards, transition management, and entrepreneurial education.

Keywords: education; social innovation; Western Europe; lifelong learning; employability

1. Introduction

Within the EU2020 Strategy, the identified challenges are in close relation to education and Lifelong Learning (LL): (1) ageing societies (2) skills shortage and (3) high unemployment rates (EU Commission 2016). The European labour markets are constantly changing. In addressing this change, skills, competencies, and qualifications preferred by businesses also change over time. To handle these changes, people need to be prepared and flexible in acquiring basic skills, including literacy, numeracy, foreign languages, digital skills, and international social competencies. As already indicated by authors, Trippel and Maier (2007), the potential of educated workforces is of immense importance for Europe and its regions. This is particularly applicable where regional innovation systems, competencies and knowledge of (highly) educated workers are regarded as essential sources. Innovation has been critical for Europe's competitiveness at a global scale, and is not only characterized by high levels of financial, media, technological and human flows, but also by knowledge flows (Gaughan and Sampat 2003; Cassiman and Valentini 2016).

Literature has consistently identified education and LL as the main pillars of employability (Jarvis 2007; Biesta 2011; Aggarwal 2016). Several European regions are suffering a setback characterized by high levels of youth unemployment and skills shortages (Mourshed and Suder 2014; Europe 2020, 2014). A closer look shows the high unemployment rates and skills shortages have several reasons, but one common denominator, education (Arandarenko and Bartlett 2012). This problem of skills shortage arises majorly from the lack of sufficient educated people with skills required by modern-day employers. In this context, improving education and LL will not only assure better youth employment opportunities, but will also reduce societal disparities, ensuring better inclusion of vulnerable

and marginalized groups. This can help facilitate social cohesion (Papageorgiu 2008; Taylor 2011) whilst contributing towards economic growth and improved lifestyles within the EU.

To overcome the recent and future challenges from both mid and longterm perspectives, formal primary, secondary, and tertiary education could be better framed within the concept and strategy of LL (Schroder 2012). LL is indicative of learning opportunities and support structures aligned in response to increasing heterogeneity of work, education and living biographies of adults (Schroder 2012). Novel solutions addressing social challenges in education contributing towards newer and better practices are regarded as social innovations. While SI in education is well established in the developing regions (Asia, Africa and South America), it is also been progressively gaining momentum in Europe. In the light of increasing importance of SI, observable trends in SI for education across Western Europe will be explored. SI has conflicting meanings (Rüede and Lurtz 2012). Novelty is perceived as innovation only when implemented and successfully diffused in markets (OECD 2005). The focus should be on social value creation, yet a deciding criterion (which here, cannot be success in markets) to distinguish SI from a social idea/change is missing. Social Innovation can be defined as a new configuration of practices in areas of social action, prompted by a constellation of actors, for better coping with needs and problems than is possible by use of existing practices. An innovation is therefore social to the extent it varies in social action, and is socially accepted and diffused in society (Howaldt et al. 2014).

The work undertaken here is a small part of a bigger European project (SI-Drive: Social Innovation – Driving Force of Social Change; www.si-drive.eu), directed at developing a sound theory of SI. It is posited that accurately defining/analysing the unique properties of SI will reveal the systemic connection and interrelation between social and other forms of innovation, to be integrated in a comprehensive new paradigm of innovation. The aim here is to research the state of the art in SI projects in education. This will be achieved using the following objectives: (a) to determine the nature, characteristics and impacts of SI in education; and (b) to map SI in Western Europe to better understand its potential for changing societies. The next section outlines the employed methodology. Then, the innovative cases addressing SI in education are summarized, followed by a discussion of project associations involved in the SI cases, and the barriers faced by them. After this, a synthesis of the lessons drawn from the cases is presented. The paper concludes with the identification of research limitations and future directions for the research.

2. Methodology

This novel empirical research is directed at a Western European survey of social innovations in Education. The guiding principle for designing fieldwork is theory and the dimensions of SI and social change. This revolves around baseline mapping, which is a general scan of social innovations (cases, platforms, tools) in Western EU across education. This identification, screening and assembling of SIs will expectedly lead to a collection of empirical cases, allowing analysis of different socially innovative initiatives in the targeted field. The survey instrument was derived from the five key dimensions identified for the SIDrive project: concepts of social innovation related to technology and business; addressed social demands, societal challenges and systemic changes; drivers and governance; barriers (capabilities and resources); and the social innovation cycle (proposal, prototypes, scaling, and systemic change). A comprehensive review of the literature was used to conceptualize SI during the first six months of the SI-Drive project. Two roundtable workshops amongst the 25 project partners and external experts were then undertaken. After a pilot study to test the

survey, social innovators, and experts with varying knowledge in education (SI-DRIVE partners and network of field experts) were involved in gathering the data. The members collecting data were offered clear guidelines, templates, and instructions on the specific data to be collected.

