Promoting Regional Development Through a Collaborative Project in Entrepreneurship Education: Lessons from a Regional Experiment to Develop Entrepreneurial Competencies in Children and Youngsters



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Abstract The chapter focuses on the reflection around the relationship between entrepreneurial empowerment and regional development, based on the assumptions, methodology and results of a self-sustained supramunicipal project in entrepreneurship education, promoted by a wide network of partners representing all the municipalities of Baixo Alentejo, Portugal, and coordinated by the Polytechnic Institute of Beja (IPBeja). The project Promoting Entrepreneurship Education at the Schools of Baixo Alentejo (PEEBA) was carried out in collaboration with Elementary Schools (1st to 2nd *Ciclos*) and kindergartens of Baixo Alentejo with the objective to nurture entrepreneurial competencies in children and youngsters aged 3–12 through practical and experiential entrepreneurship education. It provided them with entrepreneurial skills and attitudes that will increase their opportunities, by helping them face their lives with more initiative and confidence and/or be more proactive at work, or even start their own business in a near future, in the hope that this may eventually contribute to reduce the *brain drain* in Baixo Alentejo.

With the motto the socioeconomic future of our region will be shaped by the students we are educating now, the PEEBA is innovative and unique, since it consists in a platform that brings together all the key stakeholders in the field of entrepreneurship education within all the municipalities of a NUTS, in this particular case Baixo Alentejo, who show an interest in working collaboratively for a common goal: to create a shared ecosystem favourable to entrepreneurship and entrepreneurial capacity.

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1 Introduction

The project Promoting Entrepreneurship Education at the Schools of Baixo Alentejo (PEEBA) was carried out in collaboration with Elementary Schools (1st to 2nd *Ciclos*) and kindergartens of Baixo Alentejo, with the objective to nurture entrepreneurial competencies in children and youngsters aged 3–12 through practical and experiential entrepreneurship education. The project reflects the relationship between entrepreneurial empowerment and regional development, based on the assumptions, methodology and results of an innovative self-sustained supramunicipal project in entrepreneurship education, promoted by a wide network of partners representing all the municipalities of Baixo Alentejo and coordinated by the Polytechnic Institute of Beja (IPBeja).

From our point of view, this is an example of a productive relationship between entrepreneurship education and societal development. Both politically and technically, it challenged all the participants to get involved in a process of renovation and improvement of their intervention practices and contexts.

In this chapter, we will start by a review of the literature on entrepreneurship education, focusing on experiments carried out worldwide and in Portugal. Additionally, we will establish a relationship between entrepreneurship education and regional development, in the assumption that entrepreneurship education contributes to the development of capacities to act upon and solve concrete local social problems. In this sense, and taking into account the European frameworks for matters of this nature in what concerns the role of teachers and trainers and the meaning of entrepreneurship education, it seems obvious that education generates integrated meaningful processes that bring innovation to communal practices, and is

¹In Entrepreneurship Education: A Guide for Educators (European Commission 2014, p. 4), "(...) To inspire their pupils and students, and to help them develop an enterprising attitude, teachers need a wide range of competences related to creativity and entrepreneurship; they require a school environment where creativity and risk-taking are encouraged, and mistakes are valued as a learning opportunity. Developing the competences of school leaders and teaching staff—including aspiring new teachers and those who have been in the profession for a long time—should be an absolute priority for Member States.". Accessed in: http://ec.europa.eu/DocsRoom/documents/7465/attachments/1/translations/en/renditions/native&usg=AFQjCNEAZENuwg06uXIDQR_CK8zmSko5Lw&sig2=kjtnBVqQOeVNEhNWeBUSrw&cad=rja

²"(...) that seek to prepare people to be responsible, enterprising individuals who have the skills, knowledge and attitudes needed to prepare them to achieve the goals they set for themselves to live a fulfilled life. It hence covers a broad range of activities across all levels of education—from creativity classes in primary education to Business Master Studies.(...)" (European Commission 2015, p. 3). Accessed in http://ec.europa.eu/DocsRoom/documents/8564/attachments/1/translations/en/renditions/pdf

recognized today as a key trigger to the integral development of people and territories and their respective dynamics of socioeconomic (re)invention.

Project PEEBA is an example of how to conduct a project that stimulates the relationship between entrepreneurship education and regional development. All the stages of implementation will be presented here, from the diagnostic analysis to the results obtained.

2 Literature Review

2.1 Entrepreneurship Education: The Concept

The two terms more commonly associated with entrepreneurship education are: education for entrepreneurship and enterprise education. The existence of these two distinct terms reinforces the idea that there are two clearly different views regarding entrepreneurship in the educational context, suggesting the existence of a *broad* perspective and a *narrow* one concerning entrepreneurship education (Lackéus 2015).

The *narrow* view of entrepreneurship comprehends the mere analysis of how an individual can become an entrepreneur, bolstering concepts such as the identification of opportunities, the development of business and companies, and the creation of self-employment. (Fayolle and Gailly 2008; QAA 2012). The *broader* perspective focuses on the aspects that enable the individual to act in an entrepreneurial way and is based on approaches that value personal development and the improvement of entrepreneurial skills, such as creativity, self-reliance, initiative, and orientation to action (Gautam and Singh 2015; Loué and Baronet 2012).

