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Reinforcing Entrepreneurship in
Adults through Communication Technologies



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Executive Summary

The main priority of the REACT project (www.reactproject.online) addresses Social Inclusion and Enhancing access to training and qualifications for all, giving in this way the opportunity to low skilled adults to reinforce the entrepreneurship **entrepreneurial** skill that is useful to increase their quality of life, including the research of a job and their re-inclusion in society. Nonetheless, as adult training centres need some new educational tools in order to grant this target group the benefits they need to be better integrated in the society and in their work placement, the REACT project intends to enhance the participation in the society of low skilled adults by providing them with innovative tools and useful methods, such as peer education and gaming, able to reinforce entrepreneurship seen as a competence that embraces all the spheres in a lifelong learning perspective.

Skills, a term used to indicate what an individual can do, understand and know, are a path to prosperity and employability. In a global and fast changing economy, it is the skills which determine the ability to drive innovation and competitiveness. Not only are skills key for investments, but **they** also contribute to the **righteous** virtuous cycle of growth and job creation. The new Skills Agenda for Europe is one of the most significant work programs at the European Commission. The real significance of entrepreneurship goes well beyond starting or running a company, and entrepreneurs are **being** represented **as** people with ideas who grasp opportunities to generate well-being or value in society. Within the 'A new Skills Agenda for Europe', the European Commission has launched a revision of key competences, and special interest will be **being** given to the promotion of entrepreneurial and innovation-oriented mindsets, including the encouragement of concrete **real** entrepreneurial experiences. In the literature there is no doubt that entrepreneurship can be **learned**. There are entrepreneurial attitudes that are particularly important for entrepreneurship and should be developed in both learning and assessment. To increase the learner's autonomy a switch from pedagogy to andragogy and heutagogy should be necessary. While in pedagogy learning tasks are defined by the teacher, in andragogy control is shared and the learner retains a degree of self-determination.

The capability **y**ies approach is based on the notion of functioning. This entails a range of activities (e.g. to **going** to school, to **riding** a bicycle) and states (e.g. being safe, being educated) that make up people's life. Capabilities refer to substantive freedoms people enjoy leading the kind of life they have reason to value. Freedom has intrinsic value: human beings value freedom and the possibility to choose in itself. Reinforcing Entrepreneurship in Adults through Communication Technologies

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Situations, needs, aspirations and goals of people are diverse. Education is regarded as a crucial element for capabilities expansion: it allows people to discover existence of different possibilities and opportunities and this knowledge about (previously unknown) choices and freedoms is the first step to achieving them. Through education and training people acquire valuable functionings that allow them to obtain jobs that lead to more freedom. An entrepreneurship education is a way to develop entrepreneurship-related capabilities that result in a growth of individual and societal wellbeing. Individuals can become the entrepreneurs of their own career without necessarily starting a business. This allows them to have and see much more impact of their work not only on profits, but also on their multidimensional wellbeing.

Peer Education is the process whereby trained and motivated peers develop organized learning activities with their fellow peers. These activities occur over a particular period of time and aim at developing more competencies in their life. In comparison with Peer Education, Peer Mentoring can be defined as a form of unstructured and unconditional support, based on a set of improvised activities, and mainly focused on the support provided by a mentor/peer through a longstanding positive and confidential relationship with a mentee. Through Peer Education, individuals who face difficult situations that put them furthest from the labour market, who experience difficulties in learning and/or employment or who lack appropriate personal skills, will have the active support of peers. The aim of peer educators is not to deliver a set of pre-established sessions, but to devise sessions that are based upon the participants' individual needs. In order to implement Peer Education in adult education organisations, peer educators should help their peers with social, educational, emotional and/or vocational concerns.

Gamification is the use of videogames elements in non-game educational contexts, whereas gaming is more broadly a playful approach to learning (the project aiming to prove that non-formal ways of teaching are more efficient with the adults involved in the project). Serious Games are an emerging paradigm in Technology Enhanced Learning and can be defined as computer-based learning simulations that engage players in realistic activities designed to increase knowledge, improve skills and enable positive learning outcomes. Despite having an entertainment component, these simulations are designed to promote learning, primarily by leveraging a narrative or story centred in an entrepreneurial setting. As a pedagogic approach, games align well with the socio-constructivist educational paradigm. They are experiential and engage players in interaction, problem-solving, choices and narratives. Within the gaming context, repetitive practice through well-designed serious games could help prepare players for future Reinforcing Entrepreneurship in Adults through Communication Technologies

entrepreneurial acts. Games place learners in interactive virtual environments that can be immersive and the consequential serious play that follows allows learners to test out decisions and build entrepreneurial preparedness in a safe and risk-free environment. Games have strong problem-solving aspects and the outcomes feedback loops within these problem-solving situations do encourage forms of reflective learning.

The good practices have been reviewed with a form that has been designed according to research on the fields of education and entrepreneurship. An educational theory of curriculum is needed for entrepreneurial education and this intellectual output takes the theory of constructive alignment 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 the good practices from the educational point of view. From the entrepreneurship **entrepreneurial** point of view, the elements that help understand a good practice are the following: **the** type of education and **the** approach to entrepreneurship **are the elements that help understand a good practice**. By combining these two dimensions, education and entrepreneurship, the aim is to determine which educational practices works best for which type of entrepreneurship **entrepreneurial** education. Eventually, the EntreComp and DigiComp frameworks are used as summarizing parameters, but also as a reference de facto for any initiative aiming to foster entrepreneurial or digital capacity of the European citizens.

The finding of the analysis is that the good practices on entrepreneurship **entrepreneurial** education gathered by the partners of the REACT project align well either with an about, a for, or a through approach to entrepreneurship. This means that the goal is different, respectively: developing an understanding of entrepreneurship and the role of entrepreneurs in society (about), preparing individuals to become entrepreneurs and to start a business (for), becoming more entrepreneurial in life. These approaches focus on diverse components of competence: knowledge for the 'about' approaches, skills for the 'for' approaches, and attitudes for the 'through' approaches. Many of the best practices deal with 'for' approach to entrepreneurship; they entail the development of a business plan as final output and make use of the mentoring as main teaching method, thus providing formative assessment, but also developing an autonomous learner able to start his or her enterprise at the end of the training. However, many good practices are delivered with mixed approaches, these can be about and for, or about, for and through, thus taking a holistic perspective on entrepreneurship as competence, and developing the learner's

autonomy and ability to make choices according to a capability approach. The good practices on enterprise education take a 'through' approach with the goal of developing the learners' attitudes toward enterprise and being enterprising in a lifelong learning perspective. Gaming is often used within 'for' approaches to entrepreneurship, the goal being starting a venture or managing an existing company. Gaming is often associated with in-class teaching methods and - for example tutoring and group work. Concerning peer education, this is often used for enterprise education with a 'through' approach, thus aiming to develop in the learner enterprising attitudes connected to enterprise, citizenship, employability.

The analysis of the best practices suggests that the teaching methods are best matched together. Moreover, the learning outcomes outlined within the EntreComp Framework match as well with 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 grasp only if they are existing, so that ideas can be valued only if they are likely to be turned into courses of action.

All in all, Entrepreneurial education with a Capability Approach means to activate the personal agency in a capability-enhancing environment. A Capability Approach provides the theoretical framework with which to analyse the entrepreneurship competence, since it allows to look beyond mere performance towards a reflection on the contextual factors that allow or deny the expression of the entrepreneurship **entrepreneurial** competence. When the individual has gained more awareness on local and general factors - these can be political, social or related to citizenship) - , s/he can fully and appropriately express his or her entrepreneurship competence in the context. The awareness of these factors allows the individual to make thought choices according to his or her values and the environmental factors that encourage or constrain his or her entrepreneurial action. In so doing **so**, the capability approach allows to better connect entrepreneurial competence to the individual's self-determination.

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A new Skills Agenda for Europe

Skills, a term used to indicate what an individual can do, understand and know, are a path to prosperity and employability (European Commission, 2016)¹. In a global and fast changing economy, it is the skill which determine the ability to drive innovation and competitiveness. Not only are skills key for investments, but they also contribute to the righteous cycle of growth and job creation. Yet there is the danger that vast parts of the European population are left behind and marginalized by the digital revolution and globalization, thus threatening social cohesion. The European situation calls for help: 70 million citizens have limited writing and reading skills, and even more individuals lack basic numeracy and digital skills, putting these individuals at risk of joblessness, social exclusion and poverty. More than half of 12 million long term unemployed individuals can be regarded as poorly skilled. Skills mismatches and gaps are also evident. While many individuals have jobs that do match their qualifications and skills, 40% of European employers find it difficult to find the skilled people they are looking for (European Commission, 2016). Less than a third of European citizens have a university degree against 40% of the U.S. and 50% of Japan (European Commission, 2010). Too few individuals have the entrepreneurial skills and mindset necessary to start a business. Dealing with these skills challenges calls for important reforms and policy efforts in education and training.

Furthermore, groups such as youth, women, seniors, ethnic minorities, and the disabled face particularly high risks of being marginalised in the labour market (OECD & European Commission, 2013). Efforts are needed to increase awareness about the desirability and feasibility of entrepreneurship by people

¹ A New Skills Agenda <http://ec.europa.eu/social/main.jsp?catId=1223>



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experiencing disabilities, both among disabled and non-disabled populations (European Commission & OECD, 2015)².

Following the Lisbon Agenda, in 2010 the European Commission launched Europe 2020³, a decade's strategy for jobs and growth. Among the targets set by Europe 2020 there are: 75% employed individuals aged 20-64; 10% early school leavers, 40% of people with tertiary degrees, and 20 million individuals less at risk of poverty (European Commission, 2013b). The Commission launched seven initiatives to reach the set targets, one of which is 'an Agenda for new skills and jobs', seeking to update labour markets and modernize people's skills in a lifelong learning perspective. The aim was increasing labour participation and providing a good match between supply and demand, with an emphasis on workers' mobility.

The new Skills Agenda for Europe is one of the most significant work programs of the European Commission. It focuses on three areas (European Commission, 2016): 1) improving the relevance and quality of skills training; 2) making qualifications and skills more comparable and visible; 3) advancing skills information and intelligence to enhance career choices. The acquisition of skills is a lifelong process which takes place in formal and informal environments starting when the individual is very young. Beyond the technical and specific skillset, employers are increasingly looking for transversal skills like the capacity to work in teams, solve problems and thinking creatively. The same skills, which are useful when considering starting a business, are often neglected in school curricula, and are seldom formally evaluated in Member states.

Formal education systems and training should provide every citizen with a wide skillset which lead to one's fulfilment and development, employment, citizenship and social inclusion. These skills are learned

² <https://www.oecd.org/cfe/leed/Policy-brief-entrepreneurship-people-disabilities.pdf>

³ https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/framework/europe-2020-strategy_en



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throughout life; they allow individuals to deal with uncertainty and complexity, permitting to flourish in society and workplaces (Costa & Strano, 2017). Education and training play a fundamental role to prepare citizens to meet these future challenges. While globalization continues to challenge the European citizens, they need a vast array of key competences⁴ to adapt and be flexible in a highly interconnected and fast changing world (European Commission, 2016). Key competences include numeracy, literacy, foreign languages and science, and transversal skills such as digital competences, critical thinking, learning to learn, problem solving, entrepreneurship and financial literacy. While some of the key competences have already and established place in educational system some key competences such as citizenship and entrepreneurship are completely lacking. To help more individuals to obtain better key competences, the European Commission in 2017 launched a revision of the Key Competences Framework. The challenge is not only to improve a common understanding of key competences and their introduction in training and education programs, but also to provide guidelines for their development and assessment (European Commission, 2016). Table 1 reports the definition for different types of entrepreneurship.

Table 1. Types of entrepreneurship.

Intrapreneurship. A person can demonstrate entrepreneurship without being the business owner and without having a stake in the company.

Social entrepreneurship is an emerging type of entrepreneurship which targets social/societal value creation.

Eco-entrepreneurship may be found in the discourse of ecological economics, entrepreneurial behaviour and in an increasing number of research streams connected to innovation, growth (green growth), employment (green jobs) etc.

Digital entrepreneurship embraces all new ventures and the transformation of existing businesses that drive economic and/or social value by creating and using novel digital technologies.

Inclusive entrepreneurship refers to the provision of equal opportunities for all citizens to take the path of entrepreneurship, in other words to start up and operate a business.

Female entrepreneurship aims to encourage women to start businesses, to address the statistical imbalance in the numbers of men and women entrepreneurs.

Source: Komarkova, Gagliardi, Conrads, and Collado (2015, pp. 24 - 29)

⁴ https://ec.europa.eu/education/policy/school/competences_en

If it is true that entrepreneurship was often associated with the creation of business, and the world of media generated a picture of the entrepreneur as an inspirational character of our time, the real significance of entrepreneurship goes well beyond starting or running a company (Bahri & Haftendorn, 2006). Entrepreneurs are represented people with ideas who grasp opportunities to generate well-being or value in society. They can perform existing processes in a more efficient fashion or match unmet needs with new products or services. Entrepreneurs search for what communities are missing or in need, and undertake their mission to meet their vision, they summon resources and take responsibility for risks. Historically, entrepreneurs have played an essential role in society since they have been willing to take the lead (Kyro, 2006). Moreover, their resilience and problem-solving skills have resulted in economic and social innovations, thus driving growth and progress. Notwithstanding that the result of entrepreneurship is commonly regarded as making business in the private sector, the phenomenon has had an essential role in society, government and culture, for any individual orientation to opportunity, resilience, organization and creativity can be reckoned as entrepreneurial spirit (Bahri & Haftendorn, 2006). Since social and economic circumstances are continuously changing around the world, such features are now invaluable more than ever. As a matter of fact, citizenship nowadays requests a reactivity to each aspect of life to push one's capabilities to the limits.

Internationally, North America plays a leading role in entrepreneurship education and in high growth enterprises (Volkman et al., 2009), and entrepreneurship is considered the main creator of economic growth (Draycott & Rae, 2011). The huge economic contributions of Amazon, Google, Microsoft and others are unquestionable. Compared to other countries, America enjoys one of the most entrepreneurial friendly cultures and environments, as well as the longest tradition in entrepreneurship education, the main goal being implementing and commercializing research, innovation or knowledge linked to



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generation of income (Volkman et al., 2009). In China entrepreneurship education is still on its infancy, but progresses are rapidly being made. In Europe the emphasis of entrepreneurship education lies on fostering entrepreneurial capabilities and mindset, and on recognizing the social importance of entrepreneurial activity. Different types of entrepreneurship that are increasingly becoming popular are intrapreneurship, social entrepreneurship, eco-entrepreneurship, digital entrepreneurship and women entrepreneurship. Within the A New Skills Agenda, the European Commission (2016) has launched a revision of key competences that will be ready within 2018. Special interest will be given to the promotion of entrepreneurial and innovation-oriented mindsets, including the encouragement of concrete entrepreneurial experiences.

Entrepreneurship has been a top priority in EU since the Lisbon agenda in 2000⁵. New enterprises, especially SMEs, are thought to represent the backbone of Europe and the primary source of new jobs (OECD & European Commission, 2013). To restore jobs and growth in Europe after the financial crisis, more entrepreneurs would be necessary. While in 2010 45% of European citizens were keen on becoming self-employed, this figure plummeted to 37% in 2012 against 56% of China and 51% of USA (European Commission, 2013a). In Europe 2020 three out of seven flagships for a smart, inclusive and sustainable growth are specifically dedicated to entrepreneurship (OECD & European Commission, 2013): 1) 'the Agenda for new skills and jobs', seeking to eliminate the obstacles discouraging from self-employment; 2) 'Youth on the move', promoting youth entrepreneurship and self-employment; and 3) 'The EU platform against poverty and social exclusion', promoting micro-finance and entrepreneurship to contrast social exclusion. Furthermore, the Europe 2020 Action Plan is the answer to Europe's downturn with three streams. Action one promotes entrepreneurship education and training to support creation of businesses

⁵ http://cordis.europa.eu/programme/rcn/843_en.html

and growth. Action two concerns the creation of an environment con grow and flourish. Action three aims to reach marginalized groups whose potential is unexpressed: young people, unemployed, migrants, seniors and women.

While Europe certainly lags behind the other most advanced economies in number of business start-ups, this situation only represents part of the picture. There is another hidden aspect of European entrepreneurship namely intrapreneurship, with employees turning ideas into action within companies instead of starting their own company (WEF & GERA, 2016). Notwithstanding the low number of new start-up companies, the northern European economies like Denmark, Sweden and the UK, continue to have prosperous and cutting-edge economies; due to the risk and opportunities profiles of Europe, enterprising workers choose to endeavour new projects or challenges while working for their employers. However, only an average 4% working-age individuals are engaged in such entrepreneurial employee activity, which is mostly confined to the highest competitive European economies. The educational implication is that entrepreneurship education and training programs should not be limited to the technical aspects on how to start a new business, but should also include how to be intrapreneurial within companies.

In the literature there is no doubt that entrepreneurship can be learned (Valerio, Parton, & Robb, 2014). For the World Economic Forum, the early individuals are exposed to entrepreneurship education at school or in the family with parents being entrepreneurs themselves, the more likely they will become entrepreneurs (Volkman et al., 2009). When promoting entrepreneurial talents, education and training programs should increase the awareness of social and environmental implications of enterprise, thus having long-term positive results in competitiveness, in social justice and inclusion (Bahri & Haftendorn, 2006). The success of entrepreneurship education could be measured by means of contribution to



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learning, to teaching practice, to poverty reduction and community improvement, and to more collective decision making. Table 2 shows some key pedagogies for entrepreneurship.

Table 2. Key didactics for entrepreneurial education.

Active learning: A model of instruction that places the responsibility of learning on learners themselves. To learn, students must do more than just listen: they must read, write, discuss, or be engaged in solving problems. Active learning relates to the three learning domains referred to as knowledge, skills and attitudes.

Experiential learning: The process of learning through experience, more specifically defined as learning through reflection on doing. Experiential learning is distinct from rote or didactic learning, in which the learner plays a comparatively passive role.

Peer-learning: It is a way of moving beyond independent to interdependent or mutual learning. It is a two-way, reciprocal learning activity which is mutually beneficial and involve the sharing of knowledge, ideas and experience between the participants.

Project-based learning: is a teaching method, in which students gain knowledge and skills by working for an extended period of time to investigate and respond to a complex question, problem, or challenge.

Source: European Commission et al. (2016, p. 120 – 122)

Concerning the terminology, the European Commission defines entrepreneurial education all educational activities that aim to prepare individuals with the knowledge, skills and attitudes necessary to reach the objectives set for themselves to live fulfilled lives (European Commission, 2015). At the European level entrepreneurship is understood as key competence for lifelong learning, the sense of initiative and entrepreneurship. This competence is applicable by all individuals in all spheres of life: entrepreneurship deals with acting upon ideas and opportunities and transforming them into value for other individuals (Moberg, Stenberg, & Vestergaard, 2012).

There are entrepreneurial attitudes that are particularly important for entrepreneurship and should be developed in both learning and assessment (QAA, 2018) For example, van Gelderen (2012) suggests that the drive behind entrepreneurs is not money but the need to be independent; our increasingly complex societies demand the ability to deal with uncertainty, change and complexity, therefore self-reliance is

becoming more and more of value. Having an autonomous motivation is the starting point for self-directed learning, which is a key element for lifelong learning, but also for enterprise education, with exploratory and informal learning providing opportunities for assessment (QAA, 2018).

Lumpkin, Coglisier, and Schneider (2009) connect autonomy to intrapreneurship that is entrepreneurship within companies, a particularly important form of entrepreneurship in Europe (WEF & GERA, 2016). Lumpkin et al. (2009) suggest that autonomy could be imagined as a concept structured hierarchically. At the lower level there is a structural autonomy, which is the degree with which a group can make decisions on factors related to the work environment; at the higher level there is a strategic autonomy referring to the degree with which a group has control of their ends. From an entrepreneurship perspective, a strategic autonomy plays a key role for individuals or teams: not only it allows the solution of problems, but it characterizes the problems and the aims that will have to be fulfilled to arrive at the solution. The level of autonomy a team can enjoy promotes knowledge creation, transfer and application. In such context, the role of management is encouraging innovation by facilitating risk taking and experimentation. By way of contrast, structural autonomy can be considered an entry level for entrepreneurial behaviour but may not suffice to boost it.

To increase autonomy some scholars (Jones, Matlay, Penaluna, & Penaluna, 2014; Penaluna & Penaluna, 2015) suggest a switch from pedagogy to andragogy and heutagogy. While in pedagogy learning tasks are defined by the teacher, in andragogy control is shared and the student retains a degree of self-determination. This is vital for the development of individuals who can act confidently in situations of risk and ambiguity. Students know that they are working in a context that emphasises innovation rather than implementation and that they will be evaluated on this basis. Hytti and O'Gorman (2004) found that a key ingredient of successful entrepreneurial programs was for the teacher to act as a coach and to leave students the freedom to choose how to solve the problems they faced. Andragogy is characterized by: a



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readiness to learn, a self-directing concept of self, a performance-centred attitude to learning, and the use of experience (Forrest & Peterson, 2006). Heutagogy takes andragogy a step further, since it seeks to shape highly autonomous self-determined learners (Penaluna & Penaluna, 2015). The learner is independent and self-determined; he or she can look for guidance and negotiate access to learning resources as and when appropriate (Jones *et al.*, 2014).

Bibliography

- Bahri, S., & Haftendorn, K. (2006). *Towards an Entrepreneurial Culture for the Twenty-first Century: Stimulating Entrepreneurial Spirit through Entrepreneurship Education in Secondary School*. Paris: UNESCO Publishing.
- Costa, M., & Strano, A. (2017). Imprenditività come leva per il nuovo lavoro. *FORMAZIONE & INSEGNAMENTO. Rivista internazionale di Scienze dell'educazione e della formazione*, 15(1), 399-412.
- Draycott, M. C., & Rae, D. (2011). Enterprise education in schools and the role of competency frameworks. *International Journal of Entrepreneurial Behavior & Research*, 17(2), 127-145.
- European Commission. (2010). *Communication from the Commission. Europe 2020. A strategy for smart, sustainable and inclusive growth*. Brussels Retrieved from http://ec.europa.eu/europe2020/europe-2020-in-a-nutshell/index_it.htm.
- European Commission. (2013a). *Entrepreneurship 2020 action plan. Reigniting the entrepreneurial spirit in Europe*. Retrieved from <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012DC0795&from=EN>.
- European Commission. (2013b). *Europe 2020: Europe's growth strategy*. Luxembourg Retrieved from http://europa.eu/pol/index_en.htm.
- European Commission. (2015). *Entrepreneurship education: A road to success*. Brussels: Publication Office of the European Union.
- European Commission. (2016). *A new skills agenda for Europe*. Retrieved from <http://ec.europa.eu/social/main.jsp?catId=1223>.