3. Innovative cases addressing social problems

From this study's perspective, 30 social innovation cases were collected, addressing various societal challenges in education across 11 countries: Germany (12), Sweden (5), Austria (2), Switzerland (2), Malta (2), UK (2), Greece (1), Denmark (1), Finland (1), Iceland (1), and Portugal (1). To better understand the implementation of socially innovative solutions, we individually examined these 30 cases, and categorized them via a thematic analysis process, involving cross-referencing the cases, and merging similar themes based on common characteristics.

3.1. Social integration

There are three German, one Swedish, and one Danish case relevant to this category. Exchange education for living is a social innovation in Germany, where participants can live without paying rent in Duisburg-Marxloh. In return, they educate and supervise children from socially disadvantaged neighborhoods. It focuses on migration, and thus, on the social issue of inclusion and equal opportunities for vulnerable groups. The management is responsible for finding and selecting godfathers for the project. They also contact potential partners, like public institutions and non-profit associations, to persuade them to join the project (EEL 2016). Profile Schools empower and support pupils with migrant backgrounds (PS 2016). The Economic Development Agency in Dortmund is fostering economy and employability within the region. It is a 100% public funded agency in Dortmund that is responsible for the implementation of this initiative. A migration background works in the favour of students here, as based on their cultural background (and also qualification), they are chosen for a yearlong course within the school. The project works towards improving migrant integration into the labour market, to support the local economy.

Berliner Scholl-Godfather familiarizes children from disadvantaged neighbourhoods with career opportunities, and offers them extended orientation to enlighten them with the possible professions they can pursue at a later stage (BSG 2016). Berlin-Schulpate is a non-profit organization founded by the Berlin Chamber of Skilled Crafts, with the sole aim of supporting primary schools facing high social burden. The initiative revolves around social inclusion of vulnerable groups and equal opportunities for all. Fifteen Berlin primary schools in socially difficult neighbourhoods are a part of this initiative, and they also receive support from 50 mentors from business institutions.

Tamam in Sweden aims at breaking social segmentation and fights prejudice with their main focus being on pupils aged 4–16 (Tamam 2016). It works with children and youth to support meaningful activities in the interest of diversity, antiracism, and community engagement. Tamam strives to act against anti-immigration sentiments and build bridges in support of harmonious relations between ethnic groups. It is a bottom-up initiative with youngsters from different background taking a lead role in the project; when they grow older, they identify and train new young people to take over. Initiating in Lund, southern Sweden, it has diffused to other parts of Sweden and other countries. Cycling Lessons for Better Social Integration in Denmark is aimed at overcoming cultural fragmentation, isolation of foreigners, lack of intercultural understanding, and an unfriendly city environment (CLSI

2016). The Danish Red Cross initiated this program. Volunteers are recruited for training, which is offered for free to immigrants, asylum seekers and refugees. This program offers training in the form of cycling, which is relaxing, whilst enabling participants to get to know the city together. It addresses immigrants facing difficulties in integrating with the Danish society, and the Danish citizens who are keen on meeting immigrants, just learning to bike. Following the success of this solution, it has been imitated by more cities across Australia and the United States.

3.2. Alternative education/training

Focussing on consulting and mentoring, two initiatives were recorded in Switzerland (across nine regions): (a) Innovage is interested in people with project ideas, promoting transfer of knowledge and experience between generations (Innovage 2016). Retired executives and professionals offer their experience and knowledge free of charge. The projects they advise are diverse in nature and tailored for different groups; (b) the association MUNTERwegs brings together the volunteers as mentors with children from Swiss families and immigrant backgrounds (Munter 2016). Young and old spend an active time in Munter. It addresses the societal challenge of migration via a mentorship system that builds on voluntariness and spare time activities. Educational activities are also offered alongside workshops and family activities. In addition, Intolerant Me in Portugal promotes multiculturalism and aims to reduce segregation of migrants (Intolerant Me 2016). It targets young children to create a generation who value multiculturalism, whilst targeting migrants and international students to make them feel welcome and a part of the community. The project is being implemented with an aim of helping individuals reach their full potential through the promotion of community integration, healthcare, tolerance and citizenship. The children themselves come up with ideas for promoting multiculturalism. Still in its testing phase, the project has been implemented in a school in Lisbon. Young volunteers who have participated in the project in the past mostly run the project.

