Entrepreneurship education as a key competence for lifelong learning is becoming increasingly important within a New Skills Agenda for Europe and within the OECD Learning Framework 2030. The development of agency through training is fundamental for the inclusion of adults in both the labour market and the digital society. This proposal illustrates the results of a European Erasmus Plus project, which sought to cultivate an enterprising capability in four European countries through a varied set of teaching methodologies. The first part of the project collected the best practices on entrepreneurship in European countries; the goal here was to prepare for the subsequent empirical element through searching for pedagogies that are specific to entrepreneurship education. These are active and experiential learning, peer learning and project learning. The latter part of the project concerned the actual training of adults based on role-play, storytelling, and the business games, Fever Pitch and the Business Model Canvas. The workshops aimed to promote participants’ self-reflection through the EntreComp Framework, actively involving and engaging them in experiential learning. Results show how these pedagogies, delivered through a capability approach, cultivate an enterprising capability to act effectively in every sphere of life, providing a lifelong and life-wide competence.

Keywords: entrepreneurship education, capability approach, best practices, lifelong learning, gamification, peer-learning, enterprising capability

Costa wrote the section 1, 3 and 5. Morselli wrote the sections 2 and 4. Section 6 and 7 were written together.
La formazione all’imprenditorialità come competenza chiave per l’apprendimento permanente sta diventando sempre più importante sia nella New Skill Agenda Europea che all’interno del documento Learning Framework 2030 dell’OECD. Lo sviluppo dell’agency attraverso la formazione alla capacità imprenditiva risulta fondamentale in vista dell’inclusione degli adulti sia nel mercato del lavoro che nella società digitale. Questo contributo mostra i risultati di un progetto europeo Erasmus Plus che si è posto l’obiettivo di formare all’imprenditorialità in quattro stati europei attraverso diverse metodologie formative. Una prima parte del progetto ha raccolto le buone pratiche di formazione all’imprenditorialità in Europa e negli Stati Uniti allo scopo d’individuare le metodologie formative specifiche per l’imprenditorialità. Queste includono l’apprendimento attivo ed esperienziale, il peer-learning e il lavoro per progetti. La parte successiva del progetto ha riguardato la formazione agli adulti basata su metodologie quali Role Playing, Story-Telling, Business games, Fever Pitch, e Business Model Canvas. I laboratori per la formazione all’imprenditorialità intendevano: promuovere la riflessione attraverso il framework europeo EntreComp, coinvolgere i partecipanti attivamente, proporre forme di apprendimento esperienziale. I risultati mostrano come nuove metodologie formative specifiche per gli adulti imparite attraverso il capability approach qualificano una capacità imprenditiva ad agire in modo efficace in ogni contesto, in una prospettiva di lifelong e lifewide learning.

Parole chiave: formazione all’imprenditorialità, capability approach, buone pratiche, apprendimento permanente, gamification, peer-learning, imprenditività

1. Introduction

The innovations in the world of work call for the development of new formative processes throughout the lifespan of the individual, which promotes professional and work mobility, inclusion and social participation (Costa 2018). The adults undertaking training processing in a lifelong learning perspective will have to elaborate upon new constructs of competence, where a central tenet will be the individual’s ability to learn and adapt rather than be an expert in the given field. The individual will therefore have to be able to exercise judgment rather than merely carry out tasks. Consequently, they will need to cooperate in an open ecosystem rather than perform within the company boundaries (Casano 2017). The adults’ employability in the new transnational labour markets (Boffo & Gioli, 2017)¹ are characterised by diverse social statuses and working

¹ The main policy of the theory of the labour transnational market is to “make transitions pay”. On the one hand, the theme of employability and the personal resour-
conditions exist simultaneously (Schmid 2011). Such environs call for a type of competence that requires “more than just the acquisition of knowledge and skills; it involves the, mobilisation of knowledge, skills, attitudes and values to meet complex demands” (OECD, 2018, p. 8).

This concept of competence is backed by an «entrepreneurial and innovation-oriented mindset» (European Commission 2016). A core element of this definition is the ability of an individual to lead action, turn ideas into action, translate capabilities into action, and develop competences related to empowerment, resilience, locus of control and copying. According to the European Commission,

Entrepreneurship refers to an individual’s ability to turn ideas into action. It covers creativity, innovation and risk taking, and the ability to plan and manage projects in order to achieve objectives. It supports everyone in day-to-day life at home and in society, makes employees more aware of the context of their work and better able to seize opportunities, and provides a foundation for entrepreneurs setting up social or commercial activities. Entrepreneurship education should not be confused with general business or economic studies, as its goal is to promote creativity, innovation and self-employment (2008, p. 10).