- European Commission, & OECD. (2015). *Policy Brief on Entrepreneurship for People with Disabilities*. Luxembourg: Publication office of the European Commission.
- Forrest, S. P., & Peterson, T. O. (2006). It's called andragogy. *Academy of management learning & education*, 5(1), 113-122.
- Hytti, U., & O'Gorman, C. (2004). What is "enterprise education"? An analysis of the objectives and methods of enterprise education programmes in four European countries. *Education+ Training*, 46(1), 11-23.
- Jones, C., Matlay, H., Penaluna, K., & Penaluna, A. (2014). Claiming the future of enterprise education. *Education+ Training*, 56(8/9), 764-775.
- Komarkova, I., Gagliardi, D., Conrads, J., & Collado, A. (2015). *Entrepreneurship competence: An overview of existing concepts, policies and initiatives*. Luxembourg: Publications Office of the European Union Retrieved from <https://ec.europa.eu/jrc/en/institutes/ipts>.
- Kyro, P. (2006). Entrepreneurship education and Finnish society. [http://www.researchgate.net/profile/Paula_Kyroe/publication/24137728_Enterpreneurship_Education_and_Finnish_Society/links/00b7d5343b20aab43b000000.pdf]. Retrieved from
- Lumpkin, G. T., Cogliser, C. C., & Schneider, D. R. (2009). Understanding and measuring autonomy: An entrepreneurial orientation perspective. *Entrepreneurship Theory and Practice*, 33(1), 47-69.
- Moberg, K., Stenberg, E., & Vestergaard, L. (2012). Impact of entrepreneurship education in Denmark-2011. Retrieved from http://www.cise.es/wp-content/uploads/2013/03/5.-impact_of_entrepreneurship_education_in_denmark_2011.pdf
- OECD, & European Commission. (2013). *The missing entrepreneurs: policies for inclusive entrepreneurship in Europe*. Paris: OECD.
- Penaluna, A., & Penaluna, K. (2015). Thematic paper on entrepreneurial education in practice. Part 2. Building motivation and competencies. Retrieved from <http://www.oecd.org/cfe/leed/Entrepreneurial-Education-Practice-pt2.pdf>
- QAA. (2018). *Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers*. Gloucester: Quality Assurance Agency Retrieved from www.qaa.ac.uk.
- Valerio, A., Parton, B., & Robb, A. (2014). *Entrepreneurship education and training programs around the world: dimensions for success*. Washington: World Bank.
- van Gelderen, M. (2012). Individualizing entrepreneurship education. In M. Van Gelderen & E. Masurel (Eds.), *Entrepreneurship in context* (pp. 47-59). New York, NY: Routledge.



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- Volkman, C., Wilson, K. E., Mariotti, S., Rabuzzi, D., Vyakarnam, S., & Sepulveda, A. (2009). Educating the next wave of entrepreneurs: Unlocking entrepreneurial capabilities to meet the global challenges of the 21st Century. *World Economic Forum: A Report of the Global Education Initiative*. Retrieved from <https://www.weforum.org/reports/educating-next-wave-entrepreneurs>
- WEF, & GERA. (2016). *Europe's hidden entrepreneurs. Entrepreneurial employee activity and competitiveness in Europe*. Geneva: World Economic Forum Retrieved from <http://www.gemconsortium.org/report/49778>.

2. A capability approach in entrepreneurial education

The capability approach is a broad normative framework for the evaluation and assessment of individual well-being and social arrangements and the design of policies and proposals about social change in society. Its roots can be traced back to, among others, Aristotle, Adam and Marx. It has become well known in the recent past through the work of Amartya Sen and Martha Nussbaum (Robeyns, 2011).

The core concept of the capability approach is the notion of a person's capabilities, that is, the set of things that a person is effectively able to do and to be. Evaluation and policies should emphasize what people are effectively able to do and to be, the quality of their life and removing obstacles in their lives so they have more freedom to live the kind of life which, upon reflection, they have reason to value (Robeyns, 2011, p. 40).

The capability approach embeds also the human capital but goes beyond it (Margiotta, 2014). Education is not only a learning process: it is a capability itself, connected with the expansion and development of other capabilities: it increases the possibility for the individual of choosing which direction to give to his/her life and helps besides to the creation of a democratic life and of a public dialogue (Walker, 2012); in addition, it facilitates the development of critical reflection and reasoning: this possibly empower the practitioners with the proactive attitude to face the future challenges of the Labour Market (Corbel, Wheelahan, Forward, & Darwin, 2014). Moreover, for Costa (2017) the capability approach nowadays represents: *the framework in which to rethink a human management capable of placing development and human freedom before productivity and richness for its own sake. The autonomous promotion of the individual capacities, the personal self-realisation through the professional action, a new idea of all-encompassing education, the guiding principle of the substantive freedoms which to redefine the well-*



being concept through, the focus shifting from the commodities to the intellectual assets: these are all elements which match surprisingly with the latest developments of the organisations. (p. 152)

Following the capability approach, the Vocational Education and Training focuses on what worker need to be able to do to in the future – which implies the capacity of learning to learn – rather than on workplace tasks and roles that have been defined for them on existing or past practices (Wheelahan & Moodie, 2011). Workers have the chance of seizing real opportunities in the environment (Wilson & Martin, 2015). Entrepreneurship, according to a capability approach, is the utilization of positive opportunities which should generate value for people and their community rather than destroy it (Gries and Naudé 2011). Innovation doesn't mean only doing something new in a different way: it implies bringing value through business to the community where it is developed (Dawe & Guthrie, 2004). But entrepreneurship can be a valued opportunity for a community only if individuals are free to choose to create new jobs and are not forced to, because of unemployment or lack of vacancies (Gries & Naudé, 2011). Entrepreneurial education programmes have to be realistic: they have on one hand have to provide competencies, but on the other hand should take into consideration the impediments in the environment that compel individuals to become entrepreneurs (DeJaeghere & Baxter, 2014).

Following the scheme proposed by Goerne (2010), the Capability Approach is made up of five conceptual building blocks: Commodities, Conversion Factors, Capabilities, Choices and Functionings. These terms are defined in Table 3.

Table 3. Key terms of the Capability Approach.

| |
|---|
| Commodities are the resources the individuals can dispose of |
| Conversion factors are made of the personal, environmental and social conditions of each individual existence, i.e. their life conditions |
| Capability set contains an individual's capabilities. Where functionings refer to what people really “do and are”, capabilities denote what people really “can do and can be”. |
| Agency/choice are options of possible choices which individuals give value to. |
| Functionings are what people really “do and are” and are considered a concept superior to commodities. |



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For Sen, capability is a set of functioning vectors and reflects the freedom of the individual to lead a certain type of life rather than another (Sen, 1992). Functioning are what people wish to do or to be, while the capability of a person is the set of alternative combinations of functionings he/she is able to realize. It is thus a sort of freedom: the substantive freedom to achieve alternative functionings combinations (or, less formally put, the freedom to achieve various lifestyles (Sen, 1995).

Functioning is the realisation, the achievement, whereas capability is the capacity of action, i.e. the capacity of acting the desired functioning, namely to be able to realize and achieve it. It is thus a substantive freedom, the one to realize one's self: the freedom to determine the nature of our lives is one of the most precious aspects of existence. Recognizing the value of freedom can in addition broaden the horizon of human enterprises (Sen, 1999). The self-determination, i.e. the power of the person of self-organizing consists in the freedom to achieve the necessary functionings to determine one's self (Sen, 1995).

To sum it up, capability is the freedom to live lives: Sen uses the term "agency" in the ancient and noble sense of person who acts, realizing changes and whose results can be judged on the basis of his/her goals and values – and not on the basis of his/her performances (Sen, 1999).

Freedom is precious because it offers more opportunities to achieve one's goals, i.e. what one's gives value to. For instance, to increase the faculty of choosing the lifestyle people desire and to realize the goals people want to boost. In this regard, freedom refers to the capacity to achieve what has value for people, independent from the process which leads to this achievement (Sen, 2010).

Understanding the role of agent is essential to recognize the individuals as responsible persons: a person is not only well or bad, but he/she can act or refuse to act, or he/she can choose to act in a certain way instead of another. Women and men have to take the responsibility of their actions and omissions,

because to take or don't take an action makes the difference and they have to take this difference into account (Sen, 1999).

Agency is the personal power of self-empowerment, the central capability, the ability to act following one's values (Deneulin, 2009). This power underlines the autonomy of the individual, which is an essential characteristic of each practitioner.

Referring to central capabilities, Table 4 lists Nussbaum's fundamental capabilities in response to the question: what does a life worthy of human dignity require?

Table 4. The core capabilities according to Martha Nussbaum

| |
|---|
| <p>Life. Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living.</p> <p>Bodily Health. Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.</p> <p>Bodily Integrity. Being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.</p> <p>Senses, Imagination, and Thought. Being able to use the senses, to imagine, think, and reason—and to do these things in a "truly human" way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use imagination and thought in connection with experiencing and producing works and events of one's own choice, religious, literary, musical, and so forth. Being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise. Being able to have pleasurable experiences and to avoid non-beneficial pain.</p> <p>Emotions. Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)</p> <p>Practical Reason. Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience and religious observance.)</p> <p>Affiliation.</p> <p>-Being able to live with and toward others, to recognize and show concern for other humans, to engage in various forms of social interaction; to be able to imagine the situation of another. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.)</p> |
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-Having the social bases of self-respect and non-humiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of non-discrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin and species.

Other Species. Being able to live with concern for and in relation to animals, plants, and the world of nature.

Play. Being able to laugh, to play, to enjoy recreational activities.

Control over one's Environment.

-Political. Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association.

-Material. Being able to hold property (both land and movable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure. In work, being able to work as a human, exercising practical reason and entering into meaningful relationships of mutual recognition with other workers.

(Source: Nussbaum M. (2011), p. 33-34.)

The Human Development Index of the United Nations⁶ assess that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. At the same time, the Human Development paradigm⁷ doesn't constitute an alternative to the predominant paradigm of Human Capital, but its possible completion (Nussbaum, 2010): although the notion of human capital is very useful, it is important to have a broader vision of the individuals too. There's a need to go beyond the notion of human capital, after having acknowledged all its relevance and importance. The extension needed is additive and inclusive; it is not in any sense alternative to the idea of human capital (Sen, 1999). There is a connection between entrepreneurship, heutagogy (see chapter 1) and the capability approach: the connection is the personal autonomy, the capacity of self-directing one's own learning as well as one's own occupation. The capability approach aims at empowering people to be able to self-direct their lives: as job constitutes a big part of everybody's life, this self-direction refers to occupations too. Very important in this sense is the distinction between entrepreneurship and intrapreneurship (Pinchot, 1984): the latter suits in particular with the capability approach because intrapreneurship doesn't necessarily

⁶ <http://hdr.undp.org/en/content/human-development-index-hdi>

⁷ <https://hd-ca.org/>

means starting a company, but only to act as if one would run a company; the highlight are ideas turned into action within companies, without leaving the company.

From a capability approach point of view, entrepreneurship is not only a production factor, or a means to an end, as is often considered by economists, but also an end in itself. Entrepreneurship can be a human functioning and can contribute towards expanding the set of human capabilities through being both a resource and a process (Gries and Naudé, 2011).

Researches on adult education suggests that adults learn from own life contexts – non-formal and informal learning (Werquin, 2010) – through reflection on experience: this is the epistemological primacy of the experience (Dewey, 1938). Adults learn incidentally, without being aware of their learning process. This experiential background is a treasure of unspoken knowledges and know-how or, with other words, the internal capacities of the individuals (Nussbaum, 2011) where they can get the necessary resources to face new professional and life challenges from. The problem is often the unawareness of these internal capacities, which need to be brought to light through a reflective process.

Here arises the potential of the capability approach, whereas the self-determination of the practitioner occurs through a reflection process (Schön, 1975). More than on technical knowledge, innovation lies on autonomy, and reflection models in adult education provide new keys of the self and of the world (Costa 2017): *Enjoying a greater freedom stimulates in the individual the capacity of autonomy and responsibility, puts people in condition of greater influence over the world, all these fundamental aspects for their development. A worker who is able to act and realize his/her changes in an autonomous and responsible way by pursuing his/her goals and in accordance with his/her professional and personal values is an agency-gifted person, capable of acting within the situations and letting perceive his/her presence. (p. 155)*

The possibility of becoming what people could be but they didn't succeed to: the power to decide what to learn in order to follow one's vocation that life obstacles prevent from doing (Mezirow, 1991): here lies



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the capability, the possibility of letting emerge his/her own aspirations, i.e. the freedom to choose the way of living according to one's own values (Sen, 1999). This process of expansion of adult's substantive freedoms is a qualitative step forward: the potential of the empowered person knows the possibility of realizing. Capability lies in this too: the possibility of realizing his/her own talents, of cultivating and taking care of the self, of developing the human being for his/her and other's sake.

Bibliography

- Corbel, C., Wheelahan, L., Forward, P., & Darwin, S. (2014). Building future capabilities for vocational education: Why high-level teaching qualifications matter for TAFE teachers. Australian Education Union, Southbank.
- Costa, M., & Strano, A. (2017). Imprenditività come leva per il nuovo lavoro. *FORMAZIONE & INSEGNAMENTO. Rivista internazionale di Scienze dell'educazione e della formazione*, 15(1), 399-412.
- Costa, M. (2016). Capacitare l'innovazione. La formatività dell'agire lavorativo. Milano: Franco Angeli.
- DeJaeghere, J., & Baxter, A. (2014). Entrepreneurship education for youth in sub-Saharan Africa: A capabilities approach as an alternative framework to neoliberalism's individualizing risks. *Progress in Development Studies*, 14(1), 61-76.
- Dawe, S., & Guthrie, H. (2004). Overview. In S. Dawe (Ed.), *Vocational education and training and innovation. Research findings* (pp. 1019). Adelaide: NCVER.
- Deneulin, S. (2009). An introduction to the human development and capability approach: Freedom and agency. London: Earthscan.
- Dewey, J. (1938). *Experience and Education*. New York: Simon & Schuster.
- Goerne, A. (2010). The capability approach in social policy analysis. Yet another concept?, Working Papers on the Reconciliation of Work and Welfare in Europe, Edinburgh: RECOWOE Publication, Dissemination and Dialogue Centre.
- Gries, T., & Naudé, W. (2011). Entrepreneurship and human development: A capability approach. *Journal of Public Economics*, 95, 216-224.



- Longworth, N. (2003). *Lifelong learning in action: Transforming education in the 21st century*. London (England) and Sterling (VA): Kogan Page Limited.
- Margiotta, U. (2014). Competenze, capacitazione e formazione: dopo il welfare. In G. Alessandrini (Ed.), *La Pedagogia di Martha Nussbaum* (pp. 3963). Milano: Franco Angeli.
- Mezirow, J. (1991). *Transformative Dimensions of Adult Learning*. San Francisco: Jossey-Bass.
- Nussbaum, M. (2010). *Not for profit: why democracy needs the humanities*. Princeton, N.J: Princeton University Press.
- Nussbaum, M. (2011). *Creating Capabilities. The Human Development Approach*. Cambridge, Massachussets and London, England: Harward University Press.
- Pinchot, G. 1984. Who is the Intrapreneur? In: *Intrapreneuring: Why You Don't Have to Leave the Corporation to Become an Entrepreneur*. New York: Harper & Row. pp. 28 – 48
- Robeyns, I. (2011). The capability approach. *Handbook of economics and ethics*, edited by Pell J. and van Staveren I. Cheltenham (UK) and Northampton, MA (USA): Edward Elgar, 39-46.
- Schön, D. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.
- Sen, A. (1995). *Inequality Reexamined*. New York Oxford New York: Russell Sage Foundation Clarendon Press Oxford University Press.
- Sen, A. (1999). *Development as Freedom*. New York: Oxford University Press.
- Sen, A. (2010). *The Idea of Justice*. London: Penguin.
- Walker, M. (2012). Introduction. *Journal of Human Development and Capabilities*, 13(3), 331334.
- Werquin, P. (2010) *Recognising Non-Formal and Informal Learning. Outcomes, Policies and Practices*. Paris: OECD.
- Wheelahan, L., & Moodie, G. (2011). *Rethinking skills in vocational education and training: from competencies to capabilities*. NSW Department of Education and Communities.
- Wilson, N., & Martin, L. (2015). Entrepreneurial opportunities for all. *Entrepreneurship and innovation*, 16(3), 159169.

3. Peer education

The main priority of the REACT project addresses Social Inclusion and Enhancing access to training and qualifications for all, giving in this way the opportunity to low skilled adults to reinforce the entrepreneurship skill that is useful to increase their quality of life, including the research of a job and their re-inclusion in society. Nonetheless, as adult training centres need some new educational tools in order to grant this target group the benefits they need to be better integrated in the society and in their work placement, the REACT project intends to enhance the participation in the society of low skilled adults by providing them with innovative tools and useful methods, such as *Peer Education*, able to reinforce entrepreneurship skill seen as a competence that embraces all the spheres of life.

Peer Education is the process whereby trained and motivated peers develop organized learning activities with their fellow peers. These activities occur over a particular period of time and aim at developing peers' knowledge, attitudes, beliefs or behaviours, enabling them to develop more competencies in their life. The *Peer Training* also aims to develop personal competencies important in work-related situations.

Through *Peer Education*, individuals who face difficult situations that put them furthest from the labour market, who experience difficulties in learning and/or employment or who lack appropriate personal skills, will have the active support of peers through a series of structured sessions based on a methodology of support for those in need, which has the potential to extend their access to training and employment.

Peer Education is an educational method and a learning process perceived as support methodology for the promotion of competencies in disadvantaged groups of adults. *Peer Education* is also a way to give disadvantaged people the possibility to take part in activities having a positive influence on their personal



and professional development, by learning from their peers in a climate of trust, friendship and cooperation.

Peer Education is used to promote changes in knowledge, attitudes and behaviour at individual level through structured learning situations that are planned and implemented by peer educators.

In comparison with *Peer Education*, *Peer Mentoring* can be defined as a form of unstructured and unconditional support, based on a set of improvised activities, and mainly focused on the support provided by a mentor/peer through a longstanding positive and confidential relationship with a mentee.

Peer Mentoring is still a developing concept, particularly *Peer Education* and - despite its usefulness - it is still very difficult to find any commercially available suitable training programme or materials to use from either within Europe or beyond which would more effectively and economically be adaptable to the disadvantaged target groups. *Peer Mentoring* and *Peer Support* are widely recognized and used in the USA, but even there *Peer Education* is not a commonly known or used methodology. It is certainly an entire new methodology in adult education. Many training courses for *Peer Mentoring* or *Peer Education* are only a brief introduction - sometimes as little as two hours - and have no quality assurance from external assessment. Because of the lack of dedicated courses with a focus on *Peer Education* and *Peer Mentoring*, Quarter Mediation coordinated the development - under the Leonardo da Vinci Transfer of Innovation Project "The 8 solutions for fighting early school leaving in VET" (2012-1-NL1-LEO05-08728) – of an appropriate high quality, externally assessed and fit for purpose training model using fully evaluated and tested courses able to ensure that adult training organizations will be in a position to develop safe, structured and supervised *Peer Support* programmes.

The *Peer Training* courses developed during the Leonardo da Vinci Transfer of Innovation Project "The 8 solutions for fighting early school leaving in VET" are flexible programmes which can be easily adapted to

suit the diverse training needs of the target group from different countries. It is also important that a learner centred approach needs to be employed throughout the planning and implementation of the training course. By delivering appropriate training activities both in *Peer Mentoring* and *Peer Education*, mentors, peer educators and the organizations they work with will be in a position to develop safe, structured and supervised programmes, whether using a *Peer Mentoring* or *Peer Education* methodology.

The mentioned courses can be adapted to meet the needs of the new target groups taking key elements such as communications, listening, confidentiality, safety and boundaries, which are all critical to a successful *Peer Support* relationship and then incorporate elements of *Peer Education* into the course. The facilitator/trainer will guide the participants in how to identify appropriate games and exercises to enhance the motivation and personal development skills needs of the target groups such as communications, self-esteem, team building, problem solving, time keeping.

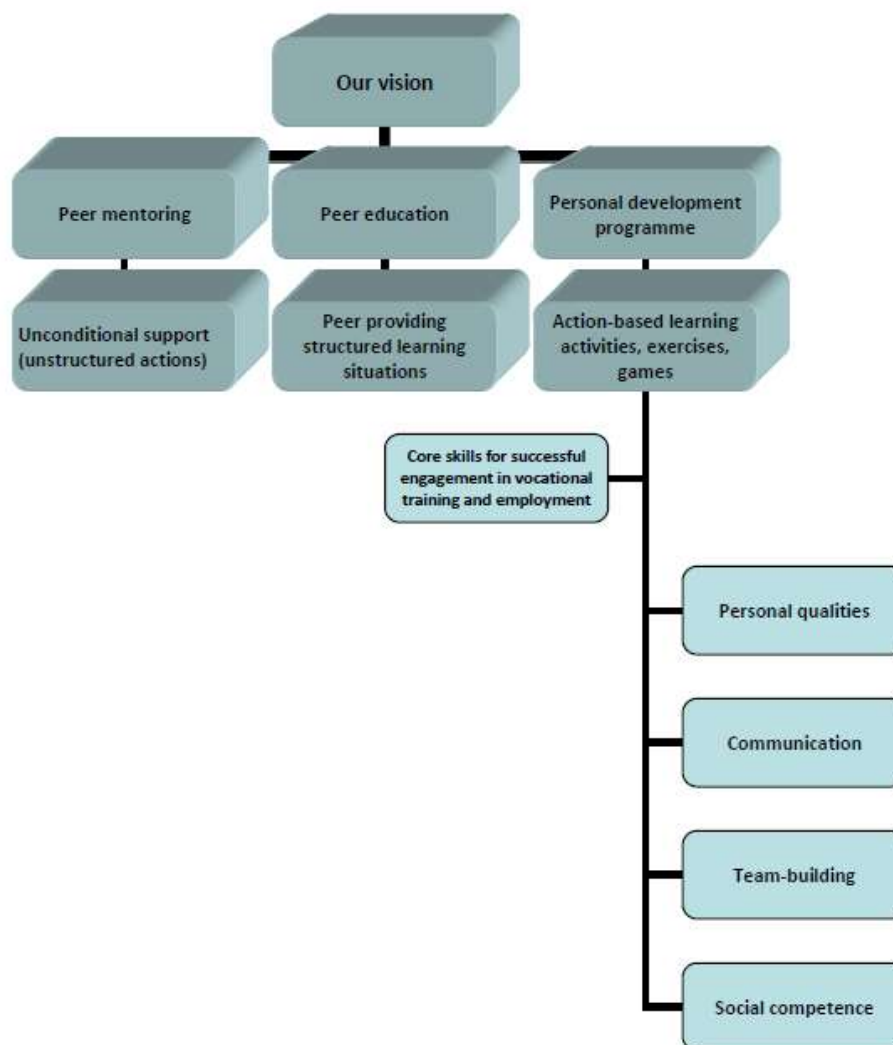
The objectives of a *Peer Education* course are focused on helping participants understand the nature and purpose of *Peer Education*; inform the main purpose of the peer education training course, which is to build the capacity of peer educators to deliver peer education sessions; inform the expected outcome of the *Peer Education* training course, which is the development of confident, competent peer educators with skills that enable them to implement a personal development programme for peers from socially disadvantaged groups, so that they have more success enrolling in vocational training, work experiences or employment placements.

It is important to highlight that a peer educator should not work alone, or have the sole responsibility for all *Peer Education* sessions. A peer educator should also be aware that *Peer Education* is not a solution to every problem, and that sometimes it can be better to use other approaches.