A Swedish initiative, Mattecentrum, supports equal opportunity in gaining knowledge in Mathematics, and helps 200,000 students with their homework at no cost (Mattecentrum 2016). Mattecentrum is a politically and religiously independent association, funded by Johan Wendth, founded to assist the youth and the general public in mathematics. It is about communicating and inspiring interest in knowledge at all societal levels, from policymakers to children across the country, offering hands-on services tailored to meet their individual needs. Mattecentrum has arranged for counting units across 28 towns, all of which are open to students irrespective of age, school, offered without any booking.

3.3. Digital learning

Two German and one Swedish case were captured here. Bettermarks was founded in 2008 in Berlin, Germany. They aim to make education affordable and accessible for everyone in the digital era, with an aim of improving education in mathematics, worldwide, by enabling personalized math learning online across multiple languages (German, English, and Spanish). It is an interactive learning platform to increase students' math competencies (Bettermarks 2016). It targets Scholl students in classes 4–10.

Serlo in Germany is also a free online learning platform with exercises and explanations for school students (Serlo 2016). It focuses on changing the education system in the direction of open education (Wikipedia). It is a university group of the Technical

University of Munich (TUM). Many Serlo volunteers are TUM students, and many TUM courses and internships are accredited with Serlo. It is a community-based platform where anyone can edit/add content.

School4you in Sweden is an educational tool facilitating learning in digital and entrepreneurial environment, operating across boundaries of country, religion and cultures (School4you 2016). It is inclined towards a sustainable creative school environment that provides inspiring cross-border links to society and business. School4you aims to attract learners of all ages, including adults, who left school with bad results/no results. It is addressing the need for educational institutions to understand the importance of e-learning tools and make most of such tools. The Swedish National Agency for Education guides the diffusion of this solution.

3.4. New learning arrangements

Of the four cases documented here, there is one each from Germany, Austria, Greece, and Sweden. Eule Gmünder Wissenswerkstatt is a unique German facility focusing on attracting young people and children, especially those with a disadvantaged social background, toward science and technology, to meet demands from regional companies and reduce skills shortage (EGW 2016). The project responds to the demands of regional companies by utilizing the potential of own human capital, which can later be part of the regional labour market. The project is led by cooperation between Schwäbisch Gmünd, the Land Baden-Württemberg, European Union, and Investition in Zukunft. Moreover, there are several educational institutes, companies and others who are involved ideally or monetarily in the project. With this initiative, children and youngsters get an insight into occupations and technical understanding of several sectors.

Climate School National Park addresses the societal challenge of climate change. An association at the Nationalpark Hohe Tauern runs this project. It is a 4-day education program in Austria concerning climate change and relevance of climate protection for pupils (CSNP 2016). This program targets students, aged 10–14, across three Austrian provinces (Carinthia, Salzburg, Tyrol). It addresses the demand for innovative approaches to learn more about climate change and ways to engage oneself towards protecting the climate. Agoge Omikon Omega is a Greek project that tackles lack of student engagement in education through new learning methods (AOO 2016). It is aimed at children between the ages of 6–12, especially those who struggle to engage with the old school program. The program has affected over 100 students across six small regional public schools in Kaparelli over the past 8 years. It is run by volunteers, who help each other and work together to create a program, which will benefit both students and teachers. It is a social movement, which tackles student engagement and dropouts by pursuing the idea that students learn better when they are having fun.

Lastly, Outdoor Association is a Swedish initiative where based on local clubs, a wide array of outdoor activities are arranged for the local community (Outdoor Association 2016). Activities are open to the public. Membership is often required for advanced or recurring activities. The major trigger behind this initiative is the social need of preventing damage to environmental quality, lack of knowledge on environment and absence of direct contact with nature. Targeting these issues, outdoor association offers comprehensive set of activities in a collaborative spirit to all Swedish citizens. The objectives set by the management involve growth, quality, and happiness of the communities involved in harmony with the nature.

