



I4OE - Collaboration for innovation and capacity building for an open ecosystem

I4OE Research Paper

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Project Reference:	2021-1-PT01-KA210-ADU-000029529	Author(s):	Kari Jeanette Langseth Hjelmén (Høgskulen på Vestlandet) Sara Anjos (Nuclio)
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Short Description:

This document is based on a diverse set of possible theoretical frameworks for open civic design and public engagement in the adult learning sector.

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Experimenting a Framework to enhance dialogue and foster an open ecosystem in an adult educational setting

Kari Jeanette Langseth Hjelmén,
Assistant professor, Western Norway University of Applied Sciences

Sara Anjos,
Project Manager, NUCLIO
Researcher, Centro de Estudos Comunicação e Sociedade, University Minho

Abstract

In 2021, a consortium of six partners from three different European countries envisioned a project called Innovation for Open Ecosystems (I4OE), as a means to answer the questions: how can we support community stakeholders to engage and collaborate effectively in an open ecosystem? The main aim was to reach out to local policy-makers, business decision-makers, non-governmental organizations, and members of civil society, adult learners and citizens overall, in order to empower them to promote cooperation, participation, and democratic citizenship in an educational context.

We argue that small-scale partnerships of the type investigated may guide quality development within education, with relevance to adult education quality and access initiatives. A small-scale partnership provided diverse partners utilizing small interventions over a short time horizon. The project had effect in the local communities across partner countries. By implementing active learning approaches, such as participatory workshops, simulations, debates, and problem-solving activities, adult learners can engage in interactive experiences that promote dialogue and democratic engagement.

Introduction

I4OE was designed to help the community and relevant stakeholders to develop a framework that could be useful to identify local problems, so that they can work together to solve concrete challenges using a participatory approach, promoting democratic ideals. This is something that is not experienced as much in the adult education context, which is traditionally focused on skills for the job market. The project aimed to identify and empower key actors linked to the local social fabric of the community so that they could function in an Open Ecosystem in an inclusive and holistic way. It was a collaboration between various stakeholders who met and talked about their contributions, practices, and ideals of collaboration in Open Ecosystems.

The participants came from three European countries (Norway, Greece, and Portugal), which gave the project a diversity of points of view: social, economic, cultural, and political. By strengthening adult learners, the project aimed to empower the identified target groups, to



become key actors for innovative and open ecosystems, contributing to building a more equitable society. In the following chapters we will detail the 18 month experience in order to reflect on the project outcomes, namely the framework and the activities developed, and discuss future steps.

Theoretical Framework

This paper leans on a diverse body of possible theoretical frameworks for open civic design and public engagement, before embedding the design thinking approach of four steps into our intervention. We advocate that adult trainees should broaden their social intervention, seeking solutions to common problems together with other people in their community, regardless of their social conditions. In this context, dialogues and interventions between people with different academic qualifications and different professional, political and social functions and positions are encouraged. Seen from the point of view of teacher training and school development, partner collaboration is about creating networks where one enriches the other. Boundaries of systems and knowledge provide opportunities for learning. The unexpected will not happen if partners do not share and exchange their own expertise about the work areas they have in common (Hargreaves, 2019).

The adult education sector, within the context of Erasmus Plus programs, refers to the field of education that focuses on providing learning opportunities for adults. It encompasses formal, non-formal, and informal learning activities designed to meet the needs and interests of adult learners, enabling them to acquire new skills, enhance their competencies, and foster personal growth. In this context, collaboration and partnerships between educational institutions, organizations, and stakeholders from different countries are encouraged aiming at sharing best practices and foster international cooperation in the field of adult education (Risse-Kappen, 1995). Such collaborations and partnerships often include promoting social inclusion, enhancing employability, supporting active citizenship, and encouraging innovation in education and training, contributing to personal, professional, and social development of learners. However, many of the trainings and activities promoted in this context are aimed at a more disadvantaged public, focusing essentially on strengthening skills for the job market as passive learners.