The objectives of a *Peer Education* intervention, the needs of the target group and the settings in which it will take place are all elements to be considered when evaluating whether *Peer Education* is appropriate. This should be discussed with the specialized personnel responsible for the implementation of the *Peer Education* programme within the adult education organisation.

Figure 1. Peer Mentoring, Peer Education and Personal Development Programme



The aim of peer educators is not to deliver a set of pre-established sessions, but to devise sessions that are based upon the participants' individual needs. In this respect, the most important point is that peer

educators should enable the participants to discover their personal needs; recognize the message underpinning the activities they have practised; gain self-awareness; develop their communication and team-building skills and social competencies; move towards a more autonomous, healthy and functional way of being by developing the entrepreneurial way of thinking and the entrepreneurial initiative.

After the completion of a *Peer Education* training course, a peer educator should be able to plan and provide sessions concerned with promoting competencies included in a personal development programme: namely personal qualities, communication skills, team building, entrepreneurial and social competencies. All these are considered to be important for successful engagement in vocational training, work experiences and employment.

In order to implement *Peer Education* in adult education organisations, peer educators should help their peers with social, educational, emotional and/or vocational concerns. This process can be organised in one of the following settings: organized sessions with individuals attending a secondary school, vocational training centre, adult education centre, college or university where peer educators use active techniques such as games, role plays and group discussions to practise some of the skills necessary for future work placement experiences and successful employment placements; group discussions, where peer educators may invite their peers to talk about different types of thinking, attitudes and behaviour that could put their future work experience or employment at risk; helping individuals to look for the information and resources relevant for their personal development.

The rationale behind *Peer Education* is that peers are a more trusted and credible source of information, since they share similar experiences and social norms and are therefore better placed to provide relevant, meaningful, explicit and honest information.



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Bibliography:

- [1] C. Stefan, C. Stefan, D. Townsend Jones, from FEIGHT Consortium coordinated by Quarter Mediation, *Trainers' training programme "The eight solution for fighting early school leaving in VET."* 2013.
- [2] C. Stefan, C. Stefan, D. Townsend Jones, from FEIGHT Consortium coordinated by Quarter Mediation, *Peer Educator Training Course. Resource Handbook "The eight solution for fighting early school leaving in VET."* 2013.

4. Gaming in entrepreneurial education

Key factors are putting new pressure on the western economies, especially in EU: an ageing population, shrinking labour force, increasing competition by emerging countries offering cheaper labour. However, entrepreneurial education is still relatively immature and rarely adequately addressed at strategic level by universities or national policies. The issue involves both the contents and the teaching methodologies and tools, since problem-solving and multidisciplinary approaches are important for the development of entrepreneurial attributes of students in scientific and technical fields.⁸ In light of this situation, fostering entrepreneurship could strongly benefit from an effective use of Serious Games, an emerging paradigm in Technology Enhanced Learning (TEL). Educational serious games use pedagogy to infuse instruction into the game play. Games are effective because the learning is practiced within the context.

Different authors (Neck and Greene, 2011; Carland and Carland, 2001) highlight the fact that the development of an entrepreneurial mindset requires methodological approaches that promote experiential learning. According to the Experiential Learning Theory (ELT) (Kolb, 1984), serious games could be a useful tool for building a learning space in which learners could test experiential learning paths. In fact, serious and simulation games have had a significant effect on classroom education as well as on training programmes (de Freitas, 2006), increasing the learner's motivation (Wouters, van Nimwegen, van Oostendorp and van der Spek, 2013) and enabling him to embark on engaging and challenging learning paths (La Guardia, Gentile, Dal Grande, Ottaviano and Allegra, 2014).

Good Serious Games challenge and involve players in compelling contexts. This can motivate learners and show the concrete relevance and application of topics and skills that may be difficult to explain in words

⁸ Final Report of the expert group: Entrepreneurship in higher education, especially within non-business studies. Available online at:
http://ec.europa.eu/enterprise/policies/sme/files/support_measures/training_education/entr_highed_en.pdf

(this is particularly true for entrepreneurship and soft skills). Moreover, Serious Games can be used as a lifelong learning tool, without time/space barriers, and as gyms where new knowledge and practices can be freely developed (Klopfer, Osterweil and Salen, 2009). Surveying e-learning experts (De Grove, Mechant and Van Looy, 2010) stress that Serious Games are perceived as de facto effective learning environments because games challenge and support players to approach, explore and overcome problems. Moreover, they offer players the capacity to try alternatives and experience the consequences. They also provide immediate feedback – which is efficient for procedural learning (Jarvis and de Freitas, 2009) – and assessment and allow for personalised learning. Furthermore, they place the learner in an active role, stimulating him to think critically and lend themselves to collective and social use. They challenge and support learners and implicitly motivate them, in particular for awareness raising.

Concerning serious games within the context of educational practice in entrepreneurship, these can be defined as computer-based learning simulations that engage players in realistic activities designed to increase knowledge, improve skills, and enable positive learning outcomes (Prensky, 2001). Despite having an entertainment component, these simulations are designed to promote learning, primarily by leveraging a narrative or story centred in an entrepreneurial setting. Serious games also differ from entertainment games as they focus on problem-solving tasks and incorporate the imperfect nature of interactions with the real world (Susi, Johannesson, & Backlund, 2007), an especially useful concept in approaching entrepreneurial opportunities. Previous empirical research on the use of serious games in entrepreneurship education suggests that learners perceive simulation gameplay as a useful education exercise that extends their knowledge about entrepreneurial decision variables (Huebscher & Lendner, 2010). Serious games have some definable characteristics as highlighted by Prensky (2001), which includes fun, play, rules, goals, interactivity, outcomes or feedback, win states, conflict, and problem solving. Games also require a narrative and adapt as a player moves through the game. When using serious gaming

to simulate entrepreneurship, important disciplinary questions arise, especially when considering Fayolle et al.'s (2016) first didactic challenge. The simulation and gaming literature provides a theoretical framework for anchoring these considerations. This framework suggests that serious games are often evaluated using three criteria: fidelity, verification, and validity (Feinstein & Cannon, 2002). These are explained in Table 5.

Table 5. Criteria for reviewing effective gaming design

| Criteria | Description | Relevant factors for entrepreneurship |
|--|---|--|
| Fidelity | Amount of realism present in the game design | Level of reality present in the game. Is this game simulating a facet of the entrepreneurial process? Balance of reality and challenge appropriateness for target learner. Can learners understand the boundaries enough to perceive inherent challenges? Fun and potential for engagement |
| Verification | Quality of the game's technical design | Technical reliability, absence of technical or user glitches Interface design, intuitiveness, and usability Level of instructor training and involvement for implementation |
| Validation | Game's coherence and alignment with the simulated reality | Existence of an underlying narrative. Does the learner impact this narrative? Underlying theory guiding the narrative. Competence and skills focus of the game design. What should entrepreneurs get out of playing a simulation? |
| (Source: Fox, Pittaway and Uzuegbunam, 2018) | | |

Games, as a pedagogic approach, seem to align well with the socio-constructivist educational paradigm (Gibb, 1987, 2002). They respect the learner's need for self-determination, apply the concept of "flow" to ensure pleasure and engagement, can support cooperative learning (Hattie, 2009) and provide timely feedback to the learner. An entrepreneurial learning framework that is likewise based on similar philosophies about learning, therefore, seems a good basis on which to evaluate existing practice.



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Active learning or learning by doing is widely perceived to be a key way in which entrepreneurs develop understanding, learning as they go while working on the job (Jones, Macpherson, & Woollard, 2008). In serious gaming, Low et al. (1994) point out, “in a field where much learning occurs through doing, games and simulations that provide realistic entrepreneurial experiences have the potential to be of enormous benefit” (p. 384). Games, by definition, are experiential and engage players in interaction, problem-solving, choices, and narratives. As such, they can be considered to model learning-by-doing in the entrepreneurial domain. Learning-by-doing is considered to lead to the acquisition of a “stock of experience” (Cope, 2005). This also helps contribute to one’s entrepreneurial identity through personal and social emergence (Rae, 2005). Stock of experience and “entrepreneurial preparedness” are placeholders for modification of existing thoughts and strategies and can also represent new cognitive processes that arise as outcomes of learning (Chen, Yao, & Kotha, 2009). Cope (2005) links this stock of knowledge to “entrepreneurial preparedness” (Politis, 2005). The relationship establishes that prior experiences can have an impact on individual’s preparedness to take entrepreneurial actions. Within the gaming context, this relationship demonstrates that repetitive practice through well-designed serious games could help prepare players for future entrepreneurial acts. It also illustrates that game designers need to be cognizant of the existing prior experience of players. Experience alone though has been recognized as insufficient (Cope & Watts, 2000). Other forms of learning have been shown to play an important role in the entrepreneurial learning process. These forms include: reflective learning (Cope, 2005); situated learning (Hamilton, 2004), learning through crises events (Cope, 2011), and vicarious learning (Baron & Henry, 2010). Each form has important ramifications for assessing serious games in the subject, as discussed in Table 6.

Table 6. Criteria for reviewing entrepreneurial learning.

| Type of learning | Relevant features in game environments |
|--|---|
| Active learning | Engaging learning by doing, by making decisions, solving problems, acting “as if” and implementing choices within the game context |
| Entrepreneurial preparedness | Extent to which the game draws on and adds to the learner’s existing stock of experience |
| Reflective learning | Level of reflective practice built into the game and the nature and forms of reflection encouraged |
| Situated learning | Whether the game places learners within situational contexts via interaction with nonplayable characters, the computer, and other players |
| Vicarious learning | Level and involvement of others in the learning process including peers, mentors, and instructors |
| Affective learning | Evidence of emotional engagement with the game, likely level of absorption, emotional simulation, and other emotional outcomes |
| (Source: Fox, Pittaway and Uzuegbunam, 2018) | |

Games do provide much value in the education process. They allow learners to engage in experiential learning that is fun and engaging, and in doing so, they provide an excellent support mechanism for adult education in the subject. Well-designed games seem to be of value in allowing learners to learn-by-doing (Low et al., 1994). Games place learners in interactive virtual environments that can be immersive, and the consequential serious play that follows allows students to test out decisions and build entrepreneurial preparedness in a safe and risk-free environment. Games have strong problem-solving aspects, and the outcomes feedback loops within these problem-solving situations do encourage forms of reflective learning. They also engage learners in narratives providing insights into specified entrepreneurial contexts (mainly small business management) and do so in a dynamic way, allowing learners to navigate through virtual situations, decisions, and choices. The gaming landscape also continues to progress with many more products on the market covering different entrepreneurial contexts and technological



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advancements, such as virtual reality and artificial intelligence offering many opportunities for improvements in technological and learning sophistication.

While the current gaming landscape could improve, games provide a safe and risk-free pedagogy for learners to enhance their entrepreneurial preparedness before they launch or join a new venture.

Bibliography

- Baron, R. A., & Henry, R. A. (2010). How entrepreneurs acquire the capacity to excel: Insights from research on expert performance. *Strategic Entrepreneurship Journal*, 4, 49–65.
- Bellotti, F., Berta, R., De Gloria, A., Lavagnino, E., Dagnino, F., Ott, M., Romero, M., Usart, M., Mayer, I. (2012). Designing a Course for Stimulating Entrepreneurship in Higher Education through Serious Games. *Procedia Computer Science* 15, 174 – 186. Amsterdam, The Netherlands: Elsevier.
- Carland, J. C. & Carland, J. W. (2001). Entrepreneurship Education: an Integrated Approach Using an Experiential Learning Paradigm. In: R. H Brockhaus, G. E. Hills, H. Klandt, & H. P. Welsch, (Eds.) *Entrepreneurship Education. A global view*. Burlington: Ashgate., 94-103.
- Chen, X.-P., Yao, X., & Kotha, S. (2009). Entrepreneur passion and preparedness in business plan presentations: A persuasion analysis of venture capitalists' funding decisions. *Academy of Management Journal*, 52(1), 199–214.
- Cope, J., & Watts, G. (2000). Learning by doing: An exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behaviour and Research*, 6(3), 104–124.
- Cope, J. (2005). Toward a dynamic learning perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 29(4), 373–397.
- Cope, J. (2011). Entrepreneurial learning from failure: An interpretative phenomenological analysis. *Journal of Business Venturing*, 26(6), 604–623.
- de Freitas, S., (2006). Using games and simulations for supporting learning. *Learning, Media and Technology Special Issue on Gaming*, 31, 343-358.



- De Grove, F., Mechant, P., Van Looy, J. (2010 September) Uncharted waters?: Exploring experts' opinions on the opportunities and limitations of serious games for foreign language learning. In Proc.s 3rd Int.l Conf. on Fun and Games. Leuven, Belgium.
- Fayolle, A., Verzat, C., & Wapshott, R. (2016). In quest of legitimacy: The theoretical and methodological foundations of entrepreneurship education research. *International Small Business Journal*, 34(7), 895–904.
- Feinstein, A. H., & Cannon, H. M. (2002). Constructs of simulation evaluation. *Simulation and Gaming*, 33(4), 425–440.
- Fox, J., Pittaway, L. and Uzuegbunam, I. (2018). *Simulations in Entrepreneurship Education: Serious Games and Learning Through Play*. In: *Entrepreneurship Education and Pedagogy 2018*, Vol. 1(1) 61–89. London: Sage.
- Gibb, A. (1987). Designing effective programmes for encouraging the business start-up process: Lessons from UK experience. *Journal of European Industrial Training*, 11(4), 24–32.
- Gibb, A. (2002). In pursuit of a new enterprise and entrepreneurship paradigm for learning: Creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Reviews*, 4(3), 213–232.
- Hamilton, E. (2004 November). Socially situated entrepreneurial learning in family business. *Proceedings of the 27th ISBA National Small Firms Policy and Research Conference*, Newcastle.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London, England: Routledge.
- Huebscher, J., & Lendner, C. (2010). Effects of entrepreneurship simulation game seminars on entrepreneurs' and students' learning. *Journal of Small Business and Entrepreneurship*, 23(4), 543–554.
- Jarvis, S., de Freitas, S. (2009). Evaluation of a Serious Game to support Triage Training: In-game Feedback and its effect on Learning Transfer. *Proceedings of 2009 IEEE Conference in Games and Virtual Worlds for Serious Applications*
- Jones, O., Macpherson, A., & Woollard, D. (2008). Entrepreneurial ventures in Higher Education: Analysing organisational growth. *International Small Business Journal*, 26(6), 683–708.
- Klopfer, E., Osterweil, S. and Salen, K. (2009). *Moving Learning Games Forward, Obstacles Opportunities & Openness, The Education Arcade*, Massachusetts Institute of Techn.
http://education.mit.edu/papers/MovingLearningGamesForward_EdArcade.pdf.



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Reinforcing Entrepreneurship in
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- Kolb, D.A. (1984): *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- La Guardia, D., Gentile, M., Dal Grande, V., Ottaviano, S. and Allegra, M. (2014). *A Game Based Learning Model for Entrepreneurship Education*. *Procedia - Social and Behavioral Sciences* 141, 195 – 199. Amsterdam, The Netherlands: Elsevier.
- Low, M., Venkataraman, S., & Srivatsan, V. (1994). Developing an entrepreneurship game for teaching and research. *Simulation and Gaming*, 25(3), 383–401.
- Neck, H. M., and P. Greene. (2011). Entrepreneurship education: Known worlds and new frontiers. *Journal of Small Business Management* 49(1), 55–70.
- Politis, D. (2005). The process of entrepreneurial learning: A conceptual framework. *Entrepreneurship Theory and Practice*, 29(4), 399–424.
- Prensky, M. (2001). Fun play and games: What makes games engaging. *Digital GameBased Learning*, 5, 1–5.
- Rae, D. (2005). Entrepreneurial learning: A narrative-based conceptual model. *Journal of Small Business and Enterprise Development*, 12(3), 323–335.
- Susi, T., Johannesson, M., & Backlund, P. (2007). *Serious games: An overview*. Skovde, Sweden: University of Skovde.
- Wouters, P., van Nimwegen, C., van Oostendorp, H., & van der Spek, E. D. (2013). A Meta-Analysis of the Cognitive and Motivational Effects of Serious Games. *Journal of Educational Psychology*. Advance online publication.



Chapter 5 Theoretical background to understand the collection of the best practices

The aim of this chapter is to provide the reader with a basic theoretical understanding of the terms used to classify the good practices in entrepreneurial education. The good practices were reviewed with a form that has been designed according to research on the fields of education and entrepreneurship. Each section of this chapter gives basic information about the fields of the form. Firstly, an educational theory of curriculum is needed for entrepreneurial education (Bécharde & Grégoire, 2005; Carrier, 2005; Kyrö, 2015). This intellectual output took the educational theory of constructive alignment (Biggs & Tang, 2011) as the starting point to understand the training course in entrepreneurial education. This is because the theory of constructive alignment is indicated by both literatures on entrepreneurial education (Macht & Ball, 2016) and quality assurance agencies such as the UK QAA (2018) as a strong theory to deliver entrepreneurial education. However, both Competence Based Education (Castoldi, 2010; Koenen, Dochy, & Berghmans, 2015; Sturing, Biemans, Mulder, & De Bruijn, 2011) and constructive alignment are based on constructivism and proclaim a tight relationship between the learning outcomes, the teaching and learning activities and the assessment practices (Morselli, 2018; Robinson, Neergaard, Tanggaard, & Krueger, 2016).

Hence the learning outcomes, the teaching and learning activities (including teaching methods) and the assessment practices are foundational to understand the good practices from the **educational point of view**. From the **entrepreneurial point of view**, the elements that help understand a good practice are: the type of education and type of approach to entrepreneurship. By combining these two dimensions, education and entrepreneurship, the aim is to determine which educational practices works best for which type of entrepreneurship education. Eventually, the EntreComp and DigiComp frameworks are

used as summarizing parameters, but also as a reference de facto for any initiative aiming to foster entrepreneurial or digital capacity of the European citizens.

The fields of the good practices that are reviewed are:

1. Type of entrepreneurial education
2. Objective (or approach to entrepreneurial education)
3. Learning outcomes
4. Teaching and learning activities – including teaching methods
5. Assessment practices
6. EntreComp Framework
7. DigiComp Framework

Type of entrepreneurial education

In the literature, there is not consensus on the definitions in use (Lackeus, 2015). This document follows nevertheless the definitions of the recently published QAA (2018) concerning the terms entrepreneurial education, enterprise education and entrepreneurship education.

Entrepreneurial Education is a ‘catch all’ term that encompasses both Enterprise and Entrepreneurship and may be used when discussing the combination of both.

Enterprise Education is the process of developing learners in a manner that provides them with an enhanced capacity to generate ideas and the behaviours, attributes and competencies to make them happen. It extends beyond knowledge acquisition to a wide range of emotional, intellectual, social, cultural and practical behaviours, attributes and competences and is appropriate for all students.



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Entrepreneurship Education builds upon the enterprising competencies of trainees who are capable of identifying opportunities and developing ventures, through becoming self-employed, setting up new businesses or developing and growing part of an existing venture.

Objective (or approach to entrepreneurial education)

There are three possible goals in entrepreneurship education which originate three approaches to its teaching: 'about', 'for', 'through' (Gibb, 2002; Hytti & O'Gorman, 2004; Pittaway & Edwards, 2012).

- 1) Developing a broad understanding of entrepreneurship, the role of entrepreneurs in modern economies and societies (this 'about' approach to entrepreneurship is mainly lecture based).
Similarly an **'about' approach to enterprise** will focus on citizenship, employability, inclusion and active participation.
- 2) Teaching trainees the skills on how to start and manage a business. This **'for' approach to entrepreneurship** and the acquisition of skills can be achieved with knowledge or experience.
Similarly a **'for' approach to enterprise** will endow learners with the skills useful in the workplace.
- 3) Learning to become entrepreneurial, since individuals need to take responsibility for their learning careers and life. There is also a need for the individuals, as part of the workforce, to play an increasingly active role in creating value in existing organizations and professions. This **'through' approach to entrepreneurship** calls for experiential learning methods, for competence development and for reflection on own skills in a lifelong learning perspective. Similarly a **'through' approach to enterprise** will develop a set of knowledge skills and attitudes useful in many contexts through experiential methods with the goal of becoming enterprising (B. Jones & Iredale, 2010).

Learning outcomes

The Bologna process⁹ in 1999 has determined a switch to outcome based approaches (Biggs & Tang, 2011): the European Qualification Framework is an example¹⁰. Learning outcomes are statements of what learner knows, understands and is able to do on completion of a learning process, which can be defined in terms of knowledge, skills and attitudes (European Commission, 2008). Hence this frame describes what the learner is able to do or knows upon completion of the course with verbs at the infinitive form. Rather than using knowledge, skills and attitudes, we prefer to use Bigg's SOLO Taxonomy¹¹ (Biggs & Tang, 2011) because it allows to summarize better the learning outcomes with verbs such as explain, reflect, apply, evaluate; in addition, it better connects the learning outcomes with the teaching and learning activities.

Teaching and learning activities

This frame summarizes what the learners do during the course in term of activities and contents. These are possible example taken from Biggs and Tang (2011, p. 135):

- managed by the teacher with little student participation: lecturing, tutorials;
- teacher managed with some student participation: setting assigned readings or textbooks, laboratories, concept mapping, minute papers, teaching study skills in context (these are explained below);
- teacher managed with active student participation: peer teaching, peer-assisted study sessions (PASS), interactive work in class, bulletin boards, various group work;
- student managed: collaborative learning groups, chat rooms;

⁹ http://ec.europa.eu/education/policy/higher-education/bologna-process_en

¹⁰ <https://ec.europa.eu/ploteus/en/content/descriptors-page>

¹¹ <http://www.johnbiggs.com.au/academic/solo-taxonomy/>

- individually managed: reading, searching in the web, soliciting advice, listening to a lecture and strategic management of these activities using metacognitive and study skills.

The main teaching methods identified are: lecture, case study, workshop, tutoring, coaching, group work, project work, debate, experiential learning (learning through direct experience), peer-tutoring and peer-learning.

Assessment practices

Assessment is considered essential in the theory of curriculum as it is the assessment, not the course program, which drives learning (European Commission, 2012). During a period of instruction, formative assessment (also known as **‘for’** learning) uses the information obtained to encourage the student’s learning. Educators and trainees need to know how learning is progressing (Biggs & Tang, 2011). Effective feedback is the most powerful tool to turn an assessment into a formative assessment. Self-assessment is another important assessment strategy: to become good learners in a lifelong learning perspective, students need to learn to keep up with the latest discoveries in the field and perform a variety of actions to promote their continuous improvement. Peer assessment can be defined as the process where groups of learners rate their peers.

At the end of an instruction period, the summative assessment (also called **‘of’** learning) summarizes the student’s learning (Biggs & Tang, 2011). The outcomes are used to grade the learners, the aim being to determine how well learners have acquired what they were expected to learn. It can be internal or external (for example for later certification of competence). The use of rubric allows educators to have a coherence between levels of performance and criteria.



