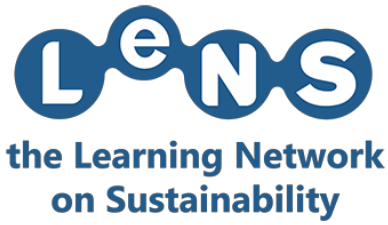

Upscaling Local and National Experiences on Education for Social Design and Sustainability for All to a Wider International Arena: Considerations and Challenges

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ABSTRACT

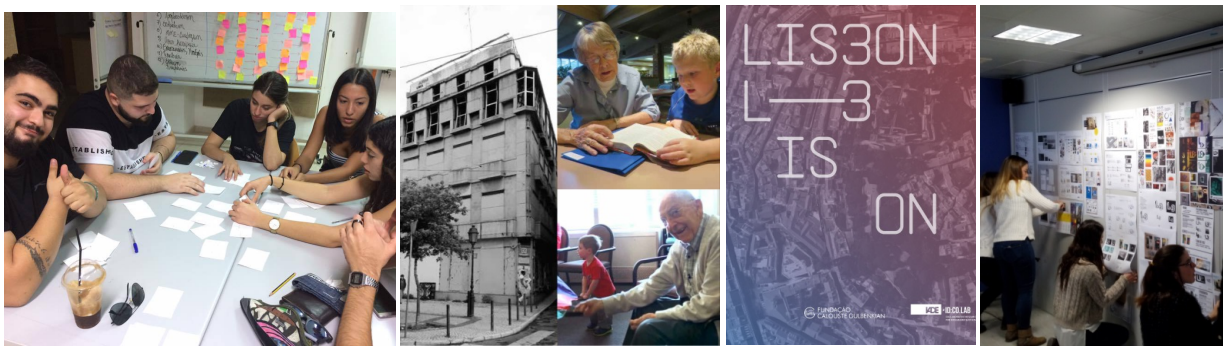
While there are a few Europe-wide Higher Education courses and/or programmes of study in social design and innovation at national levels, efforts to upscale them to a wider cross-national audience are lagging behind. If we are to develop a disciplinary benchmark that transcends national boundaries and achieve a wider consensus on the disciplinary boundaries thus providing for a level of comparability across national boundaries, the considerations and challenges confronting this upscaling, need to be addressed. This paper will elaborate on this issue drawing from a combination of European policy documents and the research of the authors in the area of social design and innovation. The identification of some challenges confronting upscaling will provide a stepping stone for future investigations towards cross-national collaborations in the areas of social design, social innovation, and sustainability for all.
Key Words: Higher Education, Social Design, Social Innovation, Sustainability.

1. SUSTAINABLE DEVELOPMENT EDUCATION

Today we face environmental and social challenges, at regional and global levels, that we can ignore no more (Santos, 2017). The United Nations Sustainable Development Goals (UN, 2015) presented a set of 17 measures to foster sustainable development across many Human endeavours and domains. Along with sustainable development (SD) research, education plays a critical and catalytic role in the formation of future leaders and in the creation of a social change mindset for a sustainable future. To address global sustainability problems, often complex, ill-defined and intermingled, it is critical to integrate knowledge from different academic disciplines, from natural and exact sciences to social sciences and humanities (Mochizuki &Yarime 2015). It also helps to a better perspective about the enablers and barriers for societal actions for sustainable behaviour and transformation (Korčulanin&Ferreira, 2018). Moreover, diverse expertise and experience are important to design and implement serious engagement and fruitful collaboration between academia and stakeholders - industry, government and civil society – to address sustainability challenges, in most cases involving a significant degree of diversity and uncertainty.
The research and educational programmes to integrate sustainability in policy making, in both developed and in developing countries, have started establishing (Mochizuki &Yarime, 2015) and reflects the changing attitude and understanding about the role of education in the context of the environment and sustainability. As shown by Michelsen (2015), it is possible to identify three different phases on the topic until 2014. After that, further impulses for the implementation of education for sustainable development were expected, focused on five priority action areas: 1) processes for the political integration of education for sustainable development at national and international levels must be strengthened, and the success factors for its establishment identified; 2) support is needed for holistic approaches for schools and higher education (whole-institution approaches) to sustainability, not viewing it merely as a topic for lessons and teaching but as a comprehensive mission that will impact the shape of educational institutions. 3) the should aim at strengthening activities integrating education for sustainability development in the areas of pre-service and in-service teacher education and training; 4) young people should not only be seen as target groups of education but should instead be more closely involved in educational processes and provided opportunities to serve as change agents, especially in the informal and non-formal educational sectors and finally; 5) efforts should be increased to promote education for sustainable development on a local level and to support network local actors.

2. DESIGN EDUCATION FOR SUSTAINABLE DEVELOPMENT IN PORTUGAL AND CYPRUS

The five priority action areas previously presented as key aspects to the implementation of education for sustainable development are still to fully explore in Portugal and in Cyprus. In fact, as presented by Sambade &Ferreira (2017), sustainable development is not yet in the top of design curricula. It exists in most cases as an isolated component, something optional, that could be chosen – or not – to integrate into the design idealization and creation phase. Although this view is changing and many Universities are already reviewing their educational programs, in order to change or improve their curriculum to address sustainable development goals, there are still a lot to run as noticed by Rocha et al. (2017b) in the paper entitled 'Benchmarking Higher Education in Design for Social Innovation and Sustainability'. A similar situation can be found in Cyprus, Limassol.