This definition of entrepreneurial competence connects well with the pedagogical need to rethink the idea of enterprise, beyond its meaning related to economy and venture creation. Instead it can be epitomised in the action of undertaking, dealing with projects, stories and competences, as well as inhabiting places and applying knowledge. The pedagogical value of entrepreneurship (Piazza, 2015) is expressed through actions which demonstrate the development of the individual’s ability to make things, along with the cultivation of a learning space within formal educational system and beyond.

In Sen’s (2000) definition, capability represents the set of combinations of “functionings” that the individual can make, and the breadth of capabilities expressing the freedom owned by the subject. Capability
refers therefore to the subject’s ability and opportunity to make choices. In doing so, this concept emphasises both the orientations that inspire the educational policies of the institutional subjects, in addition to the criteria which are useful to orient the educational actions that safeguard the individual’s freedom to make choices, related to self-fulfilment as well as work and life goals (Ellerani, 2014). For these reasons, the Capability Approach is considered the new adults’ learning paradigm in the recent pedagogical debate. Work experience gains value within a holistic growth of the subject, and it matches the organisational and individual needs, with, the smart use of the resources available in the environment (Margiotta, 2014).

An enterprising capability (Costa & Strano, 2018) becomes an inclusive bridge between citizenship and work, where the worker acts not only to influence his or her employability, but also to improve his or her inclusion and active participation (Council of the European Union 2015). Hence, this paper embraces the following definition: “Entrepreneurship is when you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural, or social” (Moberg, Baslund, Fosse, Hoffman, Junge, 2014, p. 14). A capability approach affirms a formative vision of enterprise as a chance to holistically develop the human being, thus cultivating one’s self-guidance and ability to make choices (Costa, 2018) and arrive at improved self-awareness on opportunities. A capability approach to entrepreneurship means to nurture competences and generative capabilities to widen one’s space of freedom, thereby enhancing everyone’s capability to foresee their future and express choices which make personal projects happen. In doing so the individual becomes capable of picking the opportunities that are valuable for them, thus increasing agency in terms of personal autonomy and responsibility.

2. The policy framework related to an enterprising capability

The goal of this section is to explain the reader how policy documents are converging towards an idea of enterprising capability as lifelong learning competence for value creation and the cultivation of the individual’s agency. According to the European Commission (2016), skills represent a path to prosperity and employability; the European Commission uses
this term as generic synonym for competence to indicate what an individual can do, understand and know. In a global and fast-changing economy, skills-based competency determines the ability to drive innovation and competitiveness. Skills are therefore fundamental for investments and contribute to the righteous virtuous cycle of growth and job creation. They count towards social cohesion, inclusion, full employability and personal fulfilment. Skills can be acquired in a lifelong and life wide learning perspective (Dozza, 2018), and can therefore be cultivated in different settings such as: in formal environments (that is, in structured and organised learning environments such as during the schooling process); in non-formal settings (where skills may be embedded in planned activities that are not specifically designed as learning activities, in the case of a museum or in a science camp); in informal environments, with learning taking place as part of the regular routine activities related to leisure, family or work. The new Skills Agenda for Europe is one of the most significant work programs at the European Commission. Within this program, a revision of the key competences has been launched, and attention has been devoted to the nurturing of entrepreneurial and innovation-oriented mindsets, including the promotion of concrete entrepreneurial experiences.

The UK Quality Assurance Agency (2018) differentiates between entrepreneurship as business creation and enterprise based on mindset. Enterprise education is “the generation and application of ideas, which are set within practical situations during a project or undertaking. This is a generic concept that can be applied across all areas of education and professional life” (p. 7). By way of contrast, in Continental Europe there is only one concept that accounts for dimensions of business creation, as well as mindset, in a lifelong learning perspective. A sense of initiative and entrepreneurship is therefore a key competence for lifelong learning and is defined as one’s ability to turn ideas into action (European Commission, 2007). Although this key competence had aroused interest in entrepreneurial capacity building, there is not yet consensus on its distinctive elements. Such lack of consensus is represented in one third of the European countries using an idiosyncratic definition, and the lack of comprehensive learning outcomes hindered the cultivation of this key competence in the educational system across Europe. The goal of the EntreComp is therefore to establish a common framework and to bridge education with work; to do so, it entailed a consensus process among stake-
holders with a literature review, a collection of best practices, an analysis of case-studies and comparison with the existing frameworks, expert workshops and iterative rounds of stakeholders consultations (Bacigalupo, Kampylis, Punie, &Brande, 2016). These processes resulted in three outcomes: a shared concept of entrepreneurship, key components, and learning outcomes.