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However, the most important form of evaluation in entrepreneurial education is the assessment ‘as’ learning (Draycott, Rae, & Vause, 2011). In this regard, Penaluna and Penaluna (2015) suggest a switch from pedagogy, where the educator defines the learning and sets the tasks (teacher-centred and teacher oriented), to andragogy, which is more learner-centred. Finally, the further step is heutagogy, a student-determined objective setting that is developed as a result of being opportunity aware (Costa, 2016). Self-direction increases motivation and can be used to demonstrate self-reliance and the ability to spot opportunities (C. Jones, Matlay, Penaluna, & Penaluna, 2014). Hence, ‘as’ learning form is the most radical form of assessment and the most characterizing of entrepreneurial education (Draycott et al., 2011). Students take the lead of their learning and assessment processes; they are responsible for setting their own objectives, monitoring their progress and reflect on their performance. This type of heutagogical assessment is thus essential to develop entrepreneurial education according to a capability approach (Costa, 2016)

The EntreComp framework

The EntreComp framework¹² (Bacigalupo, Kampylis, Punie, & Brande, 2016) proposes a shared definition of entrepreneurship as a competence, with the aim to raise consensus among all stakeholders and to establish a bridge between the worlds of education and work. Developed through a mixed-methods approach, the EntreComp framework is set to become a reference de facto for any initiative aiming to foster entrepreneurial capacity of European citizens. It consists of three interrelated and interconnected competence areas: ideas and opportunities; resources and into action. Each area is made up of five competences which, together, constitute the building blocks of entrepreneurship as a competence. The

¹² <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/entrecomp-entrepreneurship-competence-framework>

framework develops the 15 competences along an eight-level progression model and proposes a comprehensive list of 442 learning outcomes. The framework can be used as a basis for the development of curricula and learning activities, fostering entrepreneurship as a competence. Also, it can be used for the definition of parameters to assess learners' and citizens' entrepreneurial competences.

The Digicomp Framework

The European Digital Competence Framework for Citizens, also known as DigiComp, offers a tool to improve citizens' digital competence. DigiComp was first published in 2013 and has become a reference for many digital competence initiatives at both European and Member State levels. This document introduces DigiComp¹³ 2.0. It constitutes phase 1 of the update of the framework which focuses on the conceptual reference model, new vocabulary and streamlined descriptors. The current document also gives examples of how DigiComp is used at the European, national and regional levels. DigiComp 2.0 identifies the key components of digital competence in 5 areas: information and data literacy; communication and collaboration; digital content creation; safety and problem solving.

In the next chapter the concepts illustrated above are applied to the analysis of the good practices in entrepreneurial education.

Bibliography

- Bacigalupo, M., Kampylis, P., Punie, Y., & Brande, G. V. d. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Brussels: Publication Office of the European Union.
- Béchar, J.-P., & Grégoire, D. (2005). Understanding teaching models in entrepreneurship for higher education. In P. Kyrö & C. Carrier (Eds.), *The dynamics of learning entrepreneurship in a cross-*

¹³ <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-20-digital-competence-framework-citizens-update-phase-1-conceptual-reference-model>



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- cultural university context* (Vol. 2, pp. 104-134): University of Tampere, Faculty of Education, Research Center for Vocational and Professional Education.
- Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university. What the student does*. New York: McGraw-Hill.
- Carrier, C. (2005). Pedagogical challenges in entrepreneurship education. In P. Kyrö & C. Carrier (Eds.), *The dynamics of learning entrepreneurship in a cross-cultural university context* (Vol. 2, pp. 136-158): University of Tampere, Faculty of Education, Research Center for Vocational and Professional Education.
- Castoldi, M. (2010). *Didattica generale*. Milano: Mondadori Università.
- Costa, M. (2016). L'apprendimento permanente come leva generativa per un nuovo learnfare. *Formazione & Insegnamento*, XIV(2).
- Draycott, M. C., Rae, D., & Vause, K. (2011). The assessment of enterprise education in the secondary education sector: A new approach? *Education & Training*, 53(8-9), 673-691.
- European Commission. (2008). *The European Qualification Framework for lifelong learning*. Luxembourg: Publication Office of the European Union.
- European Commission. (2012). *Thematic Working Group 'Assessment of Key Competences'. Literature review, Glossary and examples*. Retrieved from http://ec.europa.eu/dgs/education_culture/repository/education/policy/school/doc/keyreview_en.pdf.
- Gibb, A. (2002). In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Reviews*, 4(3), 233-269.
- Hytti, U., & O'Gorman, C. (2004). What is "enterprise education"? An analysis of the objectives and methods of enterprise education programmes in four European countries. *Education+ Training*, 46(1), 11-23.
- Jones, B., & Iredale, N. (2010). Enterprise education as pedagogy. *Education+ Training*, 52(1), 7-19.
- Jones, C., Matlay, H., Penaluna, K., & Penaluna, A. (2014). Claiming the future of enterprise education. *Education+ Training*, 56(8/9), 764-775.
- Koenen, A.-K., Dochy, F., & Berghmans, I. (2015). A phenomenographic analysis of the implementation of competence-based education in higher education. *Teaching and Teacher Education*, 50, 1-12.



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- Kyrö, P. (2015). The conceptual contribution of education to research on entrepreneurship education. *Entrepreneurship & Regional Development*, 27(9-10), 599-618.
- Lackeus, M. (2015). Entrepreneurship in Education. What, why, when, how. Retrieved from http://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf
- Macht, S. A., & Ball, S. (2016). "Authentic Alignment"—a new framework of entrepreneurship education. *Education+ Training*, 58(9), 926-944.
- Morselli, D. (2018). Teaching a sense of initiative and entrepreneurship with constructive alignment in tertiary non-business contexts. *Education+ Training*.
- Penaluna, A., & Penaluna, K. (2015). Thematic paper on entrepreneurial education in practice. Part 2. Building motivation and competencies. Retrieved from <http://www.oecd.org/cfe/leed/Entrepreneurial-Education-Practice-pt2.pdf>
- Pittaway, L., & Edwards, C. (2012). Assessment: Examining practice in entrepreneurship education. *Education+ Training*, 54(8/9), 778-800.
- QAA. (2018). *Enterprise and Entrepreneurship Education: Guidance for UK Higher Education Providers*. Gloucester: Quality Assurance Agency Retrieved from www.qaa.ac.uk.
- Robinson, S., Neergaard, H., Tanggaard, L., & Krueger, N. F. (2016). New horizons in entrepreneurship education: From teacher-led to student-centered learning. *Education+ Training*, 58(7/8), 661-683.
- Sturing, L., Biemans, H. J., Mulder, M., & De Bruijn, E. (2011). The nature of study programmes in vocational education: evaluation of the model for comprehensive competence-based vocational education in the Netherlands. *Vocations and Learning*, 4(3), 191-210.

6. The best practices

This chapter gathers the good practices on entrepreneurship that the REACT project partners¹⁴ collected in Europe, North America and Canada. The classification below differentiates between entrepreneurship and enterprise education, between the ‘about’ ‘for’ and ‘through’ approaches. This chapter also differentiates the good practices related to gaming and peer-education, given the importance attributed to these teaching methods in the REACT project.

¹⁴ A’Scopara, Quarter Mediation, Ca’Foscari, Civifrom, Innoventum Oy.



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Entrepreneurship education

Entrepreneurship delivered with about approaches

| | | | | | |
|---|----------------------------------|-----------------------------|--|---|----------------------------------|
| Country: Italy (Civiform) | | | | | |
| 1) Type of initiative: best practice on training disadvantaged groups | | | | | |
| Name of the best practice/tool: Education projects for Cooperative Entrepreneurship | | | | | |
| Provider (name/ address): Confcooperative Friuli Venezia Giulia region | | | | | |
| Language(s): Italian | | | | | |
| Overview of the initiative/tool/program: Confcooperative FVG seeks to develop social and organizational skills in adults and to promote the culture and values of social entrepreneurship. The courses aim at: promoting the knowledge of social enterprise business model; endowing students with entrepreneurial skills; stimulating an entrepreneurial mindset. The activities are combined with work alternance. | | | | | |
| 2) Type of audience: unemployed adults and trainers | | | | | |
| 3) Summary of the learning outcomes (course objectives): Explain the social enterprise model; Reflect on own attitudes towards social entrepreneurship. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | About | | |
| 6) Teaching method(s) | | | Lecture and group work | | |
| 7) Summary of the teaching and learning activities | | | Entrepreneurship and self-leadership. Duration: 6/12 hours. Topics: the advantages of self-employment, debunking the false myths that accompany self-entrepreneurship; Self-evaluation of own attitudes for starting enterprise and the validity of the business project; Educating for cooperation and teambuilding; Duration: 6/12 hours. Topics: cooperatives values and social enterprise. | | |
| 8) Final output | | | Knowledge about how to create a cooperative | | |
| 9) Assessment practices | | | Of learning through an "in situation" test | | |
| 10) Brief description of the assessment and certification of competences | | | An "in situation" test verifies the adults' objective skills in using specific knowledge and skills within an authentic problematic situation | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | |
| Into action | Taking the initiative | Planning and management | | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | | | | | |
| Communication and collaboration | | | Collaborating through digital technologies | Netiquette (awareness of the behavioural norms) | |
| Safety | | | | | |
| Digital content creation | | | Protecting personal data and privacy | | |
| Problem solving | Solving technical problems | | | | |



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| | | | | | |
|--|--------------------------------------|-----------------------------|---|---|----------------------------------|
| Country: Italy (Civiform) | | | | | |
| 1) Type of initiative: best practice on training disadvantaged groups | | | | | |
| Name of the best practice/tool: Approccio Imprenditivo e formazione d'impresa | | | | | |
| Provider (name/ address): Civiform | | | | | |
| Language(s): Italian | | | | | |
| Overview of the initiative/tool/program: The course takes an entrepreneurial idea and turns it into a real business. It offers notions on entrepreneurship at a national and European regulatory policies level. It makes the trainees reflect on own entrepreneurialism, attitudes towards risks and challenge of being entrepreneurial, and offers a glance into the entrepreneur's characteristics including leadership. | | | | | |
| 2) Type of audience: unemployed adults | | | | | |
| 3) Summary of the learning outcomes (course objectives): identify possible business sectors based on personal characteristics and expectations; reflect on own entrepreneurial potential; reflect on own leadership skills; manage a problem-solving process. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | About | | |
| 6) Teaching method(s) | | | Lecture | | |
| 7) Summary of the teaching and learning activities | | | Search for information and opportunities to do business; Motivation to the success of the entrepreneur; From an idea to the business plan; Entrepreneurship in the principles of the small business act; What is a social enterprise? Definition of company, regulation on creation of new businesses; Search on facilities and financing to support the new businesses; Identification of the organizational, economic and bureaucratic elements that contribute to a business plan; Definition of the phases for starting up a social enterprise. | | |
| 8) Final output | | | | | |
| 9) Assessment practices | | | Of learning authentic testing | | |
| 10) Brief description of the assessment and certification of competences | | | "In situation" test that aims to verify the adults' objective skills in using specific knowledge and skills; analysis of the reference labor market as a basis for contextualizing the idea; motivations to support the idea; marketing strategies to launch the idea (max 20 points); management of financial and economic aspects of the plan | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | |
| Into action | Taking the initiative | Planning and management | | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | | | | | |
| Communication and collaboration | | | Collaborating through digital technologies | Netiquette (awareness of the behavioural norms) | |
| Digital content creation | | | | | |
| Safety | Protecting personal data and privacy | | | | |
| Problem solving | Solving technical problems | | | | |



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| | | | | | |
|---|---|---|---|---|-------------------------------------|
| Country: Italy (Civiform) | | | | | |
| 1) Type of initiative: best practice on entrepreneurship education | | | | | |
| Name of the best practice/tool: Stargate | | | | | |
| Provider (name/ address): FVG Region (Friuli Venezia Giulia) | | | | | |
| Language(s): Italian | | | | | |
| Overview of the initiative/tool/program: Special project funded by the Friuli Venezia Giulia Region and the Province of Gorizia in collaboration with AGCI - LEGACOOP - ITACA - IRECOOP FVG. It is a 30-hour training module on entrepreneurship for unemployed adults. The course seeks to disseminate a business culture based on capacity building. It also seeks to develop communities with a sustainable approach. The course also aims to support start-up creation, particularly new technologies, information sector, multimedia (ICT), environmental protection (renewable energy, etc.), production of cultural services, and protection of cultural heritage through technology. | | | | | |
| 2) Type of audience: unemployed adults | | | | | |
| 3) Summary of the learning outcomes (course objectives): reflect on own career as entrepreneur; explain own entrepreneurial idea; reflect on own entrepreneurial attitude and creativity; apply initiating to own entrepreneurial idea. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | About | | |
| 6) Teaching method(s) | | | Lecture and group work | | |
| 7) Summary of the teaching and learning activities | | | The first module concern basic topics like what is a cooperative enterprise; a reflection about the motivation behind our professional choices and about creativity; The second module is about the history of the cooperative movement, the principles of social enterprise; The third module is about how a cooperative is formed; formal steps for the establishment of a cooperative enterprise: the articles of association and the internal regulation. Another final module defines the business plan and the administrative/financial aspects through a group work to share their experience. | | |
| 8) Final output | | | Business plan | | |
| 9) Assessment practices | | | Of learning through a final test; For learning through peer tutoring. | | |
| 10) Brief description of the assessment and certification of competences | | | Certificate of the new competences acquired | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | |
| Into action | Taking the initiative | | | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | Managing data, information and digital content | |
| Communication and collaboration | | | Collaborating through digital technologies | Netiquette (awareness of the behavioural norms) | Managing digital identity |
| Digital content creation | | | | | |
| Safety | | Protecting personal data and privacy | | | |
| Problem solving | | Identifying needs and technological responses | | | Identifying digital competence gaps |



react

Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|---|--|---|--|--|
| Country: The Netherlands | | | | | |
| 1) Type of initiative: Best practice on adult entrepreneurship education (European project on adult entrepreneurial education) | | | | | |
| Name of the best practice/tool: DIGITAL BOOKLET : Comparative studies and best practices "Link school - labour market" based on the needs of business education in the European partner countries | | | | | |
| Provider (name/ address): Quarter Mediation/Lessinglaan 52, 3533AX, Utrecht, the Netherlands | | | | | |
| Internet Site: http://www.quartermediation.eu/ | | | | | |
| Language(s): English | | | | | |
| Overview of the initiative/tool/program: Summary of best practices on entrepreneurship and business education, as a link between the school and the labour market in the countries partners in the project "Comparison of business policies in vocational education and training in EU countries and adaptation of good practices at VET schools and VET providers 2013-1-NL1-LEO04-12683-1 (Netherlands, Poland, Spain and France). | | | | | |
| 2) Type of audience: VET students and youth, trainers, teachers and staff. | | | | | |
| 3) Summary of the learning outcomes (course objectives): Reflect on own entrepreneurial mindset; Explain how to run a business; Reflect on entrepreneurial opportunities. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | About | | |
| 6) Teaching method(s) | | | Best practices/Case studies | | |
| 7) Summary of the teaching and learning activities | | | Lectures on "Teaching business abilities in VET" and "A critical approach to entrepreneurship in VET". Presentation and discussion: Best practice examples on European opportunities for would-be entrepreneurs and related teaching and training methods focused on the topic of entrepreneurship (ex: introducing young people to trades and opening prospects; on the job training during a business cooperation under the Erasmus for Young Entrepreneurs programme). | | |
| 8) Final output | | | A digital booklet - comparative studies and best practices in digital format | | |
| 9) Assessment practices | | | 'of' learning | | |
| 10) Brief description of the assessment and certification of competences | | | Summative assessment during vocational education | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | | Valuing ideas | |
| Resources | | Motivation and perseverance | Mobilising resources | | |
| Into action | | | | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | | Managing data, information and digital content |
| Communication and collaboration | | Sharing through digital technologies | | Collaborating through digital technologies | |
| Digital content creation | | Integrating and re-elaborating digital content | Copyright and licences | | |
| Safety | | Protecting personal data and privacy | | Protecting the environment | |
| Problem solving | | Identifying needs and technological responses | Creatively using digital technologies | | |



react

Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

Entrepreneurship delivered with for approaches

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|--|---|---|--|--|---|
| Country: Italy (Civiform) | | | | | |
| 1) Type of initiative: best practice on training disadvantaged groups | | | | | |
| Name of the best practice/tool: Imprenderò 4.0 | | | | | |
| Provider (name/ address): Regione FVG | | | | | |
| Internet Site: www.imprendero.eu | | | | | |
| Language(s): Italian | | | | | |
| Overview of the initiative/tool/program: "Imprenderò" is the project with which the Friuli Venezia Giulia Region supports the processes of creating new businesses and starting up self-employment activities and the processes of generational change and business transfer. | | | | | |
| 2) Type of audience: unemployed adults employed. Adults with unemployment insurance, even of derogation, residing or domiciled in FVG between the ages of 18 and 65. | | | | | |
| 3) Summary of the learning outcomes (course objectives): Reflect on own entrepreneurialism; Apply business plan to own idea; Explain the start-up process. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | For | | |
| 6) Teaching method(s) | | | Mentoring | | |
| 7) Summary of the teaching and learning activities | | | The project Imprenderò 4.0 supports the processes of development and creation of business and self-employment, offering free activities and services such as: 8-hours promotion and dissemination seminars aimed at promoting the knowledge of the contents of the operation and the possible paths achievable through the services offered, as well as illustrating the additional tools and devices present at the regional level to support the new entrepreneurs; 8-hours thematic seminars aimed at deepening a specific theme of strong interest for the development of entrepreneurial culture. Entrepreneurial training paths lasting 40 and 80 hours aim at acquiring managerial and managerial skills. Personalized support is provided for the preparation of the business plan. | | |
| 8) Final output | | | Individualized business plan | | |
| 9) Assessment practices | | | For learning with the coaching process | | |
| 10) Brief description of the assessment and certification of competences | | | Certificate of attendance | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | | Managing data, information and digital content |
| Communication and collaboration | | | | Collaborating through digital technologies | Netiquette (awareness of the behavioural norms) |
| Digital content creation | | | | Copyright and licences | |
| | | Protecting personal data and privacy | Protecting health and well-being | Protecting the environment | |
| Problem solving | Solving technical problems | Identifying needs and technological responses | Creatively using digital technologies | Identifying digital competence gaps | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|---|-----------------------------|---|---|--|
| Country: Italy (Civiform) | | | | | |
| 1) Type of initiative: best practice on female entrepreneurship education | | | | | |
| Name of the best practice/tool: Imprenditrici Oggi | | | | | |
| Provider (name/ address): Italian Ministry for the Economic Development | | | | | |
| Internet Site: http://imprenditricioggi.governo.it/ | | | | | |
| Language(s): Italian | | | | | |
| Overview of the initiative/tool/program: This good practice is focused on: offering opportunities for self-employment to women entrepreneurs and women who want to create their own business; animating the public debate to promote female employment and qualify the offer of women self-employment; ensuring that women have effective instruments and support; facilitating access to funding. | | | | | |
| 2) Type of audience: unemployed women | | | | | |
| 3) Summary of the learning outcomes (course objectives): The participants will: reflect on most viable or preferred type of start-up; explain how to establish a new start-up; reflect on own entrepreneurialism; apply start-up to won entrepreneurial idea. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | For | | |
| 6) Teaching method(s) | | | Lecture and workshops | | |
| 7) Summary of the teaching and learning activities | | | The participants in this program will learn more about the regulation of innovative start-ups in Italy that has set the requirements, the role of venture capital, the methods of opening, documents for their establishment and mandatory registration in the Register of Companies. | | |
| 8) Final output | | | Business plan, possibly establishment of own start up | | |
| 9) Assessment practices | | | As learning by choosing own entrepreneurial idea; for learning with active feedback | | |
| 10) Brief description of the assessment and certification of competences | | | Participants set their own goal which is the establishment of a real start up taking into consideration the benefits for new companies with a high technological and innovative content and or aimed at the development and marketing of products, services or solutions in the digital economy, or to enhance public and private research. | | |
| 11) EntreComp Framework | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | |
| Into action | Taking the initiative | | | Working with others | Learning through experience |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | | Managing data, information and digital content |
| Communication and collaboration | | | Collaborating through digital technologies | Netiquette (awareness of the behavioural norms) | Managing digital identity |
| Digital content creation | | | | | |
| Safety | | | Protecting personal data and privacy | | |
| Problem solving | | | Identifying needs and technological responses | | Identifying digital competence gaps |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



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|---|---|-----------------------------|--|---|--|
| Country: Italy (Civiform) | | | | | |
| 1) Type of initiative: best practice on peer-learning | | | | | |
| Name of the best practice/tool: Start Cup 2017 | | | | | |
| Provider (name/ address): Friuli Venezia Giulia region | | | | | |
| Internet Site: www.startcupfvg.it | | | | | |
| Language(s): Italian | | | | | |
| Overview of the initiative/tool/program: Start Cup Friuli Venezia Giulia region stimulates innovative ideas and promotes entrepreneurship. It supports the economic development of the Friuli Venezia Giulia region. It is a competition between innovative entrepreneurial ideas and start-ups with a high innovative content, expressed through a business plan. | | | | | |
| 2) Type of audience: unemployed adults | | | | | |
| 3) Summary of the learning outcomes (course objectives): Participants will: Apply business plan to own entrepreneurial idea; Apply pitching to own entrepreneurial idea; Apply group work to own entrepreneurial idea. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | For | | |
| 6) Teaching method(s) | | | Project work, group work, pitching | | |
| 7) Summary of the teaching and learning activities | | | Proposed contents: The participants compete for prizes, elaborate a business plan of an innovative entrepreneurial idea that can result in a start-up. | | |
| 8) Final output | | | A business plan that can be transformed into a real company; The best 4 ideas expressed in the form of a business plan the competition awards cash prizes for the establishment and development of new businesses. | | |
| 9) Assessment practices | | | For learning, only the best ideas pass and are rewarded; As learning, it is the trainee who decides their business idea | | |
| 10) Brief description of the assessment and certification of competences | | | | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | |
| Into action | Taking the initiative | | | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | | Managing data, information and digital content |
| Communication and collaboration | | | Collaborating through digital technologies | Netiquette (awareness of the behavioural norms) | Managing digital identity |
| Digital content creation | | | | | |
| Safety | | | Protecting personal data and privacy | | |
| Problem solving | | | Identifying needs and technological responses | | Identifying digital competence gaps |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