In the scope of entrepreneurship education, from the *narrow* standpoint students are only encouraged to start their own business or create their own employment. The second view defends that entrepreneurship education should not focus at all on the mere creation of new business and enterprises, but instead must implement activities that encourage students to become more creative, focussed, proactive and innovative, which is in fact a more comprehensive definition, relevant to all spheres of human life (Lackéus 2015).

Another way of distinguishing the objectives of entrepreneurship education is to categorize it into three distinct approaches: education *for, about*, and/or *through* entrepreneurship (O'Connor 2013; Lackéus 2015; Moberg 2014). This categorization is based on the analysis of the different objectives the educators (and, in turn, the students) have when trying to implement processes of entrepreneurship education.

Thus, educating *for* entrepreneurship has an underlying approach directed to creating future entrepreneurs and equipping them with the knowledge and skills necessary to play this role actively, for instance by creating a business (Kirby 2004; Moberg 2014). Educating *about* entrepreneurship, on the other hand, aims at developing the knowledge and understanding of entrepreneurship as a phenomenon and its impact on society. This is the case of the activities of sensitization and learning

about the role entrepreneurs play in the community. The approach is more theoretical and less practical (Moberg 2014).

Finally, educating *through* entrepreneurship implies, above all, an experiential approach through which students undergo a true entrepreneurial learning process (Kirby 2004). This approach implies a broader definition of entrepreneurship and assumes that it is possible to integrate it as a cross-curricular component of other curricular areas, or to approach it extracurricularly and more autonomously, aiming to promote students' overall development (Middleton et al. 2014). Moberg argues that (2014, p. 9) "(...) education through entrepreneurship (...) [is] a way to teach other subjects by applying an entrepreneurial teaching method."

According to Lackéus (2015), the common denominator between the different approaches to entrepreneurship education is the objective to develop the students' capacity and willingness to create value for others. To this author this is the core of the true entrepreneurial spirit and it is a competence that all citizens should have in today's society, regardless of their career.

The Danish Foundation for Entrepreneurship-Young Enterprise (FFE-YE)³ argues that entrepreneurship education must be defined as "(...) the content, methods and activities that support the development of motivation, competence and experience that make it possible to implement, manage and participate in value-added processes" (Rasmussen et al. 2015, p. 7). This focus on value creation and the involvement of students in the process of identifying and developing this value is what, according to the definition, distinguishes entrepreneurship education from other teaching methods, namely project-oriented teaching.

The value creation processes are the foundation and the main objective of the learning dynamics developed with students, in which there is constant direct interaction with the community outside the classroom and the educational institution, in connection with an ecological dimension of learning (Rasmussen et al. 2015). In this sense, entrepreneurial action implies having a dynamic attitude towards reality, in which, given certain internal or external contexts, one can envisage and create solutions to modify this reality.

These are the bases in which the concept of entrepreneurship education is currently discussed. And the issue has gained a great deal of attention in recent years in the world scientific production. It has been followed by policy makers in a growing number of countries, contributing to the integration of entrepreneurship education in the school context as an educational priority.

³FFE-YE is a national knowledge centre supporting the implementation of entrepreneurial education in Denmark at all educational levels. Relevant target groups include participants from primary and secondary school and higher education.

2.2 Entrepreneurship Education: A Review of the Practical and Policy Frameworks

The debate around how to implement entrepreneurship education has become central to academic research on this field (Dickson et al. 2008; Jones et al. 2014; Neck and Greene 2011; Redford 2013; Edwards and Muir 2012; Lackéus 2015). The idea of entrepreneurship as a great catalyst for economic growth and job creation (Raposo and do Paço 2011; Sánchez 2013) is one of the arguments used to defend the need to promote entrepreneurship education (Lackéus 2015).

The idea of linking entrepreneurship and education is not new, even though the situation is clearly different in higher education and other school levels, such as elementary and secondary (Pepin 2015). In higher education Myles Mace was the first to introduce a course in entrepreneurship, in 1947, at Harvard University (Katz 2003; Hoppe 2016). Since then there has been an exponential increase of courses and strategies aiming to include entrepreneurship in higher education, which has aroused the interest of the scientific community and contributed to the academic debate around entrepreneurship education, notwithstanding the controversy around the definition of the notion of entrepreneurship, making it an almost autonomous scientific field (Pittaway and Cope 2007).

In what concerns elementary and secondary education, though, it is not so easy to find the genesis of the movement towards combining entrepreneurship and education. Anglo-Saxon countries, especially the United Kingdom, are often referred to as the precursors in this field, around 1970 (Greene 2002). Nowadays, entrepreneurship education at these levels is widespread in most post-industrialized societies (Pepin 2015), in countries such as Sweden, Finland, Denmark, Belgium, Canada, Australia, Ireland, the United Kingdom, Croatia, Greece, Brazil, and Japan (Hoppe 2016).