EntreComp is composed of three competence areas, these are “Ideas and opportunities”, “Resources” and “Into action”. Each area entails five sub-competences, each of which has three descriptors. EntreComp thus develops 15 competences along a progression model made of eight levels, and in total lists 442 detailed and comprehensive learning outcomes. Ethical and sustainable thinking is defined as assessing the consequences and impact of actions, opportunities and ideas, and has three descriptors: assessing the consequences of ideas that bring value and the effect of entrepreneurial action on the target community, the market, society and the environment; reflecting on how sustainable long-term social, cultural and economic goals are, and the course of action chosen; acting responsibly. Of course, such list of learning outcomes has not been created to be used as a whole or as a fixed tool. Educators, unions, employers, and policy makers can use it as an inspiration, so they can select the competences and descriptors that best fit their situation.

Moreover, such emphasis on sustainable and ethical thinking is useful to emphasize how EntreComp depicts entrepreneurship as a transversal competence that applies to all spheres of life, therefore in a life-wide and lifelong perspective: from cultivating personal growth, to participating into society; to re(entering) the labour market as self-employed or employee, to starting up own enterprise. Most importantly, it is acknowledged, very much in line with a capability approach as proposed by Sen (2000), that an individual can act upon opportunities and ideas to create value for the community in any domain: value can be cultural, social or commercial.

In doing so, EntreComp framework as key competence connects well with the definition of key competences operated by OECD (2018) on the position paper “a Learning Framework for 2030”. Similarly to the document a new Skills Agenda in Europe, OECD starts by pointing out that our societies face unprecedented challenge led by an increasingly faster pace of technological development and globalisation, impacting the social, the economic and the environmental sectors. These forces are
presently giving our societies many opportunities for advancement of humankind, even as future trends remain uncertain. As such, students need to be future-ready, in order to exercise agency, in their own education and throughout life, and this calls for personal responsibility to participate actively into society, and to influence circumstances, events and individuals for the better. When individuals are educated as change agents, they are ready for their future: they are more likely to have a positive impact on their environment, influence the future, understand the intentions, actions and feelings of others, in addition to anticipating the consequences of what they do. In a capability approach, agency requires the ability to identify purpose and find actions to meet the goals that the individual has set as valuable for himself or herself (Sen, 2000). Hence, there is a striking convergence between how Sen and OECD see agency for the good.

For the OECD (2018), a holistic concept of competence entails more than the mere acquisition of knowledge and skills, since it concerns the activation of knowledge, skills, attitudes and values to meet complex demands. Drawing on the OECD De.Se.Co. project (Definition and Selection of Competencies) of 2003, the OECD Education 2030 framework identifies three groups of transformative key competencies with the aim of addressing the increasing need for individuals to be innovative, responsible and aware. The three key competences identified are creating new value, reconciling tensions and dilemmas, and taking responsibility. Consequently, the creation of value and the cultivation of one’s agency is becoming a key feature of an enterprising capability as key competence.

3. The REACT Erasmus + project

The European project REACT - Reinforcing Entrepreneurship in Adults through Communication Technologies (www.reactproject.online), was financed by Key Action 2 - Adult Education within the Erasmus + program. This partnership was carried out by five entities from four European countries, Ca’ Foscari University being a partner. At Ca’ Foscari the project was led by CISRE (Centro Internazionale di Ricerca Educativa e Formativa), Department of Philosophy and Cultural Heritage. The goal of REACT was to cultivate an enterprising capability in adults to improve their life quality, by being more pro-active in searching for employ-
ment opportunities and reinserting themselves into society by actively participating in it (Costa, Morselli, Chiusso, Vezzoli, 2018). The project entailed formative methodologies and innovative approaches to promote the diverse aspects of an enterprising capability, but also aimed to familiarize the participants with digital technologies. It involved 250 participants around Europe in different rounds of experimentations. Overall, the project sought to nurture an enterprising capability and cultivated gamification strategies to make adult learning more engaging (Vezzoli, Tovazzi, 2018).

Only when the individual acquires an awareness of the contextual factors that constrain his or her vision and fulfilment, can he or she express fully and appropriately the entrepreneurial competence in own context. Moreover, the awareness of these factors allows the individual to make choices according to personal values.