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|--|---|--------------------------------------|--|---------------------|--|
| Country: Finland | | | | | |
| Type of initiative: Best practice on adult entrepreneurial education for immigrants | | | | | |
| Name of the best practice/tool: Business Start-up Training for Immigrants | | | | | |
| Provider (name/ address): TE-services Uudenmaa | | | | | |
| Internet Site: https://koulutukset.te-palvelut.fi/kt/675554?&professions=X0&announced=0&sort=1 | | | | | |
| Language(s): English, Arabic, Spanish, Vietnamese | | | | | |
| Overview of the initiative/tool/program: Business start-up training is for immigrants who want to find out their possibilities to start their own business in Finland. The purpose of training is to make a business plan or to process the existing one, to help trainees to evaluate business abilities and opportunities for a successful business development process, and to get knowledge and skills of Finnish legal and tax issues. | | | | | |
| Type of audience: Immigrants | | | | | |
| Summary of the learning outcomes (course objectives): Reflect on own potential as entrepreneur; Evaluate own ideas; Apply entrepreneurship to own business; Explain Finnish legal and taxation issues to start a business. | | | | | |
| Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| Objective | | | For | | |
| Teaching method(s) | | | Lectures, online-training, mentoring | | |
| Summary of the teaching and learning activities | | | Career guidance and self-assessment; Business idea and business start-up process; Marketing; Accounting and pricing; Legal issues and business start-up process in Finland; Business plan and strategic planning; Consultation and personal guidance | | |
| Final output | | | Business plan | | |
| Assessment practices | | | Formative assessment with the mentoring process | | |
| Brief description of the assessment and certification of competences | | | Student will get a certificate after presenting the business plan | | |
| <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | | Creativity | Vision | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | | | |
| Into action | Taking the initiative | | Coping with uncertainty, ambiguity, risk | Working with others | |
| <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | | Sharing through digital technologies | | | |
| Digital content creation | | | Integrating and re-elaborating digital content | | |
| Safety | | | | | |
| Problem solving | | | | | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



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|--|---|--------------------------------------|--|--|---|
| Country: Finland | | | | | |
| Type of initiative: Best practice on adult entrepreneurial education | | | | | |
| Name of the best practice/tool: Team Academy (Tiimiakatemia) | | | | | |
| Provider (name/ address): JAMK University of applied sciences (Jyväskylä) | | | | | |
| Internet Site: http://www.tiimiakatemia.fi/en/ | | | | | |
| Language(s): Finnish, English | | | | | |
| Overview of the initiative/tool/program: | | | | | |
| At Tiimiakatemia, student will embark on a unique journey into the world of entrepreneurship as working in one's own team-company. Students learn by doing real business with real customers and real money. The most important learning tool is team-company, which is established at the onset of studies. Students work and share ideas, thoughts, experiences, and what they've learned with their teammates. Together students practice team and interaction skills, which are vital in the professional world of the future. Instead of lessons, they have coaching sessions and various projects with team-company. In coaching sessions team's coach will offer ideas and advice upon request. The coach is not a teacher, and he or she will not tell what needs to be done next in the team-company. | | | | | |
| Type of audience: Students | | | | | |
| Summary of the learning outcomes (course objectives): | | | | | |
| applying management with real business; | | | | | |
| applying team work in companies; | | | | | |
| applying communication and sharing of ideas to projects. | | | | | |
| Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| Objective | | | For | | |
| Teaching method(s) | | | Coaching, group work, project work | | |
| Summary of the teaching and learning activities | | | Productization and service production; marketing, sales skills, management; finances and to use financial numbers as incentives; project planning and to choose the right people for project teams; manage larger entities, different forms of leadership; work in international projects; graphic design and coaching skills. | | |
| Final output | | | Portfolio which is called "learning contract" and includes all documents concerning running the team-company (establishing process, business plan, marketing plans, plans and document of organizing events, networking, documents of coaching sessions | | |
| Assessment practices | | | 'For' learning with self-assessment and feed-back 360 from the coach, students, costumers; 'As' learning the learner choses the idea to develop | | |
| Brief description of the assessment and certification of competences | | | The success is evaluated by customers, team, and student as a learner. Direct, constructive feedback gives you the opportunity to develop both professionally and as a human being | | |
| EntreComp Framework | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | Financial and economic literacy | Mobilising others |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| DigiComp Framework | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital services | Sharing through digital technologies | | Collaborating through digital technologies | Netiquette (awareness of the behavioural norms) |
| Digital content creation | Developing digital content | | Integrating and re-elaborating digital content | | Copyright and licences |
| Safety | | | Protecting personal data and privacy | | |
| Problem solving | | | Identifying needs and technological responses | | Creatively using digital technologies |
| | | | | | Identifying digital competence caps |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|--|---|--------------------------------------|--|---------------------|--|
| Country: Finland | | | | | |
| Type of initiative: Best practice on adult entrepreneurship education for unemployed | | | | | |
| Name of the best practice/tool: Business start-up training for unemployed adults who already has a business idea | | | | | |
| Provider (name/ address): Valmennusmajakka oy/TE-services | | | | | |
| Internet Site: https://koulutukset.te-palvelut.fi/kt/677099?searchPhrase=koulutus&locations=Joensuu&&announced=0&sort=1 | | | | | |
| Language(s): Finnish | | | | | |
| Overview of the initiative/tool/program: | | | | | |
| Business start-up training is for unemployed people who are starting their own business. The purpose of training is to make a business plan or to process the existing one and to help trainees to evaluate business opportunities for a successful business. | | | | | |
| Type of audience: Unemployed adults | | | | | |
| Summary of the learning outcomes (course objectives): | | | | | |
| Apply business plan to own entrepreneurial idea; | | | | | |
| Evaluate business opportunities for successful business. | | | | | |
| Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| Objective | | | For | | |
| Teaching method(s) | | | Lectures, online-training, mentoring | | |
| Summary of the teaching and learning activities | | | Mapping of own existing skills and knowledge; Adequacy of clientele; Demand for products / services; Commercialization of own services; Choosing the right corporate form; Pricing- methods and criteria; Financing; Competition means of marketing and a marketing plan; Risk management and monitoring; Contract law and entrepreneur as an employer; Investment and profitability calculations. | | |
| Final output | | | Business plan | | |
| Assessment practices | | | Formative assessment on the business plan | | |
| Brief description of the assessment and certification of competences | | | Student will get a certificate after presenting the business plan | | |
| EntreComp Framework | | | | | |
| Ideas and opportunities | | Creativity | Vision | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | | | |
| Into action | Taking the initiative | | Coping with uncertainty, ambiguity, risk | Working with others | |
| DigiComp Framework | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | | Sharing through digital technologies | | | |
| Digital content creation | | | Integrating and re-elaborating digital content | | |
| Safety | | | | | |
| Problem solving | | | | | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|--|--|--|---------------------------------------|--|
| Country: France | | | | | |
| 1) Type of initiative: Best practice on adult entrepreneurial education | | | | | |
| Name of the best practice / tool: Support Contract for Entrepreneurship (CAPE) | | | | | |
| Provider (name / address): Union des Couveuses (<i>Alliance of incubators</i>) | | | | | |
| Internet site: http://jetestemonentreprise.com/ | | | | | |
| Language (s): French | | | | | |
| Overview of the initiative/tool/program: The "couveuse d'entreprise" (<i>business incubator</i>) enables people to test their project in the real market (market test) and according to the legal framework (legal, social, tax). The CAPE enables project holders to test their economic activity for 2 years alongside three directions: to launch business in safe conditions (legal help and advice, incomes protection...); to test own business (prospect, produce, sell, create contacts); to learn about entrepreneurship as viable career option (implementation of management tools, daily monitoring...). | | | | | |
| 2) Type of audience: adults either employed or unemployed | | | | | |
| 3) Summary of learning outcomes: Explain the steps to become entrepreneur from a legal and practical point of view; Generate a business plan of own venture and test it to the practice in safe conditions; Reflect on own entrepreneurial career and risk-taking attitude. | | | | | |
| 4) Type of Entrepreneurial Education | | Entrepreneurship education | | | |
| 5) Objective | | For | | | |
| 6) Teaching Method(s) | | Mentoring, team work, experiential learning | | | |
| 7) Summary of the teaching and learning activities (different steps of the course are delivered) one paragraph | | Work on own professional project; Work on entrepreneurial skills and knowledge and empowerment (learning by doing) | | | |
| 8) Final output | | Project and business plan/ work experience | | | |
| 9) Assessment practices | | 'as' learning (the learners choose their goals and later assess the extent with which they achieved them); 'for' learning with active feed-back from the coaching process | | | |
| 10) Brief description of the assessment and certification of competences | | Self-assessment. At the end of the 2 years of test, entrepreneurs can end with a Certificate of completion on the entrepreneurial skills | | | |
| 11) "EntreComp" Framework | | | | | |
| Ideas and opportunities | | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | Financial and economic literacy | |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | | | | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | Sharing through digital technologies | Engaging in citizenship through digital technologies | | Managing digital identity |
| Digital content creation | Developing digital content | | Integrating and re-elaborating digital content | | |
| Problem solving | | | Identifying needs and technological responses | Creatively using digital technologies | Identifying digital competence gaps |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|----------------------------------|--------------------------------------|--|--|--|
| Country: France | | | | | |
| 1) Type of initiative: best practice on training disadvantaged groups | | | | | |
| Name of the best practice/tool: ACTIF CREA | | | | | |
| Provider (name/ address): PÔLE EMPLOI / French Employment Agency | | | | | |
| Internet site: www.poleemploi.fr | | | | | |
| Language(s): French | | | | | |
| Overview of the initiative/tool/program: This coaching service helps jobseekers consider business creation or takeover (a business which is to close and someone decides to carry on the activity) of an existing business as a solution to return to work. This service accompanies and provides counselling to jobseekers willing to create their own business. If business creation turns to be a viable option, the service helps develop an "action plan" by detailing the actions to be implemented and the mechanisms to mobilize for project implementation. | | | | | |
| 2) Target audience: Unemployed people | | | | | |
| 3) Summary of the learning outcomes (course objectives): Reflect on and develop own ideas and creativity; Explain the steps required to create a new business or take over an existing business; Apply an entrepreneurial action plan to own idea; Reflect on own entrepreneurial skills and attitudes towards entrepreneurship. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objectives | | | For | | |
| 6) Teaching method(s) | | | Mentoring | | |
| 7) Summary of the teaching and learning activities (different steps of the course are delivered) one paragraph | | | Welcome phase; Assessment of beneficiary's motivation, skills and attitudes to rely on; Reflect on personal constraints and strengths in order to become an entrepreneur; Nurture of ideas and creativity; Understand the steps required to create or take over a business; Establish an action plan. | | |
| 8) Final outputs | | | Road map | | |
| 9) Assessment practice | | | For learning (formative) through the mentoring process; Of learning, the learner chooses own goals | | |
| 10) Brief description of the assessment and certification of competences | | | Assessment criteria | | |
| 11) EntreComp Framework | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | | | |
| Into action | | | | | |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | | | | | Managing data, information and digital content |
| Communication and collaboration | | Sharing through digital technologies | | | |
| Digital content creation | | | | | |
| Safety | | | | | |
| Problem solving | | | | | Identifying digital competence gaps |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|--|--|-----------------------------|--|---------------|-------------------------------------|
| Country: France | | | | | |
| 1) Type of initiative: Best practice on training disadvantaged groups (unemployed or people about to lose their job) | | | | | |
| Name of the best practice/tool: LAB'EMPLOI pathway | | | | | |
| (name / address): SC'OPARA and Pôle Emploi (French Labour Agency) | | | | | |
| Internet site: | | | | | |
| Language (s): French | | | | | |
| Overview of the initiative/tool/program: LAB'EMPLOI is a pathway to foster entrepreneurial mindset amongst adults unemployed or people facing difficulties. It also provides coaching and counselling. The aim is to foster meeting of job-seekers and companies, innovative support measures for job-seekers and mobility. The program seeks to raise awareness on entrepreneurship and develop entrepreneurial skills. This is obtained through coaching, counselling and personal empowerment. | | | | | |
| 2) Type of audience: Adults unemployed or people in difficulties (such as employees in precarious working conditions) | | | | | |
| 3) Summary of the learning outcomes (course objectives): Explain what entrepreneurship is; Reflect on own entrepreneurial career; Generate a personal roadmap to become entrepreneur; Reflect own self-confidence to start a business. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | For | | |
| 6) Teaching methods | | | mentoring, workshops | | |
| 7) Summary of the teaching and learning activities | | | Awareness phase: data + figures + networks + success stories about entrepreneurship; Information phase: basic information on how to start business (legal framework, taxes, ...); Emerging phase: personal project; Coaching phase | | |
| 8) Final output | | | Road map for entrepreneurship (business plan, help and training, financing, taxes...) | | |
| 9) Assessment practices | | | 'for' learning with self-assessment and mentoring process; 'as' learning the learner chooses own entrepreneurial path | | |
| 10) Brief description of the assessment and certification of competences | | | | | |
| 11) EntreComp Framework | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | | | |
| In action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | | Learning through experience |
| 12) Digicomp Framework | | | | | |
| Information and data literacy | | | | | |
| Communication and collaboration | Interacting through digital technologies | | | | |
| Digital content creation | | | | | |
| Safety | | | | | |
| Problem solving | | | | | Identifying digital competence gaps |



react

Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|----------------------------------|--------------------------------------|--|---------------------------------|--|
| Country: France | | | | | |
| 1) Type of initiative: Best practice focusing on adult education with peer-learning and/or peer-tutoring as teaching method | | | | | |
| Name of the best practice/tool: Collective Entrepreneurship | | | | | |
| Provider (name/ address): CG SCOOP | | | | | |
| Internet site: www.les-scoop.coop | | | | | |
| Language(s): French | | | | | |
| Overview of the initiative/tool/program: This initiative enables new entrepreneurs to create and develop their own business within an existing enterprise. This initiative enables them to benefit from the legal framework of an enterprise as well as some services that they share (accountancy, marketing, communication, ...). They often meet each other to share experiences and difficulties. Each entrepreneur wins his/her own salary but pays a share of the expenses for common services. | | | | | |
| 2) Type of audience: Employee-starter | | | | | |
| 3) Summary of the learning outcomes (course objectives): Apply accounting with regular financial objectives, Countryments and perspectives; Generate and evaluate business plan own entrepreneurial career. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | For | | |
| 6) Teaching method(s) | | | Experiential learning, peer-tutoring, mentoring | | |
| 7) Summary of the teaching and learning activities (different steps of the course are delivered) one paragraph | | | Implementation and assessment of the business plan; Welcome and presentation of the business; Discussion about experience and formalization of the needs; Writing and signing of the bipartite agreement (signature by the entrepreneur and the enterprise (=moral entity)); Follow-up | | |
| 8) Final output | | | Business plan | | |
| 9) Assessment practices | | | 'as' learning the learners choose their goals and later assess the extent with which they achieved them; 'for' learning through the mentoring process | | |
| 10) Brief description of the assessment and certification of competences | | | Self-assessment, without certification | | |
| 11) EntreComp Framework | | | | | |
| Ideas and opportunities | | | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | Financial and economic literacy | Mobilising others |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | | | | | Managing data, information and digital content |
| Communication and collaboration | | Sharing through digital technologies | | | Managing digital identity |
| Digital content creation | Developing digital content | | | | |
| Safety | | | | | |
| Problem solving | | | | | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|--|---|-------------------------|---|---------------------------------|--|
| Country: France | | | | | |
| 1) Type of initiative: Best practice on training disadvantaged groups | | | | | |
| Name of the best practice/tool: Microcredit | | | | | |
| Provider (name/ address): ADIE | | | | | |
| Internet site: www.adie.org | | | | | |
| Languages(s) : French | | | | | |
| Overview of the initiative/tool/program: Financing entrepreneurs who do not have access to bank credit, through microcredit. Accompanying entrepreneurs before, during and after the creation of their company. Contributing to the improvement of the institutional environment of microcredit and entrepreneurship. | | | | | |
| 2) Type of audience: Unemployed, bank banned-people, migrants, people in difficulties | | | | | |
| 3) Summary of the learning outcomes: Develop an idea into a project and business plan that could be eventually funded; Reflect on own entrepreneurial career | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | For | | |
| 6) Teaching method(s) | | | Experiential, individual support, mentoring | | |
| 7) Summary of the teaching and learning activities (different steps of the course are delivered) one paragraph | | | Welcome and diagnosis; Financial formalization of the project (cost-efficiency) and global funding; if loan granted, monitoring of the (financial) project (without pitching) | | |
| 8) Final outputs | | | Business plan to maybe obtain funding | | |
| 9) Assessment practices | | | 'as' learning /the learners choose their goals and later assess the extent with which they achieved them: 'for' learning through the learning process | | |
| 10) Brief description of the assessment and certification of competences | | | Self-assessment | | |
| 11) EntreComp Framework | | | | | |
| Ideas and opportunities | | | Vision | | |
| Resources | Self-awareness and self-efficacy | | Mobilising resources | Financial and economic literacy | Mobilising others |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | | |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | | Managing data, information and digital content |
| Communication and collaboration | | | | | |
| Digital content creation | | | | | |
| Safety | | | | | |
| Problem solving | | | | | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|--|--|--|-------------------------------------|----------------------------------|
| Country: France | | | | | |
| 1) Type of initiative: best practice on entrepreneurship for young adults | | | | | |
| Name of the best practice/tool: Student Entrepreneur Diploma | | | | | |
| Provider (name/ address): FNEGE: Fondation Nationale pour l'Enseignement de la Gestion des Entreprises (<i>National Foundation for Business Management Teaching</i>) | | | | | |
| Internet site: https://www.pepite-france.fr/b-diplome-etudiant-entrepreneur-2 | | | | | |
| Language(s): French | | | | | |
| Overview of the initiative/tool/program: As part of the action PEPITE - Students for Innovation Transfer and Entrepreneurship (www.pepite-france.fr), the national status of student entrepreneur enables to build and develop an entrepreneurial project and benefit from support for students regardless of the entrepreneurial approach (individual, collective, economic and / or social purpose, innovative or not). Thus, the Student Entrepreneur Diploma allows each student to choose an individualized path meaning according to his/her needs to start his/her enterprise: the student is not obliged to attend all the teachings of a sector but just those essential for his/her needs. | | | | | |
| 2) Target audience: Adults graduating from the bachelor (students ...) with an age limit of 28 years | | | | | |
| 3) Summary of the learning outcomes (course objectives): Apply entrepreneurship to start own enterprise; Reflect on own entrepreneurial career. | | | | | |
| 4) Type of Entrepreneurial Education | | Entrepreneurship education | | | |
| 5) Objectives | | For | | | |
| 6) Teaching method(s) | | Mentoring | | | |
| 7) Summary of the teaching and learning activities (different steps of the course are delivered) one paragraph | | The student entrepreneur chooses the courses s/he needs which are in line with the course built with the facilitator/adviser from action Pépite | | | |
| 8) Final outputs | | Project Validation, Entrepreneurial Culture, Graduation | | | |
| 9) Assessment practice | | Of learning: Defence before a jury for graduation of the student; For learning: the students is mentored with formative feed-back on the project; As learning: the student choose the activity he wants to pursue. | | | |
| 10) Brief description of the assessment and certification of competences | | Skills certificate of student entrepreneurs (33 skills, 4 steps). To have an entrepreneurial behaviour, to make emerge the opportunity to become an entrepreneur, to build the project, to launch the project | | | |
| 11) EntreComp Framework | | | | | |
| Ideas and opportunities | | Creativity | | | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | |
| Into action | Taking the initiative | Planning and management | | Working with others | Learning through experience |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | | | | | |
| Communication and collaboration | Interacting through digital technologies | | Digital collaboration through digital channels | | |
| Digital content creation | | | | | |
| Safety | | | | | |
| Problem solving | | | Creatively using digital technologies | Identifying digital competence gaps | |



react

Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

Entrepreneurship delivered with through approaches

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|---|---|--------------------------------------|---|--|--|
| Country: Finland | | | | | |
| 1) Type of initiative: European project on adult entrepreneurship education | | | | | |
| Name of the best practice/tool: Yes Network | | | | | |
| Provider (name/ address): National YES Finland, Kuortanegatan 2, 00510 Helsinki, Finland | | | | | |
| Internet Site: http://www.yesverkosto.fi/yes/?lang=en | | | | | |
| Language(s): Finnish, Swedish | | | | | |
| Overview of the initiative/tool/program: | | | | | |
| The YES Network is a network of networks, bringing together entrepreneurship education agents and other agents interested in the development of entrepreneurship and work life skills both regionally and nationally. The aim of the YES Network is to create a new kind of work culture where education and business life are engaged in an active dialogue, where educational institutions operate in an entrepreneurial manner, and above all, pupils and students receive adequate training during their studies to enter working life. | | | | | |
| 2) Type of audience: Teachers, pupils at schools, students in vocational education | | | | | |
| 3) Summary of the learning outcomes (course objectives): | | | | | |
| Explain how to set-up an enterprise in Finland; | | | | | |
| Explain how to write business plan; | | | | | |
| Reflect on own entrepreneurial culture and attitudes. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | Through | | |
| 6) Teaching method(s) | | | Experiential learning in youth enterprises, workshops, group work, project work | | |
| 7) Summary of the teaching and learning activities | | | | | |
| 8) Final output | | | Business plan | | |
| 9) Assessment practices | | | “as” learning students choose the entrepreneurial idea they want to pursue | | |
| 10) Brief description of the assessment and certification of competences | | | Assessment varies on school and subject (compulsory/optional) where the programme is run: self-assessment, group assessment, certificate of participation | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | Financial and economic literacy | |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | Sharing through digital technologies | | Collaborating through digital technologies | |
| Digital content creation | Developing digital content | | Integrating and re-elaborating digital content | | Copyright and licences |
| Safety | Protecting devices | | Protecting personal data and privacy | | |
| Problem solving | | | Identifying needs and technological responses | | Creatively using digital technologies |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