[Figure 1] *Fostering Social interactions, New forms of Mutual Learning and Creative Solutions in Lisbon, Portugal (Sambade&Ferreira, 2017) and Limassol, Cyprus (authors)*

Some advantages of education for sustainable development called, in some contexts, as design for social change and innovation or design for social innovation and sustainability are multiple and linked to the cultivation of participatory and co-design mindsets (Souleles et al. (2017). This stems from the need to assess in collaboration with others the needs of varied groups of people, and to address with others a variety of social challenges. Subsequently, there is value in promoting the practice of collaborative design, of engaging in local social contexts, and of practising

collaborative and participatory problem-solving. Through appropriate instructional strategies, learners can explore the connection between design and problem-solving through a process of collaborative learning (Bernarda et al, 2017). Although critical, those punctual practices are exercises approaching the fourth-generation design epoch, as presented by Souleles (2017) when reflecting on the different stages of design transformation. In fact, in most recorded cases, they assumed a transdisciplinary nature, materialized service design solutions, transform and are transformed by the social system in which act and have a profound and positive impact in students and the communities. Yet, a systemic and scale transformation is necessary for a true transformation of the quality of the HE system and an embedded practice and understanding of social design and education for SD (Souleles et al, 2017).

3. UPSCALING LOCAL AND NATIONAL EXPERIENCES ON EDUCATION FOR SOCIAL DESIGN AND SUSTAINABILITY

Innovation is a context-dependent phenomenon with a cycling behaviour. (Ferreira, 2008, 2009). This fact makes evident the need to go beyond the spiral model having in mind that representation is not good enough to express the complexity, the interconnectedness and systemic nature of the global challenges that social challenges and innovation impose. Furthermore, it does not consider the fact that innovation is not a linear process. (Nesta, 2010) (European Commission, 2017) (Ferreira, 2019). These perceptions are of the most importance when reflecting on scaling-up processes of social innovations.

In 'The Open Book of Social Innovation', from Nesta (2010, p. 83), we can read the words of former US President Bill Clinton, in relation to scaling and diffusion [of social Innovations]: "nearly every problem has been solved by someone, somewhere. The challenge of the 21st century is to find out what works and scale it up". When looking to systemic change, it possible to observe that it concerns the interaction of many elements, from social movements to laws and regulations untill entirely new ways of thinking and doing. It generally involves new frameworks or architectures made up of many smaller innovations (Ferreira, 2008). Individual innovators may bypass barriers of the old system, but the extent to which they can grow will often depend on the creation of new conditions, much based on synergic actions, and to make the innovations economically viable and socially important (Ferreira, 2009).

As reinforced by Dale &Newman (2005), sustainable development must be seen as a process, not a goal, considering that it is a constantly moving target whose boundary domains evolve as the dynamics between the three imperatives shift. This perspective is in line with the three stages noticed by Mochizuki &Yarime (2015) in respect to the different but evolving levels of learning about education for SD and the corresponding degree of integration of knowledge - multidisciplinarity, interdisciplinarity, or transdisciplinarity. The first stage is an essential first step which aims at deepening awareness, knowledge and understanding of the concerns of sustainability. The second stage is vital to individual and social change, as it involves questioning of the usual frame of reference to respond to the challenges of sustainability. The third stage involves epistemic change and leads to cultivating a culture of sustainability. Under the same perspective, Barth and Michelsen (2013) have identified three types of ESD and sustainability 1) looking educational contribution to fostering competencies of individuals, advance discussions on sustainability literacy and improve teaching and learning get there; 2) the ones that address organisational change and social learning through interdisciplinary approaches tackling, for instance, the root causes of the fundamental 'unsustainability' of the current model of progress; and 3) lastly but not least, the ones situated learning and 'communities of practice' in the context of inter and transdisciplinary collaboration bringing about epistemic change by systematically involving knowledge users in the research process and active collaborations with various stakeholders throughout society.

4. CONSIDERATIONS AND CHALLENGES

As pointed out by Deshmukh (2017), education and culture are intimately and integrally connected. Just as culture influences education, much in the same way education also exerts a powerful influence upon the culture. Nevertheless, there is a lack of widespread and shared understanding of design for social change and innovation as an integral part of Higher Education curricula in Europe. Be aware of the five strategic action areas identified in the Global Action Program to the practice and research in the area of sustainable development (Michelsen, 2015) could make a difference. This note is also true for Nesta's report In and Out of Sync (EC, 2017), identifying the characteristics that scalable social innovations tend to have. In line with the conceptual constructs presented by Velazquez et al. (2006) and Santos (2017), higher education institutions are challenged to turn sustainability principles into practice through management, research, the transfer of knowledge and teaching - curricula and the teaching of new competencies to address sustainable development dimensions - and to fully integrate sustainability in their thinking. The challenges to fully embrace education for sustainable development and social design are clear. We work every day - with everyone - to promote and achieve this system change and sustainability to all.

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