Active citizenship, self-organization, and engagement are high on the agenda of governments worldwide (Certomà, 2020; Certomà & Rizzi, 2017; Kleinhans et al., 2015). Successful approaches have been placing playful interventions in neighborhoods to gather citizen input on city life (Claes, Coenen, et al., 2017; Claes, Vande Moere, et al., 2017; Golsteijn et al., 2016) create discussion on local issues (McArthur et al., 2015; Wouters et al., 2014), or explore alternate designs of the physical space (Golsteijn et al., 2016; Hespanhol et al., 2015). For the business sector this is something that is also considered as a means of providing firms in hyper-competitive environments with the ability to create a stream of new products and services (Almirall et al., 2014). While firms have generally been slow to adopt open innovation, many cities in the U. S. and Europe have been quick to embrace it, providing needed field-based experience on how to organize external sources. The authors conclude that an integrated approach in which the needs of the entire ecosystem of sources and supporters of innovation are organized to address both competitive and community needs.



Design thinking comprises a variety of creative strategies for stewarding projects with multiple stakeholders or fostering organizational innovation. The essence of design thinking is to put participants into contexts that make them think and work like an expert designer, and thereby foster civic literacy, empathy, cultural awareness and risk taking (Panke, 2019; Panke & Harth, 2019). Adult education institutions can actively engage with local communities and civil society organizations to create partnerships and collaborative initiatives. There are several examples from literature that show us that, using innovative theoretical frameworks and exploratory methodologies and practices such as design thinking. For instance, Reynante et al. explore a vision for open civic design where an integration of theoretical frameworks from public engagement, and design thinking consider the role technology can play in lowering barriers to participation, scaffolding problem-solving activities, and providing flexible options that cater to individuals' skills, availability, and interests. The theoretical framework mentioned key goals associated with this vision: (1) to promote inclusive and sustained participation in civics; (2) to facilitate effective management of large-scale participation; and (3) to provide a structured process for achieving effective solutions (Reynante et al., 2021). In turn, considering a framework for inclusive, meaningful and participatory city-making, Slingerland bring forward four pillars on which the framework is grounded and four activities, supported by a case-study, for exploration of the design space for participatory city-making (Slingerland et al., 2020). Those are to be useful to all stakeholders who wish to create playful and participatory interventions for the local community.

While the importance of including the local community and stakeholders is widely acknowledged, it remains a challenge how to organize such processes (Harding et al., 2015; Leminen, 2015; Stokes, 2020; Stokes et al., 2017). It also remains to broaden and refine ideas to encompass a more full innovation system, and to bring rigorous meaning and practical usefulness to the innovation ecosystem concept. To this end, challenges for research include detailing similarities and differences between natural and innovation ecosystems (Dorst, 2015; Oh et al., 2016). This paper addresses these challenges by reviewing literature on the subject and developing a framework for inclusive and participatory ecosystems in adult education. The framework took into consideration the Design Thinking approach and six participatory activities that were developed and tested during the process. We then further elaborate on the activities and events used to test the framework on three European countries and communities. The next section further elaborates the problem addressed in this paper: namely the need for a participatory design process in which stakeholders can jointly explore their community problems.

Method

The paper report on a qualitative study based on focus group data, the twelve transnational meeting video conversations, and written notes from the Cascais on-site meeting serve as our units of analysis. We aim to do the reporting as a methodologically coherent thematic analysis, to show good practice and avoid common problems in TA research. Braun and Clarke outline the thematic analysis approach to aid researchers and practitioners to be reflexive in their practice. We choose an experiential orientation to the qualitative research, with focus on the lived experience and perspectives of the participants, and also the factors that influence and contextualize our choices. The practice requires depth of engagement, thinking creatively and



reflexively about the data. An organic coding process is needed to parse out different facets of data meaning, and to aid the analysis moving beyond obvious or superficial meanings in the data. The reader should not be left to detect the researcher's assumptions - they are explicitly described in the first part of the paper, then discussed in the results section. A critical realist ontology serve to avoid confusing themes-as-meaning-unified-interpretative-stories with themes-as-topic-summaries; thus, trying to owning one's perspective (Braun & Clarke, 2006, 2023).