The second component that qualified training was gaming (Deterding, Dixon, Khaled, Nacke, 2011). Since the participants were adult, we choose to make use of gamification to promote engagement (Nesti, 2017) to favor deep change in their attitudes and behavior (Domínguez, Saenz-de-Navarrete, de-Marcos, Fernández-Sanz, Pagés, 2013).

From the pedagogical point of view (Faiella, Ricciardi, 2015), the use of gamification aligns well with a socio constructive paradigm of experiential learning that involves participants in the interactive and problem solving situations, in the choices made and in the construction of stories (Kiryakova, Angelova, Yordanova, 2014). In interactive virtual environments, the participants tested their choices with no risk; they built their entrepreneurial preparedness through complex problem solving scenarios and feedback that promoted forms of experiential learning (Barata, Gama, Gonçalves, 2013).

4. The collection of good practices on entrepreneurship education

The partners of the REACT project collected 36 good practices around Europe and beyond. The good practices were reviewed with a form that has been designed according to research on the fields of education and entrepreneurship (Costa et al., 2018). An educational theory of curriculum was used for entrepreneurial education and this intellectual output takes the theory of constructive alignment (Biggs, 2014) as the starting
point to understand the training course in entrepreneurial education. The learning outcomes, the teaching and learning activities (including teaching methods) and the assessment practices are foundational to understand good practices from an educational point of view. From the entrepreneurship point of view, the elements that help understand a good practice are the following: the type of education and the approach to entrepreneurship. By combining these two dimensions, education and entrepreneurship, the project determined which educational practices work best for which type of entrepreneurial education. Eventually, the EntreComp and DigiComp frameworks helped as summarizing parameter and as a reference de facto for any initiative aiming to foster entrepreneurial or digital capacity of the European citizens.

The analysis of the best practices suggested that the selected teaching methods are best matched together (Costa et al., 2018). Moreover, the significance of clear learning outcomes was outlined within the EntreComp Framework, being most effective when defined within the capability approach: “taking the initiative,” “mobilising resources,” “creativity,” just to mention but a few, and can be considered part of a capability set which is turned into functionings through the conversion factors. Furthermore, being entrepreneurial involves the possibility of “spotting opportunities”, “valuing ideas” and this is feasible only if the context enables the subject to do so: opportunities are to be grasped only if they are existing, so that ideas can be valued only if they are likely to be turned into courses of action.

5. Training to an enterprising capability

After the identification and collection of the best practices, REACT entailed the experimentation of three distinct methodologies shared with the partners. The goal here was to test innovative instruments and solutions that nurtured the participants’ enterprising capability in terms of (re)activation within society that is personal initiative, awareness and agency. The experimental phase in Italy was carried out in three workshops made of varied formative techniques (Costa, De Waal, 2018) referring to the pedagogy of Dewey (2014), Mezirov’s transformative learning (2003) up to the recent developments of Service Learning (Boffo 2018; Jacoby, 2015):
1. Workshop 1 involved self-evaluation and empowerment through digital storytelling and role playing;
2. Workshop 2 (named Game Lab CISRE) consisted of a business game based on Technology Enhanced Learning, which was entirely developed at Ca’ Foscari, and sought to develop information literacy and the ability to define ill-defined problems when having to make quick decisions;
3. Workshop 3 was based on the Fever Pitch and the Business Model Canvas. The Fever Pitch is a group activity where the participants must pitch in 60 seconds imaginary products (such spying bushes, foldable giraffe or coursing monkey). The Business Model Canvas implies the analysis of ideas, their visualisation, with a special focus on the connections.

The three workshops were characterised by learning pedagogies for entrepreneurship education (Morselli, 2018) such as:
– Active learning, with hands on activities such as read, write, discuss or solve problems (Jones, Iredale, 2010).
– Experiential learning, which concerns learning through reflection on own actions (see Mortari 2003; Dewey 2014).
– Peer-learning, by way of activities implying learning from each other such as sharing knowledge, ideas and experiences among participants (Costa et al., 2018).
– Project based learning, where the participants deal with a problem, a challenge, or a complex question (Pittaway, Edwards, 2012).

6. Results

From the analysis of the processes and the data collected during the workshops hypothesis can be made on the factors that mostly influence the formative process of cultivation of an enterprising capability. These are:
– the appraisal of participants’ initial representation of an enterprising capability;
– the adoption of an international reference framework on the reflective processes on own capabilities;
– the development of strategies for active participation in the formative process;
– the generation of meaningful feedback in the participants’ personal life contexts;
the use of tools that show the progression in the acquisition of the contents achieved, and allow for a dynamic reorganization of these contents.