The political phenomenon and the joint action of the various world policy makers have contributed to this state of affairs. Over the last few years, entrepreneurship education has become a relevant topic and a top priority on the political agenda of several countries around the world. This growing interest in the benefits of integrating entrepreneurship education in the school context finds support in the guidelines and recommendations of organizations such as the Organization for Economic Co-operation and Development (OECD), the United Nations Educational, Scientific and Cultural Organization (UNESCO) or the European Union (EU).

For decades, the OECD, for example, has been advocating that "Entrepreneurship can be learned and should be promoted at all levels of education" (from http://www.oecd.org/site/entrepreneurship360/project/). In this context, the Foundation for Entrepreneurship360 was created in 2014, a collaborative initiative of the OECD and the European Commission which aims to nurture entrepreneurship as a key competence in schools and technical and vocational institutions.

In recent years, the EU has also tried to make contributions⁴ in order to encourage member countries to adopt more consistent strategies in the field of entrepreneurship

⁴European Commission (2004). Final report of the expert group "education for entrepreneurship": making progress in promoting entrepreneurial attitudes and skills through primary and secondary

education. According to the European Commission, one of the ways to overcome employment problems is to develop vision and entrepreneurship skills among young people (European Commission 2015).

In Portugal, the attention given to the benefits of entrepreneurship education has followed the international orientations, in general (Redford 2013). As a matter of fact, in terms of the public policies adopted in Portugal in recent years concerning the introduction of entrepreneurship in the school context, the National Entrepreneurship Education Project (PNEE, Portuguese acronym), launched in 2006 and restructured in 2009, aimed to promote entrepreneurship activities in schools, from elementary to secondary education. To support the development of this project, the Directorate-General for Innovation and Curriculum Development of the Ministry of Education issued the guide "Promoting Entrepreneurship in Schools". According to these guidelines, schools must "promote, from early on, students' entrepreneurial culture, therefore helping overcome risk aversion and the stigma of failure, still prevailing in our culture" (Pereira et al. 2007, pp. 6–7, own translation). In this perspective,

the aptitude for entrepreneurship is not an innate and natural "trait", and it is necessary to work with schools, helping students develop skills that foster the "spirit of competitiveness", the "taste for risk", initiative and leadership, among other qualities, for the sake of "equal opportunities (Pereira et al. 2007, p. 7, own translation).

Currently, and since its introduction by the Ministry of Education and Science, in 2012, entrepreneurship education is integrated in the 1st *Ciclo* curriculum, as part of Citizenship, a cross-curricular area implemented according to the schools' own decisions (Decree-Law no. 139/2012 of July 5 of the Ministry of Education and Science 2012). The same Decree-Law establishes, in article 15, for all levels of elementary and secondary education, that "within their autonomy, schools should promote projects and activities that contribute to students' personal and social development, such as civic education, health education, financial education, media education, road safety education, consumer education, entrepreneurship education and moral and religious education, of a non-compulsory nature" (Decree-Law no. 139/2012, p. 3479, own translation).

In recent years, entrepreneurship education in the school context, particularly at the elementary and secondary levels, has been stimulated in different ways, namely:

• projects promoted by local authorities, such as: project Escolas Empreendedoras (Entrepreneurial Schools), supported by the municipality of Cascais, or project

education; European Commission (2005). Mini-Empresas no Ensino Secundário—Projecto do Procedimento Best: Relatório Final do Grupo de Peritos; European Commission (2006). *Implementing the Community Lisbon Programme*: Fostering entrepreneurial mind-sets through education and learning; European Commission (2010). EUROPE 2020 A strategy for smart, sustainable and inclusive growth; European Commission (2014). Entrepreneurship Education: A Guide for Educators; European Commission (2015). Entrepreneurship Education strategies and measures; European Commission (2016). Entrepreneurship Education at School in Europe.

Aveiro Empreendedor (Entrepreneurial Aveiro), sponsored by the municipality of Aveiro:

- activities developed by industrial associations, such as project Atelier Empreender Criança, promoted by the Portuguese Industrial Association;
- initiatives sponsored by private organizations, such as Junior Achievement Portugal, Science for You with project Mini Empreendedores (Mini-Entrepreneurs), or the Educational Centre Alice Nabeiro (CEAN—Portuguese acronym), belonging to the Delta business group, with project "Ter ideias para Mudar o Mundo: Manual para treinar o empreendedorismo em crianças dos 3 aos 12 anos" ("Having Ideas to Change the World: a resource book to teach entrepreneurship to children and youngsters aged 3–12"), just to name some.

These initiatives, as many other less disseminated, show that in Portugal there is no coordinated pedagogical strategy for all educational levels, since the activities are not widespread in schools across the country, and are far from involving all school levels (GEM 2013; Redford 2013).

In reality, the great potential of entrepreneurship education in the school context is the power to stimulate students' overall academic performance, by encouraging them to understand the relevance of the subjects taught, by increasing their motivation and school involvement, and by reducing some of the problems associated with the school drop-out phenomenon (Hoppe 2016; Lackéus 2015). Developing young people's skills to innovate and solve their own everyday problems, as well as their community's, is the true goal of entrepreneurship education. Consequently, the challenge is to provide in-depth learning experiences that are meaningful to students, combining components of theoretical knowledge with activities of an entrepreneurial and practical nature, which involve the active participation of community members (Hoppe 2016).