3.5. New strategies for LL

One instance was recorded in Germany. HESSENCAMPUS is aimed at improving LL for adults (HESSENCAMPUS 2016). The public and private educational institutions have come together under an innovative regional-local partnership to execute this initiative. The project addresses changes in education system, mainly overcoming the separation of different educational phases and institutions. A paradigm change from the institutional to a learner perspective is propagated here. With this initiative, different societal challenges are being addressed, indirectly influencing the implications of LL: demographic change, integration of migrants, and higher demands from employers in terms of qualifications.

The project funding comes from the ministry of education and culture. Also found in this category are two instances from Malta – The Hilti Family Literacy and NWAR Programs aim to reinforce learning in an after-school family-based setting with their primary focus being on educating children aged 6–7 (HLL 2016; NWAR 2016). This program operates with the support of, both teachers and parents, with the parents specifically taught methods by which they can facilitate their child’s education at home. UNESCO operates it, and the project receives active support from the state through the Ministry of Education, the EU and HSBC “Cares for Children Fund”. Both programs aim to strengthen child literacy skills by empowering parents and nurturing the concept of family-based learning.

3.6. Early career planning

This category has two cases each from United Kingdom and Germany, and one from Austria. Studio Schools focus on youth unemployment (Studio Schools 2016). They are innovative government funded state schools spread across the UK for 14–19-year olds of all abilities, but with an innovative and important difference of making them work-ready. These are small schools for 300 students, and with year-round opening and a 9–5 working day, they feel more like a workplace. This is a new concept in education, which seeks to address the growing gap between skills/knowledge that young people require to succeed, and those that the current education system provides. They pioneer a bold approach to learning, which includes teaching through enterprise projects and real work. Working closely with local employers, Studio Schools offer a range of academic and vocational qualifications, and paid work placements linked directly to employment in local areas. Young Enterprise is a business and education charity in the UK empowering young people to harness their personal and business skills. They address young people looking for jobs, where every year, they teach everything about business and enterprise (Young Enterprise 2016). They offer one-day master classes to yearlong projects that help young people develop skills they cannot learn from a textbook. They make the connection between school and working world, enabling young people to acquire key skills such as, communication, confidence, financial capability, initiative, organization, problem solving, teamwork, and resilience. In 2015, they delivered 338,340 learner experiences (age 4–25). Their local volunteer board has 6,000 business volunteers, who share their experiences within their classrooms.

Technology center for children and youngsters in Germany is a laboratory offering learning experiences to children of all ages across all stages of their learning biography, to make them interested in natural sciences and technology (KITZ 2016). It addresses this also with children in kindergarten and teachers, who are of special interest to KITZ.do. The implementing body, schul.inn.do e.V. is an association supporting innovative educational projects in Dortmund. It is a part of the federal association of pupils’ laboratories in

Germany, which was founded to spread innovative learning concepts, and support mutual learning amongst actors working in pupil laboratories.

Projektfabrik-Jobact in Germany addresses young people without an educational history/degree. It is run by PROJEKTFABRIK, which is a registered association and an independent educational organization. The initiative aims to involve unemployed young people into theater plays to develop their skills, self-esteem and personal goals (PFJ 2016). The outcome is several theater plays, which reach the public. The project board has employees, teachers, project managers, and a communication manager. It addresses long-term unemployed people below the age of 25, and also older participants, single parents, school dropouts, and migrants.

Job Ahoi and albatross in Austria aims at reducing early school leaving. The project is divided into two different strands of work and education (JAA 2016). Its focus is on the needs of young people who dropped out of school (and are without jobs), and on young people in prison. As a measurable outcome of this project, the young people covered by this project have ended up either completing their school, or finding jobs that suit their skills. This project comes under a policy program aimed at the betterment of regional employment opportunities.