The question I4OE aimed to answer led us to look for theoretical frameworks that were inclusive and participatory. This drove us to the Design Thinking approach to ground our efforts on the construction of community events and resources to foster discussion and participation. Before describing the steps and activities developed during the project we describe what is and how we integrated the Design thinking Approach on the I4OE events.

The Design Thinking Approach

The Design thinking Approach as a concept itself has evolved through the contributions of several designers, educators, and practitioners over the years and continues to evolve and adapt as it is applied to a wide range of fields and challenges worldwide. Although often used in various fields, including product design, service design, business strategy, and more, we based our view of the concept on the non-profit organization founded by IDEO (ideo.org, 2023) and the d.stanford school (Both, 2018; Hasso Plattner Institute of Design at Stanford University, 2023), which has been influential in demonstrating the application of design thinking to address social challenges. We also used several other projects that experience with this approach such as Erasmus Plus project "The Next Step" (*NEXT STEP Project*, 2021).

The design thinking approach included four steps in our interventions: Feel, Imagine, Create and Share and Implement.

Feel

The first stage of design thinking involves understanding the problem from the perspective of the people who experience it. This means empathizing with the end-users or stakeholders to gain deep insights into their needs, desires, and challenges. Techniques such as interviews, observations, surveys, and personal development are used to gather information and build empathy for the users.

Imagine

In this stage, the insights gained during the previous phase are synthesized to define the core problem or challenge that needs to be addressed. It's essential to create a clear and well-framed problem statement that guides the design process. This stage helps in reframing the problem in a way that leads to innovative solutions. Also lead to generate a wide range of creative ideas to solve the defined problem. There are no bad ideas during this phase, and the goal is to encourage free thinking and explore different possibilities. Methods such as brainstorming sessions, mind mapping, and lateral thinking are commonly used here.

Create and Share





This phase involves representations of the potential solutions that were generated during the previous one. The aim is to build something tangible that can be used for user testing and feedback, allowing for iterations and improvements. It may also involve gathering feedback from users and understanding how users interact. Design thinking is an iterative process, and the insights gained from testing often lead back to earlier stages of the process. Teams continue to refine and improve the solutions based on user feedback, new insights, and changing requirements. This iterative approach ensures that the final solution is user-centered and continually adapts to evolving needs and challenges.

Implement

Once a viable solution has been developed and refined through multiple iterations, it is ready for implementation. This stage involves scaling up the solution and integrating it into the organization's processes or systems. Design thinking is a flexible approach that encourages creativity and collaboration throughout the problem-solving process. It can be applied to a wide range of challenges.

The I4OE case study

During the project several institutions were key, such as Junta de Freguesia and LUSOSPACE bring a unique set of components that needs to be integrated in the conversations and subsequent activities. The first is a local political municipality with a very important role during the community events and conversations with other stakeholders and the later a technological institution. They had a key role as advisers of the whole process from their specific point of view, policy and business sector. These holistic partnership ensured that the vision being brought to live by I4OE is not purely academic or pedagogical but has concrete practical applications and potential impact.

In Portugal three community events were developed. NUCLIO, LusoSpace and Junta de Freguesia de S. Domingos de Rana gathered to promote events around the themes that were proposed by the discussion generated during the consortium meetings. The first theme was on lifelong learning, with the aim of exploring what kind of competences adults can develop to feel able to participate in identifying and solving problems that concern everyone (in open systems: Open Ecosystems). Usually there are certain actors who are on the margins, so what social skills do they need to develop, in a logic of lifelong learning, to be able to actively participate in community life? Lifelong Learning for active citizenship was discussed. In the second and third event, the role of local businesses in Lifelong Learning was examined. Participants debated what kind of links can be established between municipalities and local organisations to promote Lifelong Learning, including active citizenship.