While the analysis of the workshops is taking its first steps, the following elements of the implementation protocol are emerging:

1. Starting the formative process by having participants complete a self-assessment about their own enterprising capabilities. At the beginning of the workshops, the participants should be allowed to inspect their attitudes (Pittaway & Edwards, 2012) and be aware of the learning outcomes of the workshops to better understand what their initial representation of enterprise is;

2. Promoting a reflection on own competences through the Entrecomp framework. This is done by comparing the participants’ self-perceptions and the evidences developed during their life course. The participants are helped to recognise not only what they know (knowledge), but also why they do it (motivation, goals) and what they could do in term of strategies and scenarios with what they are able to do. The same goal is achieved with discussions to find the personal intentionality behind the activation of the competence areas identified by the EntreComp framework;

3. Adopting active involvement strategies by challenging the participants’ competences. The workshops should be designed so that the participants develop their intrinsic motivation that is developed with goals that are relevant in their personal lives (Boffo, 2018);

4. Promoting self-awareness through activities that stimulate reflection (Mortari, 2003) on own competencies, with a focus on transformative learning (Mezirow, 2003);

5. Cultivating visual thinking. This protocol can be done with learning activities of ideas generation (Fayolle, 2013) able to promote new courses of actions, ideas and concepts through visual thinking (Bobek, Tversky, 2016). Furthermore, the analysis of the data represented (for example when using the Business Model Canvas) helps find alternative decisions or elements that could be adopted when considering binds and available resources.
7. Conclusions

This project suggests that the cultivation of an enterprising capability in an agentive way offers concrete possibilities of inclusive participation, sharing and hold responsibility at the individual and social level, thus offering opportunities to exert the own substantial freedom (Costa & Strano, 2018). This process encourages the individual to choose and responsibly pursue the own life project, activate an authentic personal flexibility, and promote an ability to think creatively and innovatively. The development of an enterprising capability represents an intentional strategy able to nurture the citizen’s knowledge, planning and choice of personal and professional fulfilment in a lifelong perspective (Jones & Iredale, 2010), especially the cultivation of dynamic and creative agency in the workplace (Costa 2018). The Learning Framework confirms this evidence:

> Education has a vital role to play in developing the knowledge, skills, attitudes and values that enable people to contribute to and benefit from an inclusive and sustainable future. Learning to form clear and purposeful goals, work with others with different perspectives, find untapped opportunities and identify multiple solutions to big problems will be essential in the coming years. Education needs to aim to do more than prepare young people for the world of work; it needs to equip students with the skills they need to become active, responsible and engaged citizens. (OECD, 2018, p. 4).

The REACT project displayed how the process underpinning an enterprising capability is based on the subject’s agency and their internal ability to self-direct their learning. The Capability Approach and EntreComp stress the importance of addressing the individual action towards self-realisation from a well-being perspective, which entails the ability to act and deal with challenging situations that are of value for the subject. In turn, the subject’s personal initiative becomes more than a generic manifestation of will, and entails a complex combination of personal attributes, features of the environment, mobilization of competence in situation which is underpinned by personal agency. In this way, an enterprising capability represents a transition point where actions come to reflect an individual’s identity, and where the individual’s capability combines with the ability to seize the available opportunities in the environment (Costa, 2018). Nurturing such an enterprising capability calls for
the subject’s ability to practice freedom to choose between alternatives. In the educational field, this freedom concerns:

- the subject’s personal initiative,
- the autonomy necessary to free from the external conditioning;
- the innovativeness to bring about changes recognized as important for the subject and the others;
- a personal autonomy characterised by vision, reflectiveness and creativity.

The development of an enterprising capability is accomplished by educating to make plans that are valuable for the subject. The individual is encouraged to find his or her needs, to set goals, to find the strategies to meet such goals, and to check and evaluate performance against the goals, thus continuously redesigning the own formative path. This can be fulfilled when there are spaces of freedom and appropriate resources (Margiotta, 2014). Given these conditions, the practices experimented with the REACT project become authentically delivered according to a Capability Approach.

In this regard, the limits of the REACT project can be found in the connection between an enterprising capability and the environment where the subject enacts his or her competence. Displaying an enterprising capability is connected to the possibility that the environment encourages such expression. Such possibility depends on two conditions: on the one side, the presence of real spaces of freedom, and on the other side, learners acting in a self-directed way to mobilise their will and envision future possibilities.

References