The challenge of developing entrepreneurial skills in a school context is therefore the challenge of training individuals who are responsible for their own future and that of the communities in which they live.

2.3 Entrepreneurship Education and Regional Development: A Virtuous Relationship

The development of a territory is not limited to, or measured exclusively by, economic growth; it requires a complementary analysis of the various social dynamics existing in the community, namely those involving education.

According to Simões Lopes (2006), local development aims at the integrated growth of communities, through an interdisciplinary approach that privileges the joint work of all actors to benefit the distinct socioeconomic sectors of intervention. In addition, this constitutes a territorial approach aimed at enhancing and mobilizing the initiative capacities in the community in order to look for innovative solutions for existing problems.

The recognition of this central role of the place and the community in the dynamics of development results from the shift in paradigm towards the concept of Development, which took place in the 1970s. Until then, Development was associated, almost exclusively, with economic growth and industrialization, defended in a functionalist and diffusionist logic. In the 1970s paradigm shift, Development implies the sustained and sustainable progress of the communities and people. In this perspective, one of the concepts immediately associated with development was education, with greater or lesser degrees of equivalence, depending on the approach. One of the most commonly accepted was the Human Capital Theory, which defends the existence of a positive linear relationship between development and education.

Over the years, several studies have attempted to demonstrate the strong association between the increase of the educational levels of the population and economic growth (Alves et al. 2010; Cremin and Nakabugo 2012; Simões Lopes 2006; OECD/ UNESCO 2002; UNESCO 2009). However, as is often the case with everything that is linearly arranged, many authors have identified weaknesses in the dominant theory (Cremin and Nakabugo 2012; Walker and Unterhalter 2007). According to Azevedo (2000), one of the main weaknesses of the Human Capital Theory is not to consider the undeniable relationship between education and the development of personal and social competences, linked to personal fulfilment, culture, and citizenship. In this context, the need for a change in the way the relationship between education and development has been conceived was evident. It was necessary to move from the cold analysis of technical knowledge, qualifications and competencies to a more comprehensive perspective, focussed on the differentiating effect of education: the improvement of people's and the communities' capacity to be and do (Nussbaum 2000). According to this author, education must be seen as a motor for the integrated development⁵ of territories, not exclusively linked with the potential for economic growth it may generate. Education is the basis of awareness and, therefore, participation, which are fundamental conditions for the success of any regional development process (Cabugueira 2000).

Since regional development is a process, "(...) of a local and endogenous nature, based on voluntary mobilization, the aim of which is to create actions that produce synergies among actors, in order to qualify the social structures and services and to ensure social well-being" (Reis 1998, p. 80, own translation), education is, naturally, one of its main structural and structuring elements. In reality, the two concepts share a common goal: to achieve better living conditions and the empowerment of communities. The very dynamics and projects designed to promote regional development are in themselves educational and formative "(...) informal in nature" (Amiguinho 2005, p. 15, own translation), since they benefit work and learning "(...) in a 'shoulder to shoulder' effort of the actors while responding to their

⁵According to Amaro (2003, p. 66, own translation): "(...) free from the 'encasing', 'clothing', 'wrappings', 'packaging' that prevent the release and the realization of the seeds and the potential wrapped up in individuals, social groups, and societies."

problems" (Amiguinho 2005, p. 15, own translation). Quoting Azevedo (2009, p. 12, own translation) "education is at the beginning, middle and end of development processes."

In connection with these assumptions, entrepreneurship education aims precisely to contribute to the consolidation of the capacity to be and act in order to find solutions to concrete social and local problems. What distinguishes entrepreneurship education is the purpose to promote, in the school context, the development of awareness and competencies for integrated social action; "(...) it means to seize opportunities and changes, and to develop and create value, personal, cultural, social or economic." (Skolverket 2010 cited by Hoppe 2016, p. 21). It has been demonstrated that entrepreneurship and the development of entrepreneurial skills are beneficial to the socioeconomic dynamics of territories and people. They bare the foundations for the creation of ecosystems favourable to the start-up of new business projects, to more economy and more employment. In addition to the pure narrow "economicist" interpretation, entrepreneurship education presupposes a complementary ambition, that of improving and renewing pedagogical models, based on problem based learning and, above all, that of equipping more proactive and creative citizens, capable of changing their contexts and territories, their worlds. Rather than challenging schools and teachers, the focus on entrepreneurship education challenges all social actors to participate in the design of a new approach to societal development.

3 Methodology

3.1 Contextualization and Objectives of the Project

Project PEEBA was conceived as an entrepreneurship education project focussing on the development of entrepreneurial competencies in children and youngsters, aged 3–12, rooted in supramunicipal/regional work dynamics that aims to create a shared ecosystem favourable to entrepreneurship and entrepreneurial capacity.