Western Norway University of Applied Sciences lead activities in Norway. Cooperation is about creating changes, exchanging and deepening expert knowledge, if one is to be able to help others in a good way (Hargreaves, 2019). We saw that the impact on local opportunities was set in such a landscape. Schools had their own rhythm with everyday challenges. Teacher training was



concerned with practicum for their students, and student reflection on current research. Between school and teacher training there were pre-set roles to play out. It was nevertheless not difficult to engage in dialogue and reflection on societal challenges as they appeared at local level. Both local school representatives and the teacher educators have tasks that deal with learning and education. Their common and overarching goal was to facilitate good learning processes - for those already within a target group. The challenge of extending initiatives into adult education, where there is a tighter framework and less long-time perspective, was not easy to solve, but possible. Different universes of meaning had to display their practices, thoughts, and ideas to each other. Arts and culture initiatives came to serve as dynamic hub and open processes that continue to exist past the project timeframe. In the consortium, this was even more true. Partners had to display practices, thoughts, and ideas, and experienced different anticipations and perceptions about contributions and starting points. Input and expectations gathered in the consortium meetings set starting-point and send-off to very varied activities locally.

The activities: community events and resources

I4OE was planned to run in 18 months as it aimed to create, and pilot test innovative methods and tools for open ecosystems. We envisioned the following project activities:

A1. I4OE Framework and Methodology

The aim of the framework was to establish the necessary connections between all relevant stakeholders, strengthening the teaching profession as well as empowering other adult learners as agents of change.

A2. I4OE Toolkit of Activities to Foster Collaboration

The toolkit has a set of 6 activities (2 from each participating country) that are aimed to facilitate the advancement of the project, being the starting point for those who wish to develop an open and innovative ecosystem, through participatory governance, providing resources for teachers and other relevant stakeholders for spreading the use of open and innovative procedures for cooperation.

A3. I4OE Guide of Good Practices

The guide of good practices summarizes the practical procedures of actuation and communication for achieving an open ecosystem, and also will allow other stakeholders to take ownership of the co-construction process carried out in previous activities, to capitalize on it.

A4. I4OE Research Study - The (White) Paper for Open Ecosystems Community Building Initiatives.

This is a reflection with the main findings of the process for the creation of a strong community for open ecosystems initiatives in the format of a white paper. The paper allow dialogues and further developments within the academic community, especially those involved in training teachers and adult education research.



Results

Fulfilling the design framework

The framework of Feel, Imagine, Create and Share, and Implement was applied to the full range of community events. As key components, they served as checklists when each partner was setting up activities in their local communities. “Feel”-components were stressed when gathering information, to aid empathy building regarding stakeholders. When trying to understand the problem from the perspective of people who experience it and empathize with stakeholders to gain deep insights, the “feel”-component proved helpful. We selected methods for engaging with different and diverse stakeholders in planning phases. Later, the component helped guide efforts to keep the local community in mind. Particularly in the mid-project online meeting sessions between consortium partners, we were not engaging directly with stakeholders, rather giving attention to practical details of accommodation of the event in a venue, and such matters might slip out of sight. The framework “feel”-component also helped when setting up an event; examining an evening program for the community activity or in the content guide for stakeholder conversations. The “Feel”-component stressed the need to check for formal as well as informal community networks and examine on what physical and online platforms the community members might meet, - always considering the hard-to-reach audiences. The framework “feel”-component helped remind event chairs that participants should be able to independently continue exploration – even allowing the flow to take unexpected routs, and unexpected ownership to processes within the event.

“Imagine”-components helped as insights gained during a previous phase was to be synthesized to define the problems to be addressed. It proved helpful when framing the issues in ways that could lead to innovative solutions, and when generating a wide range of creative ideas relevant to the problem. In brainstorming sessions and mind mapping, “Imagine”-component checking helped ensure input variety. The role of an event chair was to support stakeholders collaboratively taking variety into consideration and cater for open discussion. Reflections show partners discussing joy and fun for participants in the events, at the same time creating an environment for exploration and stakeholder plural perspectives.

Stakeholders engaged in ways suited to their availability and commitment. Multiple methods were used to provide community members to enter as participants, a range of ways to be involved and provide input was considered. “Create and Share”-components were helpful in representations of potential solutions, allowing for iterations and improvements. The solution was to remain user-centered and continually adapt to needs and challenges. The framework helped us discuss the iterative nature of our activities. Based on the components, Feel, Imagine, Create and Share, and Implement, we did not presume a specific sequence, nor make explicit requirements as to inform across stakeholders after the first activity. The framework us note that we for the most part made results visible to the community during the last part of the activity series.