3.7. New educational standards

There is one case each from Iceland and Finland relevant to this category. The Biophilia Educational Project in Iceland targets students aged 10–12, and the objective is to bring together academics, scientists, artists, teachers and students to promote creativity as a teaching and research tool, linking music, technology and natural sciences (BEP 2016). It works on the societal need in education for drawing on multiple sources of learning in arts and sciences to inspire creativity and new learning. The project has been implemented across Nordic countries, including Greenland, Faroe islands, and Åland. The Icelandic education Ministry, alongside a project team including leading artists and educators from Nordic countries, manage the project. Storycrafting is aimed at overcoming the hierarchical and streamlining pedagogy towards young children in primary schools, nurseries, and institutions in Finland. It offers meaningful training to children for strengthening their creativity, communication skills, and social skills (Storycrafting 2016). This project is inclined towards bringing a change in the attitude of adults in applying a democratic, empowering approach. The method was originally developed as a part of a research project in the early 1980s that included children. Storycrafting is an innovative reciprocal method that enables sharing and listening, leading to successful outcomes of inducing social skills, communication skills, creativity, and self-confidence in children through education.

3.8. Transition management

One German and one Swedish case have been recorded here. Rebound is a German initiative that addresses youth, known to have experiences with a number of psychoactive substances, to help them out of it (Rebound 2016). This program was developed between 2010–2013 at Heidelberg University Hospital, to engage with and address the European Drug Prevention Quality Standards (EDPQS). The first successful pilot was in September 2010. It functions under the policy program, promoting Excellence in Drug Prevention in the EU. Organized in an eight-stage project cycle, the standards outline the necessary steps in planning, implementing and evaluating drug prevention activities. In the school year 2012/13, 760 young people in the Rhein-Neckar area were targeted.

Fryshuset is a center and a NGO in Sweden that organizes various activities for boys and guides them into adulthood (Fryshuset 2016). It targets young boys, particularly in cities, often at the fringes of society, but with an inclusive approach, including activities for girls as well. It is a platform offering mentorship and meaningful activities for young. It is a bottom-up initiative by the users themselves, who worked hard for, and established a new physical forum and portfolio of activities. A professional board oversees the development of the NGO and bridges between established organizations and users.

3.9. Entrepreneurial education

Two German instances have been recorded within this category. Rock it Biz entertains children of all cultures from different social backgrounds in entrepreneurship. It particularly focuses on students from 6th to 9th grade from all kinds of schools around Germany. Students go through the whole process of developing a start-up. It is aimed at bringing the entrepreneurial concept to school education, and works in close cooperation with several companies and schools. It has been developed by a non-profit organization that was founded in 2010 by successful entrepreneurs to get children interested in entrepreneurship. It addressed the societal issues of skills shortage/miss-match, lack of professions, improvement of learning possibilities and options/expansion of educational opportunities.

FuturePreneur focuses on the development of entrepreneurial spirit amongst young people and contributes to the labour markets by increasing entrepreneurial spirit and human capital (FuturePreneur 2016). It addresses young socially disadvantaged people and also the pressing issue of skills shortage. Young people are given the opportunity of meeting people from the business world. They get to try their potential and abilities at being an entrepreneur by igniting their existing drive for entrepreneurship. In the process, they discover their hidden talents, skills and resources whilst learning to overcome to fear of failure. They become capable of realizing their dreams, earn good money, and establish their self-worth.

4. Project associations

It was observed that these 30 innovative projects were based on a social idea, which was often associated with social movements and policy programs encouraging social engagement, whilst developing innovative tools/systems capable of tackling social problems. Some instances of social movement and policy programs have been described here for better understanding. Agoge Omikon Omega operates under a social movement, which tackles student engagement and dropouts, by pursuing the idea that students learn better when they are having fun. Hilti family literacy and NWAR programs work under a social movement that believes a playful environment is the best way to maximize learning.

HESSENCAMPUS is a program receiving huge project funding by the ministry of education and culture since 6 years under the policy program for LL. Job Ahoi and albatross is functioning under the Territorial Employment Pacts (TEPs). TEPs are contracted regional partnerships to better link employment policy with other policies to improve the employment situation at regional and local levels. Rebound works under the Prevention Standards, which offered the first European framework for high quality drug prevention. Organized in an eight-stage project cycle, the standards outline necessary steps in planning, implementing, and evaluating drug prevention activities.

Projektfabrik-Jobact operate under policy programs from the federal ministry for education. School4you operates under the policy program proposing access to learning for every young person. Profile schools come under the program that funds projects to improve integration with labour market, whilst supporting local economy.