Entrepreneurship delivered with about and for approaches

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|--|---|--------------------------------------|--|--|--|
| Country: Italy (Ca' Foscari) | | | | | |
| 1) Type of initiative: | | | | | |
| Name of the best practice/tool: Introductory course in Entrepreneurship | | | | | |
| Provider (name/ address): College of Business, Ohio University | | | | | |
| Internet Site: https://business.ohio.edu/ | | | | | |
| Language(s): English | | | | | |
| Overview of the initiative/tool/program: | | | | | |
| The introductory course in entrepreneurship is for bachelor students of any faculty, although primarily for non-business students, and it has no prerequisites | | | | | |
| 2) Type of audience: non-business university students | | | | | |
| 3) Summary of the learning outcomes (course objectives): | | | | | |
| Reflect on entrepreneurship; | | | | | |
| Explain key terms and concepts related to entrepreneurship (for example value proposition); | | | | | |
| Apply business plan and pitching to own entrepreneurial idea; | | | | | |
| Generate an entrepreneurial idea. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | About, For | | |
| 6) Teaching method(s) | | | Lectures, group work, project work, experiential learning | | |
| 7) Summary of the teaching and learning activities | | | The course is split 50% knowledge on entrepreneurship (for example problem solution, value proposition, how to gather funding, etc...) and 50% experiential learning. Individually students interview an entrepreneur, and in groups of 4-5 components they develop from scratch an entrepreneurial idea. The lessons alternate seminars to group activities such as pitching for investors and trade fair for attracting clients. | | |
| 8) Final output | | | An executive summary, a complete report and a YouTube video on the idea | | |
| 9) Assessment practices | | | 'of' learning (through rubrics): multiple choice answers for the contents; an interview with an entrepreneur; an executive summary, a complete report, a pitch and a trade fair, a video on the group idea. Through an on-line application, students also rate their group components; 'for' learning: the teacher provides continuous feed back to the groups regarding the development of the idea; 'as' learning: the students in groups choose the idea they want to pursue. | | |
| 10) Brief description of the assessment and certification of competences | | | The course is value 3 units | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | Financial and economic literacy | Mobilising others |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | Sharing through digital technologies | | Collaborating through digital technologies | |
| Digital content creation | Developing digital content | | Copyright and licences | | |
| Safety | | | | | |
| Problem solving | | | Identifying needs and technological responses | Creatively using digital technologies | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|---|--------------------------------------|--|--|--|
| Country: Italy (Civiform) | | | | | |
| 1) Type of initiative: best practice on adult entrepreneurial education | | | | | |
| Name of the best practice/tool: Foundation of Social Enterprise | | | | | |
| Provider (name/ address): Civiform | | | | | |
| Internet Site: www.civiform.it | | | | | |
| Language(s): Italian | | | | | |
| Overview of the initiative/tool/program: The purpose of the activity is to stimulate an entrepreneurial mentality in adults and transferring method and skills for the creation of a social enterprise. The initiative also supports adult students in creating business activities. The goal, with the support of teachers, is to create catering events (for example banquets) to have students experimenting with social entrepreneurial initiatives. | | | | | |
| 2) Type of audience: adults | | | | | |
| 3) Summary of the learning outcomes (course objectives): reflect on own entrepreneurial mindset; apply project management and business plan writing to social enterprise; generat the social enterprise start up process, especially catering events. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | About and for entrepreneurship | | |
| 6) Teaching method(s) | | | Experiential learning, mentoring | | |
| 7) Summary of the teaching and learning activities | | | The first reflective phase aims at stimulating an entrepreneurial mindset, with entrepreneurs and professionals coming to share their stories; The second phase employs experts to teach business plan and project management; Third phase has the trainees writing a business plan helped by a mentor who assists the best ideas in the start-up process of the social enterprise, including found raising. | | |
| 8) Final output | | | Catering events management | | |
| 9) Assessment practices | | | 'For' learning with the mentoring process; 'Of' learning with the selection of the best practices; 'As' learning with the selection of own entrepreneurial activity. | | |
| 10) Brief description of the assessment and certification of competences | | | At the end of the activity, students write a final report with the description of all the developed activities; This tool is needed to self-assess the activity | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | Financial and economic literacy | Mobilising others |
| Into action | Taking the initiative | Planning and management | | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | Sharing through digital technologies | Engaging in citizenship through digital technologies | Collaborating through digital technologies | Netiquette (awareness of the behavioural norms) Managing digital identity |
| Digital content creation | Developing digital content | | Integrating and re-elaborating digital content | | Copyright and licences Programming |
| Safety | Protecting devices | | Protecting personal data and privacy | | Protecting health and well-being Protecting the environment |
| Problem solving | Solving technical problems | | Identifying needs and technological responses | | Creatively using digital technologies Identifying digital competence gaps |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|--|---|--------------------------------------|---|--|----------------------------------|
| Country: Finland | | | | | |
| Type of initiative: Best practice on adult entrepreneurial education | | | | | |
| Name of the best practice/tool: Further Qualification for Entrepreneurs | | | | | |
| Provider (name/ address): Providers of vocational education (National certificate) | | | | | |
| Internet Site: http://www.oph.fi/download/178167_further_qualification_for_entrepreneurs_2012.pdf | | | | | |
| Language(s): Finnish, Swedish, English | | | | | |
| Overview of the initiative/tool/program: The aim of is to strengthen the entrepreneur's business skills. The qualification is also suitable for entrepreneurs who have already been working as such for a long time and wish to redirect their business. | | | | | |
| Type of audience: Adults who already work as entrepreneurs or want to become entrepreneurs | | | | | |
| Summary of the learning outcomes (course objectives): Apply the entrepreneurship process to own idea; Explain how to market own products and services and how to analyze finances and organize the functions of own company profitably; Explain the tasks associated with the establishment of a company; Reflect on risks associated with doing business; Identify business opportunities. | | | | | |
| Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| Objective | | | About, For | | |
| Teaching method(s) | | | Lectures, distance learning, experimental learning, group work | | |
| Summary of the teaching and learning activities | | | The Further Qualification for Entrepreneurs comprises three modules completed in the following specializations: planning; launching of entrepreneurial activities; development of entrepreneurial activities. | | |
| Final output | | | Portfolio including the documents required for competence tests of modules (for example a written business plan and documents, such as plans regarding networking opportunities, work assignments and documents associated with the establishment of a company, etc). | | |
| Assessment practices | | | For learning with peer-learning; As learning with self-assessment | | |
| Brief description of the assessment and certification of competences | | | In the competence tests, candidates demonstrate their abilities and skills in applying their knowledge to varying situations and operating environments. They demonstrate their ability to assess and learn from their experiences, reappraise their methods and implement new methods. | | |
| EntreComp Framework | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | | Financial and economic literacy | Mobilising others |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| DigiComp Framework | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | Managing data, information and digital content | |
| Communication and collaboration | Interacting through digital services | Sharing through digital technologies | Collaborating through digital technologies | | |
| Digital content creation | Integrating and re-elaborating digital content | | Copyright and licences | | |
| Safety | Protecting personal data and privacy | | | | |
| Problem solving | | | Creatively using digital technologies | Identifying digital competence caps | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|--|-----------------------------|---|--|--|
| Country: France | | | | | |
| 1) Type of initiative: Best practice on training disadvantaged groups | | | | | |
| Name of the best practice/tool: BCE: Entrepreneurial skills assessment (Bilan de Compétences Entrepreneuriales) | | | | | |
| Provider (name/ address): BGE | | | | | |
| Internet Site: www.bge.asso.fr | | | | | |
| Languages(s): French | | | | | |
| Overview of the initiative/tool/program: This is a coaching program to help unemployed people to appraise their entrepreneurial skills and envision their entrepreneurial career with the possibility to elaborate a plan to start own business. | | | | | |
| 2) Target audience: unemployed people in difficulties (financial, social, physical, geographical) or in precarious working situation. | | | | | |
| 3) Summary of the learning outcomes (course objectives): Evaluate own entrepreneurial competences; Reflect on own entrepreneurial career. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objectives | | | About, for | | |
| 6) Teaching method(s) | | | Mentoring | | |
| 7) Summary of the teaching and learning activities (different steps of the course are delivered) one paragraph | | | Welcome and presentation; Country of the art of previous experience; Identification of current and missing entrepreneurial skills; Planning of potential career evolution; Plan further steps for project implementation / start the activity as entrepreneur | | |
| 8) Final outputs | | | Entrepreneurial skills assessment / roadmap | | |
| 9) Assessment practices | | | As learning with the mentoring process | | |
| 10) Brief description of the assessment and certification of competences | | | Written report about entrepreneurial skills (current and to be acquired) after individual interview | | |
| 11) EntreComp Framework | | | | | |
| Ideas and opportunities | | | Vision | | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | | | |
| Into action | | | | | Learning through experience |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | | | | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | | | | |
| Digital content creation | | | | | |
| Safety | | | | | |
| Problem solving | | | | | Identifying digital competence gaps |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

Entrepreneurship delivered with about, for and through approaches

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|---|----------------------------------|-----------------------------|--|---|----------------------------------|
| Country: Italy (Civiform) | | | | | |
| 1) Type of initiative: best practice on training disadvantaged groups | | | | | |
| Name of the best practice/tool: MENT Project | | | | | |
| Provider (name/ address): Austria, Italy, Germany, Belgium and France | | | | | |
| Internet Site: http://www.mentproject.eu/#about | | | | | |
| Language(s): English | | | | | |
| Overview of the initiative/tool/program: MENT project fosters economic and social integration of migrants supporting them in the development of new business initiatives, via light incubation and mentorship programmes. The relationship with mentors is the core of the project, enabling the improvement of emerging business ideas through the interaction with experts in the given business sector and national context. By the end of the programme, participants have transformed the initial business idea into a value proposition and business plan, they have validated their idea into a viable product/service. The participants increase business literacy and acquire essential know-how in financial planning, marketing, delivering presentations, work with external partners. | | | | | |
| 2) Type of audience: unemployed immigrants | | | | | |
| 3) Summary of the learning outcomes (course objectives): identify possible business sectors for start-up; reflect own entrepreneurial potential; evaluate own idea into a feasible product/service with a strong value proposition; explain key terms in financial planning and marketing; apply start up process to own idea. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship Education | | |
| 5) Objective | | | About, for, thorough | | |
| 6) Teaching method(s) | | | Workshop, project work; lecture; mentoring; pitching | | |
| 7) Summary of the teaching and learning activities | | | Participants will attend the following learning activities: Tools for product and service design. Workshop with tutors to evaluate the business idea. Participants receive feedback on the viability of their idea; Understand your market and users. Identity, mission and vision. Prototype-test-repeat. Accounting, budgeting, finances. Sales and marketing; Writing a funding proposal. Delivering business presentations. Nurturing business relationships; Meeting with mentors to redefine entrepreneurial idea; Final event to present entrepreneurial idea to look for partners. | | |
| 8) Final output | | | Business plan | | |
| 9) Assessment practices | | | For learning with a formative feed-back on viability of own project; Of learning, the trainees develop idea in preferred business sector. | | |
| 10) Brief description of the assessment and certification of competences | | | | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | |
| Into action | Taking the initiative | Planning and management | | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | | | | | |
| Communication and collaboration | | | Collaborating through digital technologies | Netiquette (awareness of the behavioural norms) | |
| Digital content creation | | | | | |
| Safety | | | Protecting personal data and privacy | | |
| Problem solving | Solving technical problems | | | | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|---|--------------------------------------|--|-------------------------------------|----------------------------------|
| Country: Finland | | | | | |
| Type of initiative: Tool on adult entrepreneurial education | | | | | |
| Name of the best practice/tool: Personal Study Path of Entrepreneurship | | | | | |
| Provider (name/ address): Riveria, Joensuu | | | | | |
| Internet Site: https://www.riveria.fi/riveria/organisaatio/ | | | | | |
| Language(s): Finnish | | | | | |
| Overview of the initiative/tool/program: Entrepreneurship education is one of the focus areas of Finnish vocational education. Riveria program offers personal study path to entrepreneurship, with students focusing on entrepreneurship and integrating real business activities in their studies. | | | | | |
| Type of audience: Vocational students | | | | | |
| Summary of the learning outcomes (course objectives): Explain how to perform the tasks associated with the establishment of a company; Explain how to recognize the risks associated with business activities and how to sell products and services; Explain how to analyze the finances and organize the functions of their company; Apply business plan process to an idea. | | | | | |
| Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| Objective | | | About, For, Through | | |
| Teaching method(s) | | | Lectures, distance learning, experimental learning, project work, coaching | | |
| Summary of the teaching and learning activities | | | Entrepreneurship, online course; Team enterprise coaching; Business planning online course; Business in action (Young enterprise) | | |
| Final output | | | a written business plan | | |
| Assessment practices | | | "For" learning with coaching and self-assessment; "Of" learning, assessment on the online course | | |
| Brief description of the assessment and certification of competences | | | The teachers will assess online courses and document the competence demonstrated by the candidate in accordance with the vocational skills requirements, assessment targets and criteria set for the studies. Feedback on the assessment provided to the candidate forms part of a good assessment process. Such feedback may be given to the candidate, for example after the submission of a proposal for the assessment. | | |
| EntreComp Framework | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | | Financial and economic literacy | |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| DigiComp Framework | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | | |
| Communication and collaboration | Interacting through digital services | Sharing through digital technologies | Collaborating through digital technologies | | |
| Digital content creation | Developing digital content | | Copyright and licences | | |
| Safety | | | | | |
| Problem solving | | | Creatively using digital technologies | Identifying digital competence caps | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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| Country: The Netherlands | | | | | |
| 1) Type of initiative: Tool on Adult Entrepreneurship Education (European project on adult entrepreneurial education) | | | | | |
| Name of the best practice/tool: eBook "Comparison of business policies in vocational education and training in EU countries and adaptation of good practices at VET schools and VET providers 2013-1-NL1-LEO04-12683-1" | | | | | |
| Provider (name/ address): Quarter Mediation/Lessinglaan 52, 3533AX, Utrecht, the Netherlands | | | | | |
| Internet Site http://www.quartermediation.eu/ | | | | | |
| Language(s): English | | | | | |
| Overview of the initiative/tool/program: Create and improve the entrepreneurial competencies of the staff involved in Vocational Education and Training (VET) organizations and to innovate the traditional entrepreneurial education, by making it more creative, transforming the business information in a didactic method itself, integrated in the curriculum. | | | | | |
| 2) Type of audience: VET students and youth, trainers, teachers and staff. | | | | | |
| 3) Summary of the learning outcomes (course objectives): reflect on own entrepreneurial attitude and way of thinking; develop own employability; apply business plan to won entrepreneurial idea. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | About, For, Through | | |
| 6) Teaching method(s) | | | group work, project work, experiential learning | | |
| 7) Summary of the teaching and learning activities | | | Presentation on "How to set up a business in the Netherlands". Good practice examples: "Entrepreneurship from the idea and a virtual business to the real-life experience. Video examples from start-ups and experienced entrepreneurs". Hands-on workshop "How to realize a business plan". | | |
| 8) Final output | | | Draft business plan idea and business plan presentation (Power Point/Prezi) | | |
| 9) Assessment practices | | | 'for' learning, 'as' learning | | |
| 10) Brief description of the assessment and certification of competences | | | self-assessment (with a check list provided by the school); in case of VET students involved in compulsory education, the competence is certified at the end of their vocational education, with a certificate of competence (level 1, 2, 3 or 4 from the European standard in VET). In case of teachers, trainers, youth, people on the labour market, the certification of competence is done by using the Europass Mobility Document. | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | | | |
| Into action | Taking the initiative | Planning and management | | | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | | | | Managing data, information and digital content | |
| Communication and collaboration | | Sharing through digital technologies | | | Managing digital identity |
| Digital content creation | Developing digital content | | | | |
| Safety | | | Protecting personal data and privacy | | |
| Problem solving | | | Identifying needs and technological responses | | Creatively using digital technologies |



react

Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

Entrepreneurship delivered with gaming

| | | | | | |
|---|---|--------------------------------------|--|--|--|
| Countries: Italy (Ca' Foscari) | | | | | |
| 1) Type of initiative: Bet practice on gaming | | | | | |
| Name of the best practice/tool: SG4Adult game (developing a game-based learning method for adults to encourage entrepreneurial skills. | | | | | |
| Provider (name/ address): CVO Antwerpen, Centre for Adult Education certified and funded by the Flemish government. | | | | | |
| Internet Site: http://www.sg4adults.eu | | | | | |
| Language(s): English, Dutch, Italian, Spanish, Greek, Macedonian | | | | | |
| Overview of the initiative/tool/program: | | | | | |
| The project develops the entrepreneurial mindset and entrepreneurial skills of adult learners by developing a game-based learning method that can be used by adult education providers. This model is based on the Analysis, Design, Development, Implementation, Evaluation (A.D.D.I.E.), conceptualised by the University of Florida. | | | | | |
| 2) Type of audience: Adults, seniors, youth, women | | | | | |
| 3) Summary of the learning outcomes (course objectives): | | | | | |
| Reflect on entrepreneurial mind-set; | | | | | |
| Apply the entrepreneurial process to virtual reality and gaming. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship Education | | |
| 5) Objective | | | For | | |
| 6) Teaching method(s) | | | Game-based learning, lectures, experiential learning, serious games, peer-learning, case study | | |
| 7) Summary of the teaching and learning activities | | | Presentation of the project; Getting to know each other; Individual Expectations; Entrepreneurship in VET and Games; Description of the pedagogical Model; Debriefing and daily Evaluation; Motivation to Entrepreneurship; Study of Entrepreneurship cases; Problem and Solutions; Strategy; Creativity; Playing the Game; Rules; Starting the Game; Study Visit; Playing the Game again. | | |
| 8) Final output | | | Written Report | | |
| 9) Assessment practices | | | For learning (formative) with feed-back from peers and self-assessment | | |
| 10) Brief description of the assessment and certification of competences | | | Results of the Need Analysis of the participants; Feedback sessions after each meeting/playing; Daily debriefing for self-assessment | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | Financial and economic literacy | |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | Sharing through digital technologies | | Collaborating through digital technologies | |
| Digital content creation | Developing digital content | | Integrating and re-elaborating digital content | | |
| Safety | | | | | |
| Problem solving | | | Creatively using digital technologies | | |



react

Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|--|---|---|--|---------------------------------|--|
| Country: Italy (Ca' Foscari) | | | | | |
| Type of initiative: Best practice on gaming | | | | | |
| Name of the best practice/tool: eSG project (stimulating Entrepreneurship through Serious Games) | | | | | |
| Provider (name/ address): "Istituto per le Tecnologie Didattiche", Italian National Research Council | | | | | |
| Internet Site: http://www.cnr.it/istituti/ProdottoDellaRicerca.html?cds=102&id=289444 | | | | | |
| Antonaci, A., Dagnino, F. M., Ott, M., Bellotti, F., Berta, R., De Gloria, A., ... & Mayer, I. (2015). A gamified collaborative course in entrepreneurship: Focus on objectives and tools. Computers in Human Behaviour, 51, 1276-1283 | | | | | |
| Language(s): IT-ENG | | | | | |
| Overview of the initiative/tool/program: It is a pioneer attempt of gamifying a collaborative course in the field of entrepreneurship education in non-business technical universities. Its main aim is to stimulate innovative and entrepreneurial mindsets of higher education students of non-business faculties and to provide them with some of the needed theoretical and operational skills. Specific eSG courses that make an extensive use of existent Serious Games were carried out in the three partner countries (Italy, Spain and the Netherlands) for the three levels of students: Bachelor, Master, PhD. | | | | | |
| Type of audience: University students (Bachelor, Master, PhD) | | | | | |
| Summary of the learning outcomes (course objectives): Reflect on own entrepreneurial awareness and motivation; Identify and exploit business opportunities; Generate a business idea and a business plan (including commercialization aspects). | | | | | |
| Type of Entrepreneurial Education | | Entrepreneurship education | | | |
| Objective | | About, Through, For | | | |
| Teaching method(s) | | Lectures, case study, individual experiential learning in serious games, and group work to collect more points for the final competition; peer-learning during in-class game debriefing | | | |
| Summary of the teaching and learning activities (different steps of the course is delivered) one paragraph | | Short theoretical introductions, where teachers present business topics relevant to entrepreneurship; talks by invited entrepreneurs presenting their experience in building and managing a company; Serious Games played at home, preceded by an in-class game debriefing and concluded with a debriefing; home assignments in the form of writing a report and filling thematic questionnaires; "Playoff" competition matches in the final day among all teams. | | | |
| Final output | | Written report, and a final, collective competition in game playing which was followed by a debriefing | | | |
| Assessment practices | | Of learning; as learning | | | |
| Brief description of the assessment and certification of competences | | Thematic questionnaires on specific learning objectives, periodical report in which students self-assess their performance in the game and their achievements | | | |
| EntreComp Framework | | | | | |
| Ideas and opportunities | | Creativity | | | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | Financial and economic literacy | Mobilising others |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | | Learning through experience |
| DigiComp Framework | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | | | | | |
| Digital content creation | Developing digital content | | Integrating and re-elaborating digital content | | |
| Safety | | | | | |
| Problem solving | | | | | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|---|--------------------------------------|---|--|---|
| Country: Italy (Ca' Foscari) | | | | | |
| 1) Type of initiative: Best practice on gaming | | | | | |
| Name of the best practice/tool: Introduction to Entrepreneurship | | | | | |
| Provider (name/ address): Universitat Laval, Catalonia (Spain) | | | | | |
| Internet Site: https://www.researchgate.net/profile/Margarida_ROMERO/publication/316997427_Serious_Games_Integration_in_an_Entrepreneurship_Massive_Online_Open_Course_MOOC/links/591ce1ce0f7e9b642814c3c8/Serious-Games-Integration-in-an-Entrepreneurship-Massive-Online-Open-Course-MOOC.pdf | | | | | |
| Language(s): Spanish | | | | | |
| Overview of the initiative/tool/program: The <i>Introduction to Entrepreneurship</i> MOOC (Massive Online Open Course) is designed for the Catalan regional community of future entrepreneurs aiming to join an open online community of learning on the introductory aspects of entrepreneurship. The course aims to create a community of learners and practice around entrepreneurship at a regional level. It integrates the use of Serious Games as a key part of the methodology for teaching and learning entrepreneurship according to the following: formative assessment; value of diversity; recognition of the participants' power to change the community; exploring alternative solutions. | | | | | |
| 2) Type of audience: Adults | | | | | |
| 3) Summary of the learning outcomes (course objectives): Reflect and identifying one's own strengths and challenges as entrepreneur; Understand and apply finance; Simulate how to start a small/medium business; Learning ideas from other participants. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | About, through, for | | |
| 6) Teaching method(s) | | | Serious gaming; Personalized feedbacks from the instructors (formative assessment); group work | | |
| 7) Summary of the teaching and learning activities (different steps of the course is delivered) one paragraph | | | Presentation in the LORE platform; Questionnaire based on the entrepreneurial attitude test (TAI); MetaVals, a Serious Game (SG) designed as an individual and collaborative classification activity, where students have to classify different items under time pressure; Hot Shot Business (HSB), a web-based entrepreneurship game where students learn how to start a small business with the guide of two virtual characters; Each step provides for complementary activities to give students extra points for the course to incentive competition and participation. | | |
| 8) Final output | | | | | |
| 9) Assessment practices | | | For learning | | |
| 10) Brief description of the assessment and certification of competences | | | Personalised feedback by one of the two instructors at the end of each activity | | |
| 11) EntreComp Framework | | | | | |
| Ideas and opportunities | | Creativity | Vision | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | Financial and economic literacy | |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | Sharing through digital technologies | | Collaborating through digital technologies | Netiquette (awareness of the behavioural norms) |
| Digital content creation | | | Integrating and re-elaborating digital content | | |
| Safety | | | | | |
| Problem solving | | | Creatively using digital technologies | | |



react

Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|--------------------------------------|--------------------------------------|---|--|--|
| Country: Finland | | | | | |
| Type of initiative: Best practice on gaming | | | | | |
| Name of the best practice/tool: Praxar Kayak – introduction to business | | | | | |
| Provider (name/ address): Praxar | | | | | |
| Internet Site: https://www.praxar.com/corpo/index.htm | | | | | |
| Language(s): English and French | | | | | |
| Overview of the initiative/tool/program: Praxar's Kayak is a business management simulation game. The purpose is to manage the expansion of an SME that manufactures polyethylene kayaks and expand the company's sales. The players set an ambitious strategy for rapid growth. To do so, they supervise a team of four top managers from the marketing, production, human resources and finance departments. | | | | | |
| Type of audience: University students | | | | | |
| Summary of the learning outcomes (course objectives): Apply business management to virtual reality; Explain key concept of management and strategy; Apply teamwork to the management of a company. | | | | | |
| Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| Objective | | | For | | |
| Teaching method(s) | | | Gaming, teamwork | | |
| Summary of the teaching and learning activities | | | The game develops the abilities to create and implement business strategies for enterprise and management. It illustrates the key concepts and tools of the company's financial management, how they relate to the company's strategy and the operations. The game also teaches how to lead many functions simultaneously in a changing environment. Students also exercise for teamwork under time pressure. | | |
| Final output | | | Summary reports | | |
| Assessment practices | | | 'Of' learning | | |
| Brief description of the assessment and certification of competences | | | The game has tools from which instructors can select the most appropriate ways to assess the student's progress. Evaluation and scoring is made automatically online. Summary reports are made to help evaluate student's progress. | | |
| <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | | Financial and economic literacy | |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | | | | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital services | Sharing through digital technologies | | Collaborating through digital technologies | |
| Digital content creation | | | | | |
| Safety | | | | | |
| Problem solving | | | Creatively using digital technologies | | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