“Implement”-components were checked when a solution had been developed, refined, and judged ready for up-scaling; usually integrating it into one of the organization's processes or systems. As the process was of a kind that allow directions and outcomes to become apparent on



the go, it requires more flexibility from all participants. Engagement is not always available. As in the Slingerland studies, our analysis show that key partners and stakeholders may be a «fluid» matter, depending on who and when you ask, and how well any iterating is happening within and between activities (Slingerland et al., 2020). Still, Design Thinking catered for that flexible approach that encourages creativity and collaboration throughout the problem-solving process. Most of all, and in line with TA as research method, untangling participatory processes and methods demonstrate how any component in a set framework influence each other constantly. The key components were fulfilled using methods for people to participate on their own terms and in ways that suited them.

The framework aided attention to combining digital and physical access and participation on several occasions, before and after events. Key framework components were fulfilled by offering creative and open-ended ways of engaging. Partner reflections show how we were required to move back and forth between framework components.

Partnership synergies

In our data, we can see that partners are concerned with what international cooperation is. We are also concerned with why international partnerships are important. We see that there is less discussion in our societies of how the agenda can be developed and implemented in the education system. Data show discussions related to common use of frameworks of “quality”, and how publication in good international journals and increasing international recruitment of staff and students serve as measure of success. As a result of international recruitment of staff, a research environment is expected to grow stronger, thus improving the quality of communication in the long term and strengthen communication and teaching at the institution itself. The “wicked problems” remain unexamined, as do new opportunities within adult education, formal as well as informal. In academia, experience of entering dialogical in a partnership means collaboration between researchers. In our data, we see a cross-national partnership with other types of actors, at several levels in the system, also strengthened our opportunities were strengthened by teacher training traditions of focusing on organizational development from within, for synergies. As an example, local companies' need for programming knowledge, and school and teacher education's emphasis on creative explorations were not aligned. The school representatives looked to "Motivation" for participation in general in the school system and recruitment in general for mathematics. It did not provide encounters for exchanging views about the companies' needs for competence. This was a discovery we would not have achieved if the six partners of the transnational consortium had not challenged each other to think in unexpected ways about their networks and possible local actors. The teacher training program gained access to new knowledge and saw that the specific needs of local businesses require capacity. This gave a promising start to further work on connecting actors. We did not sign a letter of intent, given the limited duration of the project. On the other hand, limits were discovered, and attention put towards “sweet spots” where interesting development could take place. Within the project, we see promising moves towards adult learner community influence in local societies. More than one version of internationalization was allowed to be the backdrop in a discussion about quality of education.





Discussion and further steps

In the data, we see partners looking more critically at who can take part in a “diversity” context, and who's representation is challenged and questioned. In our opinion, it was very beneficial to embrace diversity as a central idea also in adult education. Overarching themes such as language and cultural competence are central. Within the project, we achieved development and thus built capacity to meet other types of partnerships with different expertises, and to deal with complex issues.

By implementing active learning approaches, such as participatory workshops, simulations, debates, and problem-solving activities, adult learners can engage in interactive experiences that promote dialogue and democratic engagement. These methods encourage critical reflection, collaboration, and the exchange of diverse perspectives. The creation of inclusive learning environments is crucial for fostering dialogue and democratic citizenship. The adult education sector should ensure that the learning spaces are safe, respectful, and inclusive of diverse voices and experiences. This involves promoting open communication, active listening, and valuing and validating different viewpoints.

From our data, we argue the importance of the more practical aspects of transnational cooperation. Via the educational dimension, partners go beyond incentives, tools, and administrative processes within sectors. Data show participants discussing overall policy and system aspects. Yet, focus is aimed at the practice level, making use of opportunities that come into view for action and intervention. Responsibilities that arise alongside such opportunities are followed up closely and with many angles by the six partners.

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