The IPBeja coordinated the project and mediated the creation of a broad work platform with all the municipalities and Groups of Schools of Baixo Alentejo, Local Development Associations (LDAs) of the region, Baixo Alentejo Intermunicipal Community, the Business Centre of Baixo Alentejo and Alentejo Litoral, the Company for the Development of Alqueva Infrastructures—EDIA, Alentejo Regional Development Agency—ADRAL, and the Directorate-General for Alentejo School Establishments.

With the motto the socioeconomic future of our region will be shaped by the students we are educating now, project PEEBA brought together all the key stakeholders in the field of entrepreneurship education within all the municipalities of a NUTS III, in this particular case Baixo Alentejo, who show an interest in working collaboratively for a common goal, by using self-sustained resources.

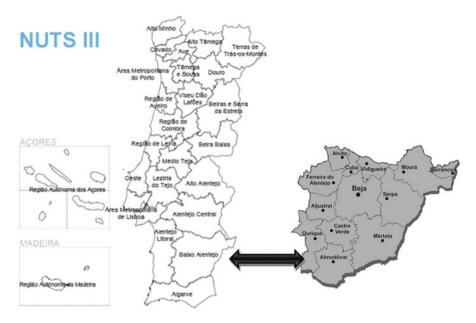


Fig. 1 Portugal map with the location of Baixo Alentejo and its 13 municipalities. Source: http://www.pordata.pt/O+que+sao+NUTS and http://www.cimbal.pt/menu/651/quem-somos.aspx. Accessed 9th June 2017

The project resulted from a strong territorially-based work dynamics, collaboratively established, involving agents from different local and regional structures. Based on a common need of the various sectors of local and regional activity, the project was unanimously considered a priority and included in the 2014–2020 Baixo Alentejo Strategic Development Plan, in its measure 3.2.: To design a plan to promote entrepreneurship in schools and in the community (own translation). The objective was to build an ecosystem that, though centred in educational contexts, involved the entire community of Baixo Alentejo. The main goal of the project was to define and implement actions that would create an environment favourable to the development of entrepreneurial skills, particularly among children and young people.

Project PEEBA was launched in 2014/15 in the territory of the NUTS III Baixo Alentejo, located within the NUTS II Alentejo, occupying 37% of the area of this region. In 2014, according to estimates from the National Institute of Statistics (INE—acronym in Portuguese), it had a population of 121,859 (6% of the whole population of the NUTS II Alentejo) (Fig. 1).

Including 13 municipalities (Fig. 1),⁶ this region is characterized by a demographic scenario of double aging and socioeconomic and educational indicators that

⁶The 13 municipalities are: Vidigueira, Serpa, Ourique, Moura, Mértola, Ferreira do Alentejo, Cuba, Castro Verde, Beja, Barrancos, Alvito, Almodôvar and Aljustrel.

		Territorial Unit	
		Baixo	
Indicator	Year	Alentejo	Portugal
Gross Domestic Product per capita (UE28 = 100)	2012	72	100 [compared to UE28, the GDP per capita = 75 (18th country)]
Resident population activity rate	2011	44	51.4
Proportion of the employed population with no qualifications and/or having just elementary education (1st, 2nd, and 3rd <i>Ciclos</i>) (ISCED 0–2)	2011	62.9	61.5
Illiteracy rate	2011	11.1	5.2
Resident population with at least 3rd Ciclo	2011	43.2	49.6
Proportion of resident population with at least Secondary Education (in 2011)	2011	24.9	31.7
Proportion of resident population aged 30–34 with a higher education degree (in 2011)	2011	22.3	28.6

Table 1 Socioeconomic and educational indicators for the NUTS III Baixo Alentejo and Portugal

Source: INE, Census 2011 and data available in December 2016

show some vulnerabilities that stand out when compared with national figures (see Table 1).

The educational community of this territory in 2014/15, the school year when the project was launched, included 10,684 students (from pre-school to 2nd *Ciclo* of Elementary Education) and 869 teachers.⁷

Given the characteristics of the educational community, and the heterogeneity of the partners involved, two crucial interconnected levels of work were followed: one political and the other technical.

The main role of the IPBeja team was based on three levels of action that must be understood in articulation:

- a macro level, the coordination and design of the project, from diagnosis to the definition of priorities for action;
- a meso level, regarding the management of the technical team and the mediation of the process with the different stakeholders (municipal technicians, LDA agents, heads of the groups of schools, teachers, etc.) for the operationalization and implementation of the action plan;
- a micro level, associated with the development of the pedagogical/formative component of the project—design and teaching of a training course, including material production, support, follow-up and monitoring of the development of projects in the educational contexts;

⁷Source: Directorate-General for Statistics and Sciences. Regions in numbers (Baixo Alentejo), accessed on 1st June 2017 at http://www.dgeec.mec.pt/np4/700.html

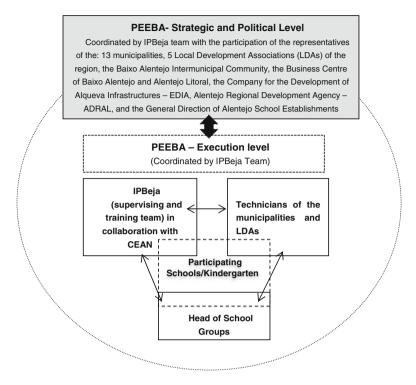


Fig. 2 The Governance Model of PEEBA. Source: Authors' elaboration

The different moments of planning, design and implementation of the project, involved intense collaborative work among all partners, benefiting from the integration of the contributions coming from the areas specific to the different organizations involved. The governance model of PEEBA is represented in Fig. 2.