5. Project drivers and barriers

A review of the 30 cases revealed four drivers that were influencing social innovation projects in education: networks, individuals and groups, innovative environment, ICT, and governance and politics. Networks, individuals and groups were responsible for driving 35 projects, with the remaining drivers accounting for very few projects. Interestingly, only the German projects reported ICT and innovative environment as their project drivers. The German projects, Bettermarks and Serlo reported ICT as their primary driver. Fostering an innovative environment played an important role in the success of one initiative, Technology center for youngsters. SI requires appropriate SI policies, and traditional frameworks for public administration, regulation of new ideas and methods (Borrás and Edquist 2013). Many potential SI ideas are hindered by traditional approaches in public policies. The next task was thus to determine if the projects faced barriers, and if yes, then which kind. Barriers were established under the following six categories: funding challenges, lack of personnel, absence of participants, restrictions through legal frameworks, lack of institutional access, and political opposition.

Most projects were found reporting (Figure 1) funding challenges (19.7%) and lack of personnel (8.2%). About 5% projects suffered lack of institutional access and political opposition. Some partners managed to submit information on the barriers these innovative projects were tackling. For instance, Agoge Omikon Omega has trouble making changes to the education system due to lack of capacity for educators to re-imagine and restructure educational settings. As a solution to this, they intend to keep pushing for change by promoting their alternative program. With Intolerant Me, the project is hindered by its lack of access to school curriculums preventing it from being fully integrated within the school systems. Also, they do not have enough teachers. With Profile Schools, some did not stay until the end of the school year, as their participation was voluntary.

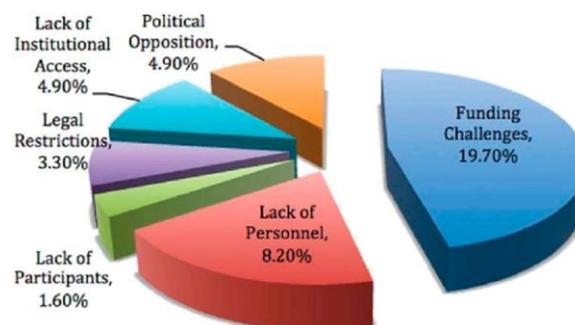


Figure 1. Project barriers

6. Discussion

This paper offers insights into emerging patterns and determinants of SI to inform policies that seek to enable and facilitate social innovation. One of the biggest problems in the European regions of interest to this study is the social inclusion of migrant population. According to Kahanec, Myung-Hee Kim, and Zimmermann (2013), Europe has a negative attitude towards immigrants. Although, the business community is fairly tolerant towards them, the barriers to immigrant labour market inclusion, language gaps, no recognition for foreign qualifications, discrimination, and legal restrictions stand as potential barriers to overall social inclusion of the migrant community. Exclusion from higher education, housing, and financial sector exponentially raise these barriers. As migrants, these ethnic minorities strive for changes in employment, education, and social insurance (Kahanec, Myung-Hee Kim, and Zimmermann 2013). Innovative character of solutions addressing social integration and equality (section 3.1) is mostly addressing the needs of people with a migration background. They focus on the combination of educational issues with urban development issues, referring to true-to-life approaches, oriented towards the needs of all actors involved (public infrastructure, churches, students, and children). It is themed on social inclusion of vulnerable groups to help overcome illiteracy in children from educationally disadvantaged families. Existing studies suggest that it is the recent economic downturn that has led to the increased importance of active inclusion policies, particularly within the areas of education and employment (Kahanec, Myung-Hee Kim, and Zimmermann 2013).

The importance of early childhood education has also been addressed by significant number of cases within this study. Literature is evidence that early education has a lasting impact on overall development of young children, giving their schooling a boosted start, and most importantly, assisting in alleviating the effects of social disadvantage (Sylva et al. 2010). The challenge is predominant in families with limited educational background, low income (below poverty line), and those with special social needs. These groups often are not enough informed of education opportunities, unaware of the importance of early childhood education and supporting possibilities. Also of high importance here is the early childhood education for migrant groups, where it is essential to raise children in a bilingual manner to assure their command over both languages (School Policy 2016).

In the LL context, the emergent themes from EU policy revolve around the two-fold idea that LL should majorly contribute towards economic competitiveness, whilst supporting inclusion and social cohesion (Saar and Ure 2013). Cases for new strategies and structures for LL (Section 3.5) are oriented towards the paradigm shift from an institutional to a learner's perspective. Public and private educational institutions come together to form a new structure to support various LL initiatives. Super-diversity is a phenomenon in Europe where in some areas, people with bilingual histories (majority and minority language speakers) coexist; it is in these locations that sometimes, the minority language speakers outnumber the majority language speakers causing serious implications for education.