Entrepreneurship delivered with peer-learning

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|---|---|--------------------------------------|---|--|--|
| Country: France | | | | | |
| Type of initiative: Tool for adult entrepreneurship education | | | | | |
| Name of the best practice / tool: BALISE database | | | | | |
| Provider (name / address): BGE Network - network to support business creation or takeovers | | | | | |
| Internet site: http://www.bgebalise.fr/ | | | | | |
| Language (s): French | | | | | |
| Overview of the initiative/tool/program: BALISE is a database which includes information related to entrepreneurship: one thousand entrepreneurs' testimonials to transform envies into a project. BALISE is composed of stories, movies, or audio portraits of successful carriers. It helps to identify motivations & assets, to give tips to get started and define entrepreneurial project with possibility of exchanges with entrepreneurs. | | | | | |
| 2) Target of audience: low-qualified adults, employed or unemployed | | | | | |
| 3) Learning outcomes: Reflect on entrepreneurship as possible career option; Explain what it means to be an entrepreneur. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship education | | |
| 5) Objective | | | About | | |
| 6) Teaching method(s) | | | Workshops, Case studies, peer-learning | | |
| 7) Learning summary (each course step) in one paragraph. | | | Presentation of BALISE software; Viewing of video clips; Debriefing about the videos presented; Collective debate (questioning: would I be able to be an entrepreneur?). | | |
| 8) Final output | | | Quantifying the beneficiaries' willingness to start own business | | |
| 9) Assessment practices | | | Assessment of learning | | |
| 10) Brief description of the assessment and certification of competences. | | | Assessment questionnaire and face-to-face interview that will lead beneficiaries to the next step of entrepreneurship education (guidance) or not | | |
| 11) "EntreComp" Framework | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | | | | |
| Into action | | | | | |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | Sharing through digital technologies | | Collaborating through digital technologies | |
| Digital content creation | | | | | |
| Safety | | | | | |
| Problem solving | | | | Creatively using digital technologies | |



react

Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

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|---|---|--------------------------------------|--|--|--|
| Countries: Italy (Ca' Foscari) | | | | | |
| 1) Type of initiative: European Project on Adult Entrepreneurial Education | | | | | |
| Name of the best practice/tool: DIST Platform (spreading sense of initiative and entrepreneurship among unemployed; supporting aspirant entrepreneurs to set up their business; supporting entrepreneurs to improve their performance). | | | | | |
| Provider (name/ address): ASEV (Agenzia per lo Sviluppo Empolese Valdelsa), leading partner is a mix private/public capital agency whose purpose are organising professional training, as well as planning new strategies for economic, cultural, social and tourist local development. | | | | | |
| Internet Site: http://www.distproject.eu/ | | | | | |
| Language(s): English, Italian, Spanish, Polish, Rumanian. | | | | | |
| Overview of the initiative/tool/program: DIST project aims to promote the key competence of a sense of initiative and entrepreneurship by increasing entrepreneurial education based on the methodology of storytelling. Storytelling is the normal way of human thinking: through micro-narrative, humans give meaning to life events and share values with others. It is effective because it brings together the rational and the emotional, and it elicits identification and emulation in the listener. The tools developed within the DIST project can be used at a distance by the final target groups and mediated by the trainers in face to face training setting. | | | | | |
| 2) Type of audience: lay people, aspirant entrepreneurs and entrepreneurs; VET trainers willing to improve their skill in developing the sense of initiative and entrepreneurship of their learners. | | | | | |
| 3) Summary of the learning outcomes (course objectives): Apply storytelling to entrepreneurial stories; Perform sense of initiative and entrepreneurship; Reflect on own entrepreneurial career. | | | | | |
| 4) Type of Entrepreneurial Education | | | Entrepreneurship Education | | |
| 5) Objective | | | About | | |
| 6) Teaching method(s) | | | Storytelling; group learning, peer-learning, case study, debriefing | | |
| 7) Summary of the teaching and learning activities | | | Theoretical introductions; video interview of 15 entrepreneurs; implementation of a guide on storytelling for training; E-learning based on videos and guide; workshops and exercises; implementation of one's own digital curricula story. | | |
| 8) Final output | | | Written report | | |
| 9) Assessment practices | | | For learning through self-assessment | | |
| 10) Brief description of the assessment and certification of competences | | | Self-evaluation of one's own skills; feedback sessions after each workshop; written report after each workshop. Certificate issued by the country partner describing the unit(s) attended and the learning outcome(s) reached, coherently with Europass. | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | Financial and economic literacy | |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | Sharing through digital technologies | | Collaborating through digital technologies | |
| Digital content creation | Developing digital content | | Integrating and re-elaborating digital content | | |
| Safety | | | | | |
| Problem solving | | | Creatively using digital technologies | | |



react

Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

Enterprise education

Enterprise delivered with through approaches

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|---|---|--------------------------------------|--|--|--|
| Country: Italy (Ca' Foscari) | | | | | |
| 1) Type of initiative: | | | | | |
| Name of the best practice/tool: Course in Social Entrepreneurship | | | | | |
| Provider (name/ address): The Voinovich School of leadership and Social Affairs, Ohio University | | | | | |
| Internet Site: https://www.ohio.edu/voinovichschool/ | | | | | |
| Language(s): English | | | | | |
| Overview of the initiative/tool/program: | | | | | |
| The course takes a non-profit sector orientation and embeds the instances of citizenship and active participation for the creation of value for the local community. It seeks to awaken a civic sense to contrast apathy and helplessness. The targets are bachelor and master students of any discipline, and there are no pre-requisites. The basic principle underpinning the course is that social issues such as poverty have not ready made or quick fix solutions. Rather, these phenomena have to be observed in their daily manifestations to be partially tackled concretely at the level of the local community. Instead of seeing development as filling gaps, the underpinning philosophy is to seek to develop the already present assets. This requires the activation of the individual who looks for enterprising opportunities for change. Social entrepreneurship is thus defined as convincing people on ideas is worth pursuing. | | | | | |
| 2) Type of audience: non-business university students | | | | | |
| 3) Summary of the learning outcomes (course objectives): Explain what social entrepreneurship is; Reflect on own values; Apply entrepreneurial process to the resolution of a local social issue. | | | | | |
| 4) Type of Entrepreneurial Education | | | Enterprise education | | |
| 5) Objective | | | Through | | |
| 6) Teaching method(s) | | | Case studies (success stories), group work, project work, workshop, experiential learning | | |
| 7) Summary of the teaching and learning activities | | | <p>"About me assignment": using a picture of him or herself and in whatever media desired, the student has to convey to the teacher who he or she is.</p> <p>The second assignment entails the reading of a book on social entrepreneurship, the student pitches in five minutes to present the content to their schoolmates.</p> <p>The latest activity is a project on the collective co-creation of value. The group have first to spot something that could be tackled in their community, and then elaborate a plan on the resources that could be marshalled to tackle it.</p> | | |
| 8) Final output | | | A presentation that has to be as convincing as possible from the teacher and expert's perspective | | |
| 9) Assessment practices | | | <p>'of' learning (through rubrics): convincing people on ideas is worth pursuing is the main criterion of the rubric to grade the course outcomes;</p> <p>'for' learning: the teacher provides continuous feed back to the groups regarding the social issue and the solution they want to tackle;</p> <p>'as' learning: the students in groups choose the social issue they want to pursue.</p> | | |
| 10) Brief description of the assessment and certification of competences | | | The course is value 3 units | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | Mobilising others |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | Sharing through digital technologies | | Collaborating through digital technologies | |
| Digital content creation | | | | | |
| Safety | | | | | |
| Problem solving | | | | | |



react

Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

Enterprise delivered with gaming

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|---|---|--------------------------------------|--|---------------------------------------|--|
| Country: Finland | | | | | |
| Type of initiative: Online tool for enterprise education | | | | | |
| Name of the best practice/tool: Minecraft Education Edition | | | | | |
| Provider (name/ address): Microsoft | | | | | |
| Internet Site: https://education.minecraft.net/ | | | | | |
| Language(s): English but can be adapted to any language | | | | | |
| Overview of the initiative/tool/program: It is a collaborative tool for basic coding that educators can use across subjects to encourage 21st-century skills; the game promotes creativity, collaboration, and problem-solving in an immersive virtual environment. It has three main features: assess and reflect, the camera and portfolio allow students to take screenshots of their work and document their progress: immersive learning, with non-player characters as tour guides in the game and extending learning by link to additional resources; classroom collaboration with the possibility for students to work together. | | | | | |
| Type of audience: primary and lower secondary students | | | | | |
| Summary of the learning outcomes (course objectives): Apply basic coding to solve virtual problematic situations; Apply English language to solve virtual problems; Apply teamwork to solve virtual problems. | | | | | |
| Type of Entrepreneurial Education | | | Enterprise education | | |
| Objective | | | Through | | |
| Teaching method(s) | | | Gaming | | |
| Summary of the teaching and learning activities | | | The students go through virtual problematic situations they solve in group | | |
| Final output | | | | | |
| Assessment practices | | | | | |
| Brief description of the assessment and certification of competences | | | | | |
| <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | | Creativity | Vision | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | | | | Mobilising others |
| Into action | Taking the initiative | | Coping with uncertainty, ambiguity, risk | Working with others | |
| <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | | Sharing through digital technologies | | | |
| Digital content creation | | | Integrating and re-elaborating digital content | | |
| Safety | | | | | |
| Problem solving | | | | Creatively using digital technologies | |



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Reinforcing Entrepreneurship in
Adults through Communication Technologies



Erasmus+

Enterprise delivered with peer education

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|---|--|---|--|--|-----------------------------|
| Country: The Netherlands | | | | | |
| 1) Type of initiative: Best practice focusing on adult education with peer-learning as teaching method | | | | | |
| Name of the best practice/tool: Peer educators' trainers' training programme , outcome in the Leonardo da Vinci Transfer of Innovation Project "The 8 solutions for fighting early school leaving in VET" 2012-1-NL1-LEO05-08728 | | | | | |
| Provider (name/ address): Quarter Mediation/Lessinglaan 52, 3533AX, Utrecht, the Netherlands | | | | | |
| Internet Site: http://www.ldvfeight.eu/ | | | | | |
| Language(s): English | | | | | |
| Overview of the initiative/tool/program: The tool Peer educators' trainers' training programme is part of the Coaching guide for teachers working in VET schools: "The 8 solutions for fighting early school leaving in VET", Peer Training being one of the eight solutions proposed by FEIGHT project coordinated by Quarter Mediation. It includes Peer Education, the process where trained and motivated young people undertake informal and organised activities with their peers, aiming to develop their knowledge, attitudes, beliefs and skills and enable them to better enrol in vocational and employment activities. | | | | | |
| 2) Type of audience: teachers working with VET students, including groups at increased risk of early school leaving (children with a socio-economically disadvantaged background, a migrant background or special educational needs) | | | | | |
| 3) Summary of the learning outcomes (course objectives): manage different learning styles and disabilities; overcome the limitations of people with mobility, visual, hearing and learning impairments; overcome socialization issues on special populations such as: mobility, hearing or visual impairments, and learning disabilities. | | | | | |
| 4) Type of Entrepreneurial Education | | | Enterprise education | | |
| 5) Objective | | | Through | | |
| 6) Teaching method(s) | | | Peer-learning | | |
| 7) Summary of the teaching and learning activities | | | Presentations on "Peer education", introduction to the trainers' training programme, how to organise a trainers' training programme on peer education; group discussions. | | |
| 8) Final output | | | A series of training sessions to be taught by the peer educators to the mentees (the beneficiaries/target group) before they undertake vocational training, work experience or work-based training, or to assist them in developing their social skills. | | |
| 9) Assessment practices | | | 'for' learning (formative) | | |
| 10) Brief description of the assessment and certification of competences | | | Reflection, Questionnaires for the "evaluation of training course by trainers" and "evaluation of training course by peer educators" | | |
| 11) EntreComp Framework | | | | | |
| Ideas and opportunities | | Creativity | | Valuing ideas | |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | Mobilising others |
| Into action | Taking the initiative | Planning and management | | Working with others | Learning through experience |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | | | Evaluating data, information and digital content | Managing data, information and digital content | |
| Communication and collaboration | Interacting through digital technologies | | | Collaborating through digital technologies | |
| Digital content creation | | | | | |
| Safety | | | Protecting health and well-being | Protecting the environment | |
| Problem solving | | Identifying needs and technological responses | Creatively using digital technologies | | |



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|---|----------------------------------|--|--|--|----------------------------------|
| Country: The Netherlands | | | | | |
| 1) Type of initiative: Best practice focusing on adult education with peer-learning as teaching method | | | | | |
| Name of the best practice/tool: Peer Educator Training Course . Resource Handbook, the Leonardo da Vinci Transfer of Innovation Project "The 8 solutions for fighting early school leaving in VET" 2012-1-NL1-LEO05-08728 | | | | | |
| Provider (name/ address): Quarter Mediation/Lessinglaan 52, 3533AX, Utrecht, the Netherlands | | | | | |
| Internet Site: http://www.ldvfeight.eu/ | | | | | |
| Language(s): English | | | | | |
| Overview of the initiative/tool/program: The tool Peer Educator Training Course. Resource Handbook is part of the Coaching guide for teachers working in VET schools: "The 8 solutions for fighting early school leaving in VET", Peer Training being one of the eight solutions proposed by FEIGHT project coordinated by Quarter Mediation. The tool is to be used by peer educators to support the successful completion of a Peer Educators Training Course. | | | | | |
| 2) Type of audience: teachers working with VET students, including groups at increased risk of early school leaving (children with a socio-economically disadvantaged background, a migrant background or special educational needs) | | | | | |
| 3) Summary of the learning outcomes (course objectives): explain the relevance of peer-tutoring in learning; apply peer tutoring in the class room; reflect on peer-tutoring as transformative experience. | | | | | |
| 4) Type of Entrepreneurial Education | | | Enterprise education | | |
| 5) Objective | | | Through | | |
| 6) Teaching method(s) | | | Peer-learning, workshops | | |
| 7) Summary of the teaching and learning activities | | | The training activity is organised into sessions, including a description, an outline of objectives, and reading materials and exercises, activities or games, which form the core training and resources to be used in future sessions as peer educators. Topics: ice breakers and energizers, presentation skills, session planning, communication, personal qualities, team building, social competence, evaluation, disability and mental health awareness, devise a training session. | | |
| 8) Final output | | | Intangible outputs as result of reflection and discussion | | |
| 9) Assessment practices | | | 'for' learning | | |
| 10) Brief description of the assessment and certification of competences | | | Trainees' reflection on how they feel and the skills they have developed | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | |
| Into action | Taking the initiative | Planning and management | | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | | | | Managing data, information and digital content | |
| Communication and collaboration | | | | Collaborating through digital technologies | |
| Digital content creation | | Integrating and re-elaborating digital content | | | |
| Safety | | Protecting personal data and privacy | Protecting health and well-being | | |
| Problem solving | | Identifying needs and technological responses | Creatively using digital technologies | | |



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|--|---|--------------------------------------|---|--|----------------------------------|
| Country: The Netherlands | | | | | |
| 1) Type of initiative: Best practice on peer-learning between disadvantaged groups (European project on intergenerational learning) | | | | | |
| Name of the best practice/tool: "Bridge the Gap" Research - Intercultural learning in the Netherlands | | | | | |
| Provider (name/ address): Quarter Mediation/Lessinglaan 52, 3533AX, Utrecht, the Netherlands | | | | | |
| Language(s): English | | | | | |
| Overview of the initiative/tool/program: The Stichting Veldwerk NL project focused on intergenerational learning activities. VET students in risk of drop-out met elderly people living in care homes and at senior clubs. VET students also met independent elderly still living on their own and learned from each other by visiting woods, garden centers or museums. The successful results of this inter-generational approach in learning were included in a research report performed by Quarter Mediation during its involvement in the Leonardo da Vinci Partnership project "Bridge the gap". | | | | | |
| 2) Type of audience: seniors (65 years+) including persons with disabilities, youth, VET students in risk of drop-out | | | | | |
| 3) Summary of the learning outcomes (course objectives): learn basic ICTs related competencies (for the elderlies); reflect on the connection between school concept and work experience (For the youth and VET students); reflect on citizenship and shared values (for both groups). | | | | | |
| 4) Type of Entrepreneurial Education | | | Enterprise education | | |
| 5) Objective | | | Through | | |
| 6) Teaching method(s) | | | Intergenerational learning (peer-learning), group work, experiential learning (learning through direct experience) | | |
| 7) Summary of the teaching and learning activities | | | The elderly taught the students about the past (e.g. the history of the region, art and architecture specific to their area, how to understand classical music etc.) and the young people taught elders how to use the ICT (e.g. how to search for a map on Internet, how to find information about different architectural styles and famous artists by using google). | | |
| 8) Final output | | | | | |
| 9) Assessment practices | | | Formative assessment | | |
| 10) Brief description of the assessment and certification of competences | | | N/A | | |
| 11) <i>EntreComp Framework</i> | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | | Valuing ideas | Ethical and sustainable thinking |
| Resources | Self-awareness and self-efficacy | Motivation and perseverance | Mobilising resources | | Mobilising others |
| Into action | Taking the initiative | | | Working with others | Learning through experience |
| 12) <i>DigiComp Framework</i> | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | | | |
| Communication and collaboration | | Sharing through digital technologies | Engaging in citizenship through digital technologies | Collaborating through digital technologies | |
| Digital content creation | | | Protecting health and well-being | | Protecting the environment |
| Problem solving | | | Identifying needs and technological responses | Creatively using digital technologies | |



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Enterprise delivered with gaming and peer-learning

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|--|---|-----------------------------|--|--|--|
| Country: The Netherlands | | | | | |
| 1) Type of initiative: Best practice on gaming and peer learning | | | | | |
| Name of the best practice/tool: Educational game: Operation Sigismund | | | | | |
| Provider (name/ address): Quarter Mediation/Lessinglaan 52, 3533AX, Utrecht, the Netherlands | | | | | |
| Language(s): Dutch | | | | | |
| Overview of the initiative/tool/program: The educational game created by the Dutch Educational Department of Drents Archief with the financial support of the Ministry of Culture is an interdisciplinary teaching and learning activity in that the knowledge of history, math, ICT, geography, foreign languages and sciences are used in teaching all ages, from students in primary education, to secondary, tertiary and adult education. The educational game was granted with the special accommodation museum award in Bologna. | | | | | |
| 2) Type of audience: people aged 10 to 67+ | | | | | |
| 3) Summary of the learning outcomes (course objectives): reflect on the importance of math in the real life; apply the knowledge taught in science lessons to real-world assignments; reflect on the knowledge of history taught in school; apply ICT technologies on computer, scanner, touch screen etc.; reflect on own motivation to learn; reflect on own environmental attitudes. | | | | | |
| 4) Type of Entrepreneurial Education | | | Enterprise education | | |
| 5) Objective | | | Through | | |
| 6) Teaching method(s) | | | group work, project work, experiential learning (learning through direct experience), peer-learning, interdisciplinary learning | | |
| 7) Summary of the teaching and learning activities | | | The educational officer introduces the trainees in the XIXth century atmosphere by telling a romantic story about the main character in the game. The learners are split in groups and they have to solve all kinds of assignments by using ICT, as well as short researches based on their knowledge of different school subjects. The game is designed as a treasure hunting, in that clues are given step-by-step, through solving different assignments. | | |
| 8) Final output | | | | | |
| 9) Assessment practices | | | 'Of' and 'for' learning | | |
| 10) Brief description of the assessment and certification of competences | | | Multiple choice questions, memory games, calculus, research | | |
| 11) EntreComp Framework | | | | | |
| Ideas and opportunities | Spotting opportunities | Creativity | Vision | Valuing ideas | Ethical and sustainable thinking |
| Resources | | Motivation and perseverance | Mobilising resources | | Mobilising others |
| Into action | Taking the initiative | Planning and management | Coping with uncertainty, ambiguity, risk | Working with others | Learning through experience |
| 12) DigiComp Framework | | | | | |
| Information and data literacy | Browsing, searching and filtering data, information and digital content | | Evaluating data, information and digital content | | Managing data, information and digital content |
| Communication and collaboration | Interacting through digital technologies | | | Collaborating through digital technologies | |
| Digital content creation | Protecting devices | | | | Protecting the environment |
| Problem solving | Solving technical problems | | | Creatively using digital technologies | |

7. Analysis of the best practices

The partners of the REACT project collected 36 good practices around Europe and beyond. From the point of view of validity (Ravitch & Carl, 2015), we did the inquiry by multiple readings of the materials and by basing on the educational theories and entrepreneurship described in Chapter 5. We discussed the findings with thought peers and with the partners (Merriam, 2009). Results try to find general trends upon the scrutiny of a limited number of practices and therefore should be generalized with care, and they do not take into consideration the cultural environment where entrepreneurial education is delivered, which could mask possible differences (Hytti, 2008).

Entrepreneurial education, approach, learning outcomes

As first analysis tries to find general trends by comparing the type of approach to entrepreneurship, the learning outcomes as described in the SOLO taxonomy (Biggs & Tang, 2011), the teaching methods and assessment, and the fifteen competences identified by the EntreComp framework (Bacigalupo, Kampylis, Punie, & Brande, 2016). This comparison is reported on Table 7 on page 81. We chose not to take into consideration the DigiComp framework as per se entrepreneurial education can be delivered without the use of ICT. While the analysis in this section mentions gaming as possible pedagogy, when ICTs are used, the digital competences are also strengthened. The section of gaming entails also the ICT closely related to gaming.