3.2 Stages of Development of the Project

3.2.1 From Diagnosis to Action Plan

Diagnostic Analysis

The methodology applied followed the usual planning stages, starting with a diagnostic, followed by setting priorities for the design of the action plan. The attempted strategy to generate a dynamics of construction strongly participated by the representatives of each of the structures involved was successful.

Taking into account the different realities and experiences of all the municipalities involved, the diagnostic identified the following:

- the existence of a variety of initiatives and projects aiming to promote entrepreneurship in schools, carried out by Groups of Schools, municipalities, LDAs and other stakeholders, with or without the support of business promoters external to the region, or other, lacking however, in most cases, an effective articulation and sustainability;
- the lack of territorial balance in the supply, diversity and periodicity of actions to
 promote entrepreneurship in schools, which led to certain overlapping of initiatives and individual actions in the same school year, while, in some, the promotion of entrepreneurial culture was scarce or inexistent;
- the need to bring together key partners—municipalities, Groups of Schools, associations, training entities—in order to guarantee well-articulated shared strategies;
- the recognition by the different stakeholders of the need for coordinated efforts to value and promote entrepreneurial attitudes and skills in the school context, as a qualifying strategy towards educational success;
- the realization that most of the initiatives were exclusively aimed at 3rd *Ciclo*, secondary and professional education, excluding 1st and 2nd *Ciclo* students.

The choice of children and youths from pre-school to the 2nd *Ciclo* of elementary education as the target population is justified by:

- the fact that we could work with a heterogeneous population, remaining in the school environment throughout several years and, therefore, capable of getting involved in continuous projects with a longer duration;
- the advantage of developing a continuous work that pervaded daily dynamics, from the classrooms to the whole school community, unlike other previous experiences developed by several municipalities.

Action Plan

The diagnosed situation resulted in the adoption of the following objectives:

- to create a common action dynamics to promote entrepreneurial culture based on the stimulation of creativity, innovation and the development of skills for the implementation of entrepreneurial ideas, targeting the youngsters in an educational context;
- to strengthen teachers' as well as municipal and LDA technicians' skills to promote entrepreneurial culture and action.

In a first stage, with the coordination of the IPBeja team, we tried to adopt a conceptual/pedagogical model that would suit the realities of the different educational contexts. A model flexible enough to adjust to the diverse situations, but solid enough to be followed as a common framework. From the collaborative discussion and analysis it was decided to adopt the guidelines of the resource book "Ter ideias para mudar o mundo: manual para treinar o empreendedorismo em crianças dos

3 aos 12 anos" ("Having ideas to change the world: a resource book to teach entrepreneurship to children and youngsters aged 3–12"), developed by CEAN (2014), with which a partnership agreement was signed.

This referential material was chosen due to its several qualities, namely:

- The resource book was organized in a problem-solving format, close to project-based methodology, familiar to the teachers' work.
- It showed some innovation in terms of new teaching/learning tools.
- It was highly adaptable to different educational contexts.

Based on the methodological approach proposed by CEAN, the promotion of entrepreneurship education with the target group implied the following actions:

- organization of a training course, ⁹ with 36 face-to-face hours and 20 tutorial hours targeting teachers and technicians (belonging to the municipal staff and the LDAs involved), based on the CEAN model. The training was provided by IPBeja over 2 years, ¹⁰ and consisted of the development of competencies to use the resource book as well as the pedagogical model, followed by the monitoring of their application in context;
- development of projects in educational contexts (by teachers/kindergarten teachers—in the classroom; and by municipal and LDA technicians—as extracurricular activities) based on the pedagogical model adopted, with monitoring moments, provided by the IPBeja team members, who followed the whole process, from the construction to the implementation of the entrepreneurial projects, by the children and young people involved;
- adaptation and improvement of the pedagogical contents of the resource book, adjusting it to the educational reality of Baixo Alentejo. The book was therefore the model to develop new pedagogical resources inspired by the social and cultural heritage of the region. This process was carried out by the IPBeja with the collaboration of all the teachers and technicians involved and its implementation was subject to ongoing assessment throughout the year;
- sharing and dissemination of the projects developed by the students, teachers and technicians of each school/class to the community at large.

The advantage of integrating entrepreneurship education in the curriculum (and not as an optional subject), approached cross-curricularly to various components of training and in direct connection with teaching experiences in a real context, has been argued to be a key factor for promoting entrepreneurship education, in the Budapest Agenda.¹¹

⁸Project mentioned before in Sect. 2.2 as a good practice example.

⁹This training course granted teachers 1.4 credits.

¹⁰Year 1: 2014/2015 and year 2: 2015/2016.