Europe also suffers from early school dropouts. One of the far-reaching targets of the EU2020 strategy is lowering dropout rates by less than 10% of the population. It tops the five benchmarks set for strategic framework of European cooperation in education and training (Brunello and De Paola 2013). Innovative solutions for early career planning and youth employment (Section 3.6) aim at contributing to the labour market by reducing school dropouts and increasing human capital. There is strong demand for young blood in technological occupations and natural sciences, which is accelerated by demographic change.

The students in Europe lack skills and knowledge and often fail in successful transition from school into the labour market. This group often suffers from no family education history, social exclusion, and fewer opportunities for entering the labour market (ESL 2016). Combating this problem calls for suitable policies, which requires identifying the causal links and calculated assessment of involved costs and benefits (Brunello and De Paola 2013).

According to Stromquist and Monkman (2014), globalization has the power to challenge

the existing approaches and theories to development, be it localized or national, which is perceived as a wakeup call by many to develop alternative forms of sustainable social and cultural arrangements. The cases addressing alternative forms of education and training (Section 3.2) are associated with broadly communicating and inspiring interest in knowledge at all societal levels, from policymakers to children across the country, offering hands-on services, tailored to meet individual needs. Interestingly, in a similar effort, cases for quality improvements and new educational standards (Section 3.7) are aimed at overcoming hierarchical and streamlined pedagogy towards young children. These cases follow a bottom up approach in stimulating creative and critical thinking amongst students.

In the light of Europe's digital agenda and EU2020 goals, year 2011 witnessed the commissioning of ICT in education (Wastiau et al. 2013). It has been unanimously agreed across numerous international studies/reports that effective policy initiatives are needed for facilitating economical implementation and use of ICT in schools aimed at producing confident students, capable of sustaining and flourishing in the digital era (Wastiau et al. 2013). The cases for digital and virtual learning (Section 3.3) aim at improving learning possibilities and expanding educational opportunities, whilst making education affordable and accessible for everyone in the digital era. They are mostly promoting understanding on how to benefit from e-learning within academic settings.

The need for environmental education and training has been much emphasized by the European Commission; they aim to equip the public with necessary skills to meet the EU2020 objective of facilitating shift to a resource-efficient economy (Kopnina 2013). Cases documented under section 3.4, new learning arrangements and interactive education, address activities offering the public a comprehensive set of activities in a collaborative spirit to acknowledge issues of environmental quality, lack of general knowledge and direct contact with nature. Research reveals that globally, consumption is being identified as the biggest contributor of environmental crisis as the world is consuming high amounts of energy/materials for its sustenance (Kopnina 2013).

Research on substance abuse claims that social influence plays a major role in initiating drug use amongst the youth; it is believed that resistance training and preventive curricula with intervention at school level can help trim this form of abuse to a significant extent (Giannotta et al. 2014). In an attempt to achieve this, cases covered under transition management (section 3.8) concentrate on bridging the gap between generations and countering bewilderment and loss of direction in young, especially, marginal groups. Moving on, economists and policymakers often link economic growth and innovation success with higher levels of entrepreneurship at the national level (Sánchez 2013). The OECD reports and European Commission have placed significant emphasis on entrepreneurial education being the core of national education policy (Sánchez 2013). The European regions covered within this study recorded only two cases for entrepreneurial education (Section 3.9) that are solely focused on contributing to the labour markets via promotion of youth entrepreneurship.

Europe has moved to a knowledge society and the number of low skilled jobs is decreasing (Diaconescu 2009). Current high (youth) unemployment and skills shortage are two sides of the same coin, which is education. This means getting more people into tertiary education can partially solve both problems, and train the workforce as required to produce skilled workers (Education and Training 2016). Social innovation between public policies and government on one hand, and market and economy demands on the other can bridge both perspectives and new structures for improvement of education and LL from the learner's perspective and actual requirements. When considering social innovations in education and LL, it should be stressed that most are innovations created within the context of formal education system and are initiated, funded (partly), and conducted by responsible public institutions.