Table 7. Analysis of the best practices on entrepreneurial education according to approach, learning outcomes and EntreComp framework.

| | Approach | Learning outcomes SOLO | Teaching methods | Assessment | EntreComp framework | Good Practices |
|------------------|---|--|---|-----------------------------|--|--|
| Entrepreneurship | About | Explain | Lecture Case study E-Learning | Of learning | Spotting opportunities Ethical and sustainable thinking Financial and economic literacy | Cooperative Entrepreneurship (IT), Approccio Imprenditivo (IT), Stargate (IT), Digital Booklet (NL). |
| | For | Apply Generate Business plan | Mentoring Project work Workshops Experiential learning Gaming | For learning As learning | Creativity Vision Motivation and perseverance Mobilizing resources Taking the initiative Planning and management Learning through experience Mobilizing others Working with others | Imprenderò (IT), Imprenditrici oggi (IT), Start Cup (IT), Business Start-up for Immigrants (FIN), Team Academy (FIN), Business start-up for Unemployed Adults (FIN), Support Contract for Entrepreneurship, ACTIF CREA (FR), LAB EMPLOY (FR), Collective Entrepreneurship (FR), Microcredit (FR), Student Entrepreneur Diploma (FR). |
| | Through | Reflect Evaluate | Peer Learning Group work | As learning | Valuing ideas Self-awareness and self-efficacy Coping with uncertainty, ambiguity, risk | Yes Network (FIN) |
| Enterprise | Through | | | | Course in Social Entrepreneurship (IT); Peer Educators' Trainers' Programme (NL); Peer Educator Training Course (NL); Bridge the Gap (NL); Operation Sigismund (NL). | |
| Entrepreneurship | Combination of About + For approaches | | | | | Introductory course in Entrepreneurship Ohio (IT), Foundation of Social Enterprise (IT), Further Qualification for Entrepreneurs (FIN), Entrepreneurial skills assessment (FR). |
| | Combination of About + For + Through approaches | | | | | MENT (IT), Personal Study Path of Entrepreneurship (FIN), Tool on adult entrepreneurship education (NL). |



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The goal of the ‘about’ approaches is to develop an understanding of entrepreneurship and the role of entrepreneurs in society (Hytti & O’Gorman, 2004). Its main learning outcomes align with a knowledge-based approach that coincides with the SOLO learning of explaining. Examples for this are: explain the steps to become entrepreneur from a legal and practical point of view (Support Contract for Entrepreneurship), explain key terms and concepts related to entrepreneurship such as value proposition (Introductory course in Entrepreneurship, Ohio), explain the start-up process (Imprendero), and explain what social entrepreneurship is (Course in Social Entrepreneurship, Ohio). Its main teaching methods are lectures, case studies, and e-learning. These pedagogies call for assessment ‘of’ learning, that is a summative assessment of knowledge, for example with multiple choice answers. Connected with the EntreComp framework, the learning outcomes deal with knowledge: spotting opportunities, ethical and sustainable thinking, financial and economic literacy.

The goal of the ‘for’ approaches is to prepare individuals to become entrepreneurs and to start a business (Pittaway & Edwards, 2012). The analysis found four type of SOLO learning outcomes connected with the acquisition of skills: apply, identify, generate and simulate. Examples for apply, the mostly used in the good practices, are: apply business plan to own idea (Imprenderò, IT), apply pitching to own entrepreneurial idea (Start-Cup, IT), and apply project management and business plan writing to social enterprise (Foundation of Social Enterprise, IT). Examples for others learning outcomes are: identify business opportunities (Further Qualification for Entrepreneurs, FI), generate a business idea and a business plan - including commercialization aspects (ESG project, IT). In the case of gaming as learning method, the outcome is simulating how to start a small/medium business such as in the Spanish Introduction to Entrepreneurship. The most useful pedagogies of ‘for’ entrepreneurship approaches deal with the acquisition of skills: mentoring, project work, workshops, experiential learning, and gaming. The corresponding forms of assessment are: ‘for’ learning where the learner is provided a formative constructive feed-back, and ‘as’ learning with the learner choosing his or her objective and evaluating the progression of his or her achievement. The consequent learning outcomes connected to EntreComp deal with skills: creativity, vision, motivation and perseverance, mobilizing resources, taking the initiative, planning and management, and learning through experience.

Furthermore, in the good practices scrutinized in this project, most of the times the ‘for’ approaches to entrepreneurship have as final output the development of the own entrepreneurial into a business plan,

a type of output is classic in the literature (Mwasalwiba, 2010). Developing such a business plan calls for two related pedagogies. The first pedagogy is pitching own business plan to investors or to potential customers such as in the MENT project or in the Introductory course in Entrepreneurship, Ohio. The second and most important pedagogy is mentoring from experts with consequent formative feed-back for learning. Examples for this are: the French ACTIF CREA and the Support Contract for Entrepreneurship; the Finnish Business Start-up training for Unemployed Adults and Business Start-up Training for Immigrants; and the Italian Imprenderò. The heutagogical dimension of autonomy here is apparent, with the learner choosing the idea s/he wants to pursue and the constant self-assessment of their goals and the extent they have been reached (Costa, Morselli, Polesel, & Rice, 2015; Costa & Strano, 2017). Notably, in the samples collected by the partners the business plan can also be applied to social enterprises.

The goal of the ‘through’ approaches in entrepreneurial education is to become more entrepreneurial in life (Hytti & O’Gorman, 2004), therefore targeting personal attitudes towards entrepreneurship or enterprise. Results are similar for both entrepreneurship education and enterprise education, and therefore have been merged in the analysis. The SOLO learning outcomes connected to the ‘through’ approach are reflecting and evaluating. Possible examples for reflect, a widely used outcome in the good practices reviewed here, are: reflect on entrepreneurship as possible career option, reflect on citizenship and shared values, reflect on own entrepreneurial career and risk-taking attitude. Very often these approaches make use of peer-learning and group-work as teaching method and develop the learner’s autonomy through an ‘as’ learning approach to assessment: it is the learner who chooses the goals to pursue and later evaluates the extent s/he achieved them. The competences connected to the EntreComp framework are connected to entrepreneurial attitudes such as: valuing ideas, self-awareness and self-efficacy, and coping with uncertainty, ambiguity and risk.

Entrepreneurial education and gaming

This section focuses on the good practices related to gaming. The partners of the REACT project found four gaming practices related to entrepreneurship and two on enterprise, one of which also makes use of peer-learning. Table 8 on page 84 shows the analysis.

In the practices reviewed here, gamification is often used in combination with other in-class activities, therefore can imply other pedagogies, from lectures to group work and mentoring, and forms of evaluation with formative feed-back.



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Table 8. Analysis of the good practices on gaming.

| | Approach | Learning outcomes SOLO | Assessment | EntreComp framework | Digicomp Framework | Good practices |
|------------------|----------|---|-------------|---|--|--|
| Entrepreneurship | For | Apply Identify Generate Simulate | Of learning | Creativity Planning and management Mobilizing resources Coping with uncertainty and risk | Managing data, information and digital content Collaborating through digital technologies | SG4Adult (BE), eSG (IT), Introduction to Entrepreneurship (SP), Praxar Kayak (IT). |
| Enterprise | Through | Apply | Of learning | Planning and management Working with others Learning through experience | Integrating and re-elaborating digital content Creatively using digital technologies | Minecraft Education Edition (IT), Operation Sigismund (NL). |

The gaming practices related to entrepreneurship deal mostly with ‘for’ approaches, therefore the acquisition of skills useful to start a new company or even to manage an existing business. The SOLO learning outcomes are therefore to apply, identify, generate, simulate. Possible examples are: apply business management to virtual reality (Praxar Canada), identify and exploit business opportunities (eSG IT), generate a business idea and a business plan (eSG IT), simulate how to start a small/medium business (Introduction to Entrepreneurship, SP). The gaming practices related to enterprise deal mostly with ‘through’ approaches, therefore to become more enterprising in a lifelong learning perspective, with SOLO learning outcomes related to the application, for example apply teamwork to solve virtual problems (Minecraft Education Edition, USA).

In the gaming practices dealing with entrepreneurship and enterprise the assessment is mostly ‘of’ learning, with summative scores. The learning outcomes related to the EntreComp framework entail creativity, planning and management, mobilizing resources, coping with uncertainty and risk, planning and management, working with others, learning through experience. The competences developed through gaming are particularly valuable and seen from the DigiComp framework span among the following: managing data, information and digital content; collaborating through digital technologies; integrating and re-elaborating digital content; and creatively using digital technologies.

Entrepreneurial education and peer education

This section focuses on the good practices related to peer-education, which are analysed in Table 9 on page 85. Unlike gaming that was matched with other pedagogies, the best practices on peer-learning collected by the partners of the REACT project rely uniquely on this learning method. Of the best practices collected two deals with entrepreneurship education and four with enterprise education. We suggest that peer-learning is loosely related to entrepreneurship but can be a suitable pedagogy to achieve the wide goals of enterprise education connected to employability, inclusion and citizenship.

Table 9. Analysis of the good practices on peer-education.

| Type of entrepreneurial education | Approach | Learning outcomes SOLO | Assessment | EntreComp framework | |
|-----------------------------------|----------|------------------------|--------------|--|--|
| Entrepreneurship | About | Explain Reflect | Of learning | Spotting opportunities Creativity | BALISE (FR), Adult Entrepreneurial Education (IT) |
| Enterprise | Through | Reflect | For learning | Vision Ethical and sustainable thinking Self-awareness and self-efficacy | Peer Educators' Trainers' Training Programme (NL), Peer Educator Training Course (NL), Bridge the Gap (NL), Operation Sigismund (NL) |

When used for entrepreneurship education, the pedagogy of peer-learning is matched with an 'about' approach, thus entailing the acquisition of basic knowledge related to entrepreneurship, with corresponding SOLO learning outcomes such as explain and reflect. Examples for these verbs come from the French BALISE tool: to reflect on entrepreneurship as possible career option and to explain what it means to be an entrepreneur. The consequent type of knowledge related assessment can be 'of' learning. When used for enterprise education, peer-learning is used for 'through' approaches, that is to endow the learner with entrepreneurial attitudes connected to enterprise, employability, and citizenship. The learning outcomes of the best practices collected all from the Netherlands are mostly connected to the higher processes of reflection, for example: reflecting on peer-tutoring as transformative experience (Peer Educator Training Course), reflecting about the connection between school concepts and work experience (Bridge the Gap), reflect on citizenship and shared values (Bridge the Gap). A formative feed-back with assessment 'for' learning proves valuable here. The consequent learning outcomes seen from the EntreComp framework relate to entrepreneurial and enterprising attitudes: spotting opportunities,

creativity, vision, ethical and sustainable thinking, self-awareness and self-efficacy. Moreover, we suggest that peer-education can be matched well with group work.

To summarize the analysis above, the good practices on entrepreneurship education align well either with an about, a for, or a through approach to entrepreneurship. This means that the goal is different, respectively: developing an understanding of entrepreneurship and the role of entrepreneurs in society (about), preparing individuals to become entrepreneurs and to start a business (for), becoming more entrepreneurial in life (Hytti & O'Gorman, 2004). These approaches focus on diverse components of competence¹⁵: knowledge for the 'about' approaches, 'skills' for the for approach, and attitudes for the 'through' approaches. Many of the best practices collected by the REACT project's partners deal with a 'for' approach to entrepreneurship, the goal is therefore to start their own business. Consequently, the activities entail the development of a business plan as final output and make use of the mentoring as main teaching method, thus providing formative assessment, but also developing an autonomous learner able to start his or her enterprise at the end of the training. However, many good practices are delivered with mixed approaches, these can be about and for, or about, for and through, thus taking a holistic perspective on entrepreneurship as competence, and developing the learner's autonomy and ability to make choices according to a Capability Approach (Costa, 2016; Costa et al., 2015; Morselli, 2017). The good practices on enterprise education take a 'through approach' with the goal of developing the learners' attitudes toward enterprise and being enterprising in a lifelong learning perspective. Gaming is often used within 'for' approaches to entrepreneurship, the goal being starting a venture or managing an existing company. Gaming is often associated with in-class teaching methods and - for example tutoring and group work. Concerning peer education, this is often used for enterprise education with a 'through' approach, thus aiming to develop in the learner enterprising attitudes connected to enterprise, citizenship, employability.

Bibliography

Bacigalupo, M., Kampylis, P., Punie, Y., & Brande, G. V. d. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Brussels: Publication Office of the European Union.

¹⁵ Competence is defined here as a combination of knowledge, skills and attitudes appropriate to the context (European Commission, 2007).



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- Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university. What the student does*. New York: McGraw-Hill.
- Costa, M. (2016). L'apprendimento permanente come leva generativa per un nuovo learnfare. *Formazione & Insegnamento*, XIV(2).
- Costa, M., Morselli, D., Polesel, J., & Rice, S. (2015). Strategies for Structural Youth Unemployment: A Capability Approach for Guidance. *Pedagogia Oggi*, 1, 91-114.
- Costa, M., & Strano, A. (2017). Imprenditività come leva per il nuovo lavoro. *Formazione & Insegnamento*, 15(1), 399-412.
- European Commission. (2007). *European competences for lifelong learning*. Luxembourg: Publication Office of the European Union.
- Hytti, U. (2008). Enterprise education in different cultural settings and at different school levels. *The Dynamics Between Entrepreneurship, Environment and Education*. Cheltenham: Edward Elgar Publishing Limited.
- Hytti, U., & O'Gorman, C. (2004). What is "enterprise education"? An analysis of the objectives and methods of enterprise education programmes in four European countries. *Education+ Training*, 46(1), 11-23.
- Merriam, S. B. (2009). *Qualitative Research : A guide to design and Implementation*. Somerset,NJ: Jossey-Bass.
- Morselli, D. (2017). The boundary crossing workshops for enterprise education. In M. Jones P., G. and Pittaway, L. *Entrepreneurship Education: New perspectives on research, policy & practice*. (Ed.), *Entrepreneurship education: New perspectives on research, policy & practice*. (pp. 277-300). Bingley: Emerald.
- Mwasalwiba, E. S. (2010). Entrepreneurship education: A review of Its objectives, teaching methods, and impact Indicators. *Education + Training*, 52(1), 20-47.
- Pittaway, L., & Edwards, C. (2012). Assessment: Examining practice in entrepreneurship education. *Education+ Training*, 54(8/9), 778-800.
- Ravitch, S. M., & Carl, N. M. (2015). *Qualitative research: Bridging the conceptual, theoretical, and methodological*. Los Angeles: SAGE Publications.



8. Conclusions: towards a Capability Approach for Entrepreneurial Education

This chapter points out conclusive trends for entrepreneurial education in Europe, and makes use of the Capability approach as informed by Sen (1999) and Nussbaum (2003) to understand how entrepreneurial education can be delivered.

The teaching methods in entrepreneurial education according to a Capability Approach

This section will discuss how the teaching methods for entrepreneurial education develop specific EntreComp competences according to a Capability Approach and will make use of a mix of deductive and inductive approaches on the best practices delivered according to the through approach. In line with the aims of the REACT project, entrepreneurial education according to a Capability Approach should concentrate on the through approaches, because their objective is to shape the entrepreneurial individual's mindset, thus fostering inclusion, citizenship and full employability. Among the best practices which refer to the through approach, we sought to isolate the teaching methods (even though they were often in combination) that we think are closely related to a Capability Approach and matched each of them with the related competences of the EntreComp framework, as shown in Table 10.

Table 10. Analysis of the best practices on entrepreneurial education according to “through” approaches, teaching methods and the EntreComp framework.

| Teaching methods | Good practices | EntreComp framework |
|---------------------------|---|--|
| Experiential learning | Personal Study Path of Entrepreneurship (FIN) Tool on Adult Entrepreneurship Education (NL) | Self-awareness and self-efficacy Learning through Experience Valuing ideas Coping with uncertainty, ambiguity, risk Vision |
| Project work Groupwork | Yes Network (FIN) Course in Social Entrepreneurship (IT) | Working with others Planning and management Mobilising resources Spotting opportunities Valuing ideas |
| Mentoring Coaching | MENT Project (IT) | Self-awareness and self-efficacy Mobilising resources Valuing ideas Spotting opportunities Vision |
| Gaming | eSG Project (IT) Operation Sigismund (NL) Minecraft Education Edition (NL) | Creativity Motivation and perseverance Financial and economic literacy Taking the initiative Learning through experience |
| Peer-learning | Bridge the gap (NL) Peer Educator Training Course (NL) Peer Educators’ Trainers’ programme (NL) | Self-awareness and self-efficacy Ethical and sustainable thinking Valuing ideas Taking the initiative |

The teaching methods emerging from the analysis of the best practices are the following:

- Experiential learning, a process through which people develop knowledge, skills and values from direct experiences outside a traditional academic setting;
- Project work, a learning experience which aims to provide people with the opportunity to synthesise knowledge from various areas of learning and critically and creatively apply it to real life situations;
- Group work (sometimes cooperative learning), a method of instruction that gets people to work together in groups that enhances the total output of the activity than when done individually;



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- Mentoring, a professional relationship in which an experienced person assists another in developing specific skills and knowledge that will enhance the less-experienced person's professional and personal growth;
- Coaching, a professional relationship that helps people produce results in their lives, careers, businesses or organizations, helping them bridge the gap between where they are now and where they want to be;
- Gaming, computer-based learning simulations that engage players in realistic activities designed to increase knowledge, improve skills and enable positive learning outcomes;
- Peer learning, a two-way, reciprocal learning mutually beneficial which involves the sharing of knowledge, ideas and experience between the participants; a way of moving beyond independent to interdependent or mutual learning.

It seems that the above-mentioned teaching methods lead to similar results among them: for instance, "self-awareness and self-efficacy" are indicated from "Personal Study Path of Entrepreneurship", "Tool on Adult Entrepreneurship Education", "Ment Project", "Bridge the Gap", "Peer Educator Training Course" and "Peer Educators' Trainers' programme", even if the practices followed different teaching methods: experiential learning, mentoring and coaching, peer-learning.

The analysis of the best practices suggests that these methodologies are best matched together: in most cases the analysis points out that more methods are utilised (for instance, the eSG Project with experiential learning and peer-learning; the Course in Social Entrepreneurship with group work and experiential learning; and the Yes Network project with work by projects and experiential learning). The learning outcomes outlined within the EntreComp Framework match as well with 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. This involves the possibility of "spotting opportunities", "valuing ideas" and this is thinkable only if the context enables the subject to do so: opportunities are to grasp only if they are existing, so that ideas can be valued only if they are likely to be turned into courses of action.



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Conclusions

Entrepreneurial education with a Capability Approach means to activate the personal agency in a capability-enhancing environment. Among the possibilities a person can cultivate to live the kind of life s/he has reason to value, an entrepreneurial or enterprising path is justified not only as a mean to invent one's job when unemployment is high, but also as a way of realizing an autonomous and responsible self (Chiusso, 2014).

A Capability Approach provides the theoretical framework with which to analyse the entrepreneurship competence since it allows to look beyond mere performance towards a reflection on the contextual factors and opportunities that facilitate or constrain the expression of the entrepreneurship competence (Costa, 2016). These factors can be inspected alongside three dimensions:

1. the necessary information on how to turn ideas into action: this concerns the awareness of the possible resources: funding, consultation services, mentoring;
2. the analysis on the own context and the elements that can inhibit or encourage the development of entrepreneurial/enterprising ideas. This analysis can be done for instance with the help of a SWAT analysis¹⁶ on the strengths, weaknesses, opportunities and threats of the own enterprising or entrepreneurial idea.
3. An awareness of own plans for the future with clear short-term, mid-term, and long-term objectives and the sequence of actions to achieve them.

When the individual has gained more awareness on local and general factors - these can be political, social or related to citizenship, s/he can fully and appropriately express his or her entrepreneurship competence in the context. In so doing, the capability approach allows to better connect entrepreneurial competence to the individual's self-determination (Costa, 2018).

Firstly, the core goal for entrepreneurship is the creation of value (Lackeus, 2015): this can be financial, cultural or social. Creating new organizations is then viewed as one of many different means for creating value. Each program in entrepreneurial education should seek to create value for the individual as well as for his/her community, thus training the learners' ability and willingness to create value for other people (Costa, 2015). Learners can become highly motivated and engaged by creating value to other individuals

¹⁶ https://en.wikipedia.org/wiki/SWOT_analysis



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and their community. This lies at the core of entrepreneurship, but is also a competence that all citizens need to have in today's society, regardless of career choice, and this can fuel deep learning and illustrate the practical relevancy of the knowledge in question (Lackeus, 2015).

Second, entrepreneurship is connected to freedom and citizenship (Costa & Strano, 2017). Entrepreneurial education helps promote and extend freedom via a pedagogy which encourages participation, learning by doing and asking questions; but it also promotes freedom, seen that it establishes the right to start or not start a business – it helps to demonstrate that employment in the SME sector can be a positive and rewarding experience and in so doing, by default challenges the role of the state and big business as monopoly providers of goods, services and employment (B. Jones & Iredale, 2010). Entrepreneurial education acts as a liberator of ideas and calls into question certain taken-for-granted erroneous assumptions about work, employment and the nature of a market economy. Furthermore, the content combined with the pedagogical approach, together with practices of entrepreneurial contributes to the creation of a democratic learning environment. It fosters democratic citizenship and community responsibility and can help resolve common problems. Entrepreneurial education has a role to play in both community development and promoting an enabling market environment. It is relevant to not-for-profit organisations, can help empower members of the community and can further the notion of the good society. In so doing, it helps promote the idea of freedom and opportunity (Costa, Morselli, Polesel, & Rice, 2015).

Third, seen from a capability approach point of view, entrepreneurship is a competence to act (Costa, 2014). It promotes the development of one's agency, so that everybody can become the little entrepreneur of his or her life, to make use in the best way possible of the interaction between own functionings and the available resource in the environment (Alkire, 2005). It promotes the development of the individual autonomy from an heutagogical perspective (C. Jones, Matlay, Penaluna, & Penaluna, 2014; Penaluna & Penaluna, 2015), so that the individual can learn to make valuable choices to develop the style of life he reckons important for himself or herself. The development of one's agency is the main goal of the capability approach connected with the entrepreneurship education: the internal capacities allow the subject to act in a way s/he has reason to value, following aspirations, vocations and talents too often put aside (Chiusso, 2014). The possibility to start a business – or to act with an enterprising way in life as well as in workplace becomes an opportunity to realize own aspirations and values.



Bibliography

- Alkire, S. (2005). Subjective quantitative studies of human agency. *Social Indicators Research*, 74(1), 217-260.
- Chiusso, C. (2014). Democrazia deliberativa e agency sociale. Il sindacato tra competenze, formazione e capacitazioni. *Formazione & Insegnamento*, 11(1), 209-216.
- Costa, M. (2014). Capacitare l'innovazione sociale. In G. Alessandrini (Ed.), *La Pedagogia di Martha Nussbaum* (pp. 214-227). Milano: Franco Angeli.
- Costa, M. (2015). Capacitare all'imprenditorialità come leva per una migrazione inclusiva. Retrieved from: https://www.academia.edu/11824424/Capacitare_all_imprenditorialit%C3%A0_come_leva_per_una_migrazione_inclusiva
- Costa, M. (2018). Formatività e innovazione: un nuovo legame per industry 4.0. In G. Alessandrini (Ed.), *Atlante di Pedagogia del Lavoro*. Milano: Franco Angeli.
- Costa, M., Morselli, D., Polesel, J., & Rice, S. (2015). Strategies for Structural Youth Unemployment: A Capability Approach for Guidance. *Pedagogia Oggi*, 1, 91-114.
- Costa, M., & Strano, A. (2017). Imprenditività come leva per il nuovo lavoro. *Formazione & Insegnamento*, 15(1), 399-412.
- Jones, B., & Iredale, N. (2010). Enterprise education as pedagogy. *Education+ Training*, 52(1), 7-19.
- Jones, C., Matlay, H., Penaluna, K., & Penaluna, A. (2014). Claiming the future of enterprise education. *Education+ Training*, 56(8/9), 764-775.
- Lackeus, M. (2015). Entrepreneurship in Education. What, why, when, how. Retrieved from http://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf
- Nussbaum, M. (2003). Capabilities as fundamental entitlements: Sen and social justice. *Feminist economics*, 9(2-3), 33-59.
- Penaluna, A., & Penaluna, K. (2015). Thematic paper on entrepreneurial education in practice. Part 2. Building motivation and competencies. Retrieved from: <http://www.oecd.org/cfe/leed/Entrepreneurial-Education-Practice-pt2.pdf>
- Sen, A. (1999). *Development as freedom*: Oxford University Press.



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