¹¹The Budapest Agenda: Enabling Teachers for Entrepreneurship Education. Accessed in: http://ec.europa.eu/DocsRoom/documents/10445/attachments/1/translations/en/renditions/native

4 Results

The development of the action plan included the intensive training process of a total of 90 teachers, LDA and municipal technicians of the municipalities of Baixo Alentejo, for 2 academic years.

The training course, including the monitoring periods, took place between October and June of each school year. The training also included a visit and two theoretical-practical sessions at CEAN (located in Campo Maior/NUTSIII Alto Alentejo), which provided trainees with first-hand contact with the resources and methodology applied by the educational centre, the original promoter of this approach.

After the face-to-face training sessions:

- the trainees worked autonomously with their students, in a classroom/club context or in extra-curricular environments; they developed entrepreneurial projects according to the proposed methodology, with the adaptations suggested during the monitored sessions or arising from their specific educational contexts;
- Monitoring/supervision sessions were carried out by the IPBeja team, in a total of 20 h. These sessions took place at the IPBeja and/or in the educational contexts where the trainees were implementing their projects;
- The trainees benefited from online support through the provision of support material, the creation of discussion and sharing forums via a Moodle platform (created for this purpose) and a blog, ¹² available beyond the duration of the training course.

During the training course, the trainees practised the model and, at the same time, applied it in their educational contexts. They were supervised during the whole process.

The entrepreneurship development model proposed by the CEAN is based on 12 stages of work, namely:

• Step 1: Stimulating ideas; Step 2: Sharing ideas; Step 3: What do I want to do?; Step 4: Mind-sets; Step 5: Active listening; Step 6: Talking about the project; Step 7: Working with collaborators; Step 8: Identifying needs in order to write our offers or proposals; Step 9: Building prototypes to showcase the project; Step 10: Collaborators' network; Step 11: Task cycles; Step 12: Project leadership.

The stages corresponded to the entrepreneurial competences that were covered with the students, based on the project(s) agreed upon, by contract, in class. The model follows the assumptions of the project-based methodology, which is well known to teachers and kindergarten teachers, therefore easy to apply and improve.

The contexts in which the projects were developed were very diverse, mainly influenced by: (1) the profile and experience of the trainees (teachers, kindergarten teachers and technicians); (2) the characteristics of the educational context itself

¹²Available at: http://empreenderescolasbaixoalentejo.blogspot.pt

Table 2 Types of entrepreneurial projects developed in educational contexts within PEEBA, with examples

Type of project	Examples of situations that generated the projects		
Projects that aim to solve problems or meet the interests of students	the need to equip and requalify a laboratory for scientific projects the need to improve the recreational area, which was damaged the need to translate into Portuguese lyrics that children like and that only exist in English, so that they can be better understood by the older members of the family at the end of the school year party		
	• the need to raise money for a class trip through products that would have to be produced and marketed by the students and could not generate expenditure (neither for school nor for families) • the interest shared by a group of 1st <i>Ciclo</i> students on how best to explain the legend of the patron saint of their homeland		
Projects that emerged from the ideas exchanged between teachers and students and stimulated by concrete challenges presented by the technicians of the municipalities and LDAs	Our grandparents' jobs—have some of them disappeared forever? A project developed with the participation of the schools—preschool, 1st and 2nd <i>Ciclos</i> —, families, artisans, among others, coordinated by one of the municipalities involved Aromatic herb fair in which students from every school had to (re)create products (teas, soaps, jams) using aromatic plants—a challenge launched by the local authority as a cross-sectional project for 1st <i>Ciclo</i> students		

Source: Author's elaboration

(number of children; spaces and activities shared by kindergartens and elementary schools—1st and 2nd *Ciclos*—; number of teachers involved; existence of clubs or similar structures for extracurricular activities or support to families); (3) the level of participation of the families; (4) the teachers' knowledge of or interest in project-based methodology. These different variables brought more inputs to the implementation dynamics of entrepreneurship education in different educational contexts and levels insofar as they posed additional challenges and simultaneously required the continuous adaptation and improvement of the original pedagogical model.

The work developed resulted in several projects built by the children and youngsters involved, applied to the practical reality of each municipality and educational context. All of them represented a response to collective needs emerging from the training contexts of the target population. They also focused on solving a collective problem and, without exception, demanded the accountability of all those involved (children and youths), responsible for tasks consensually distributed by contract within each group (Table 2).

All these cases followed a sequence of steps, not always in a linear way but at the rhythm of each target group. Having as mediator the teacher/kindergarten teacher, this allowed each of the children to mobilize themselves in order to change their

condition and the context of their action. It was possible for these children and youngsters to experience the role of active agents in relation to their contexts and to verify that their action, along with that of others, can be a source of change.

Another important fact was the symbolic and simultaneously operative value of the moment of dissemination of the projects to the community, which implied coordinated action between schools, local authorities, LDAs and other stakeholders involved in each municipality.

At present, there is a unanimous desire to continue this work together. Once the work platform was validated and stabilized, we defined the objective of a second phase of project PEEBA: to produce a KIT (resource book and pedagogical materials) for entrepreneurship education based on the characteristics and the endogenous resources of Baixo Alentejo, assumed as an upgrade to the adopted resource book, that is, "Having ideas to change Baixo Alentejo: a resource book to teach entrepreneurship to children and youngsters aged 3–12" for children and young teenagers, on a first moment, and for young people aged 13–18, in a final stage.