7. Conclusions, implications, and future work

The 30 gathered socially innovative education cases encompass new practices – concepts, policy instruments, new forms of cooperation and organization that are developed and/or adopted by citizens, customers, politicians etc. so as to meet social demands and resolve societal challenges in a better way than existing practices. In this vein, social innovation can be interpreted as a process of collective creation in which the members of a certain collective unit learn, invent and lay out new rules for the social game of collaboration and of conflict or a new social practice. In this process they acquire the necessary cognitive, rational and organizational skills (Crozier and Friedberg 1993, 19). Social innovation also requires appropriate social innovation policies, and traditional framework for public administration regulation of new ideas and methods. Many potential social innovations (ideas) are hindered by traditional approaches in public policies. If Europe wants to tackle the challenges, as documented, through its Strategy for Smart, Inclusive and Sustainable Growth as well as its specific Flagship Initiatives, policy makers need to understand how to involve and make use of the participation of citizens to serve the public good.

Skills shortage is common across most economies. Sometimes they apply to specific professions and sometimes they are sectoral in nature. Examples of social innovation have been observed in both respects in this study, often involving dedicated initiatives by a few individuals leading to establishment of new institutes and departments in universities in line with highly specific social and industrial needs. Information technologies have played an important role in education and LL. There are national strategies and innovative solutions covering training measures and research in areas of ICT in schools, E-learning, digital/media literacy and e-skills development. Information technologies and computer literacy are key competencies for strategies approved in education. In education and LL, alliances between public, private and civil society actors are few. There is a need for partnerships in building territorial employment pacts (contractual arrangements established between companies, trade unions, municipalities etc.). Pacts of this kind are well established in all Austrian federal provinces and can serve as role models (www.pakte.at). These provide, for instance, trainings for vulnerable groups in danger of losing their jobs or improve opportunities for the unemployed. Cross-cutting themes are affected broadly: apart from human resource development and empowerment, ICT is the new worldwide enabler of learning and new pedagogical arrangements; demographic change is a huge challenge changing the number of learners in different education and LL phases; gender and diversity are especially within vulnerable groups; financing is an important issue when it comes to (additional) investments

in education and LL; legal conditions, governance, and networking are crucial in initiating, funding and diffusion of social innovations.

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: out-dated, not effective and inefficient, not well-developed education systems. There is rising necessity of early childhood education, improvement of 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 miss-match of professions and skills, entrepreneurship education and promotion; disadvantaged rural areas; missing and improvable collaborations between the public, private sector and civil society. Educational communities, sometimes with the support of non-governmental organizations, have been seen as the main innovators. Civil society and citizen empowerment are of high relevance for social innovations in this field.

There is no evidence of acceptance of the SI concept. SI outside formal education and LL system is still a black box, particularly, in the non-formal and informal LL of adults, and could be a way to overcome existing barriers (section 6) to successful SI implementation. It is essential that the concept of LL be addressed seriously. This requires a paradigm change from an institutional to a learner perspective, reorganizing institutional structures and requiring synergies between national and regional-local policies in education and learning. Moving from the fragmentation of education and LL (with separate rationalities and target-orientations, different public responsibilities) to overarching and connected new institutions is one way of facilitating this shift. In this respect, key governance structures between centralized and decentralized public government, market, and civil society driven structures could be beneficial. This means a common management of resources (infrastructure, staff, etc.), competencies, learning offers and programs to secure and improve efficiency for the learner and the regional-local area, and to increase efficiency (by common use of resources). The aim should be to achieve top-down governance with a bottom-up perspective of learners and learning processes with a social innovation process being warranted.

As previously acknowledged, this study is a work-in-progress article. Having documented the various education-related socially innovative cases across Western EU, the next stage of this work involves mixed-method empirical research for investigating the 52 social innovations. Analysing the collected data to delineate research conclusions and policy recommendations will follow this. This involves: (a) Exploring and utilizing potential SI projects/cases across different contexts; (b) Focussing on change management (roles, relations, values, frames of reference); (c) revisiting key dimensions of SI; and (d) Exploring foresight perspective of SI. Also, the successful and less successful examples of SI will be compared to allow recommendations for strengthening factors that are crucial for social innovations to have sustainable social impact. Theory development and empirical research will build on existing innovation research, explicitly including studies on technological and business innovation. This is particularly important because often in this discourse, the emphasis is more on exploring new concepts and less on exploiting proven ones.

Funding

This work was supported by European Union's Seventh Framework Programme for research, technological development and demonstration [grant number 612870].

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