5 Discussion and Final Remarks

Project PEEBA ran for 3 years and during this period it involved more than 1600 students and 90 teachers and technicians of Baixo Alentejo LDAs and municipalities, and strengthened the work dynamics inter-municipalities and inter-schools/groupings around the promotion of entrepreneurship education.

For many municipalities, the commitment to entrepreneurship education has become an absolute priority, both in their municipal educational strategic plans and in municipal action plans. In addition to the traditional support for entrepreneurship development focused on material and immaterial aid aimed at creating new businesses, the medium- and long-term goal of developing entrepreneurial skills has gained support among key local and regional stakeholders.

Some conditions for this success have been identified. They should be taken into account when replicating the project. These are the conditions we considered relevant:

- The project was considered innovative due to the supramunicipal approach and
 for providing each municipality with a form of original work to develop entrepreneurial skills among children and young people. The idea of promoting
 entrepreneurship education with and for children and youngsters aged 3–12
 was completely new.
- It was developed in an educational context based on a close relationship between
 municipality, LDAs and schools. It involved a strong work dynamics in the
 school, between teachers and students, accompanied and/or encouraged by the
 technicians of the municipalities and LDAs, with periods of training and supervision in between, provided by the training team of IPBeja, and also framed by a
 supramunicipal work scheme in which everyone felt integrated.

Besides children and teachers, a network of community collaborators was aggregated to the projects developed in schools and extracurricular activities. The motivation of all the participants geared by the adoption of dynamic student-centred approaches was a success factor.

• At the beginning of the training on entrepreneurship education, some teachers showed some reluctance towards the possibility of involving children in the early years of schooling. It was considered that behind this reluctance there might be a less accurate association of the concept of entrepreneurship to economic issues. These "negative" expectations gradually changed throughout the project—for this shift in attitude it was crucial to demonstrate the virtues of the resource book used and the methodology developed by CEAN.

Finally, the governance model adopted, including two different levels of action, emerges as a fundamental success factor. At the first level, the regional stakeholders, who designed the diagnosis and the shared action plan, and, at a second level, the promoters of entrepreneurship education in schools and in extracurricular contexts. The IPBeja team, as the project coordinator, ensured the interconnection between the two levels, encouraging and coordinating the political decision, taking into account the feedback on how the training in entrepreneurship education and its implementation with the children and young people was developed in each educational context.

Due to the success of this actual regional work platform, we believe it can be regarded as a benchmark model for others, interested in the development of similar regional collaborative projects to foster entrepreneurship education. In low-density territories, such as Baixo Alentejo, structural weaknesses of a socioeconomic nature require greater need for the joint efforts of entities, not always easy to achieve. Effective networking is sometimes made even more difficult by self-centred attitudes and yearning for individual protagonism. In this context, the PEEBA celebrates the collective and congregates, in fact, participants from various entities with the ultimate goal of contributing to regional development, investing on education, in particular entrepreneurship education, as a joint action strategy to boost entrepreneurial dynamics and economic innovation.

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References

Alves, N., Centeno, M., & Novo, Á. (2010). O Investimento em Educação em Portugal: Retornos e Heterogeneidade. *Boletim Económico Primavera*, 16(1), 9–39. Retrieved from https://www.bportugal.pt/sites/default/files/anexos/papers/ab201000_p.pdf

Amaro, R. R. (2003). Desenvolvimento – Um conceito ultrapassado ou em renovação? Da teoria à prática e da prática à teoria. *Cadernos de Estudos Africanos*, 4, 36–68.

- Amiguinho, A. (2005). Educação em meio rural e desenvolvimento local. *Revista Portuguesa de Educação*, 18(2), 7–43. Retrieved from http://www.scielo.mec.pt/scielo.php?script=sci_arttext&pid=S0871-1872005000200002
- Azevedo, J. (2000). O ensino secundário na Europa. Porto: Edições ASA.
- Azevedo, J. (2009). A educação de todos e ao longo de toda a vida e a regulação sociocomunitária da educação. *Cadernos de Pedagogia Social*, *3*, 9–34.
- Cabugueira, A. (2000). Do desenvolvimento regional ao desenvolvimento local. Análise de alguns aspectos de política económica regional. Gestão e Desenvolvimento, 9, 103–136. Retrieved from http://repositorio.ucp.pt/bitstream/10400.14/9090/1/gestaodesenvolvimento9_103.pdf
- CEAN. (2014). Ter ideias para mudar o mundo. Manual para treinar o empreendedorismo em crianças dos 3 aos 12 anos. Lisboa: SpringerLink.
- Cremin, P., & Nakabugo, M. (2012). Education, development and poverty reduction: A literature critique. *International Journal of Educational Development*, *32*, 499–506. https://doi.org/10.1016/j.ijedudev.2012.02.015
- Decreto-Lei no. 139/2012 do Ministério da Educação e Ciência. *Diário da República: I série, n° 129* (5 de julho de 2012), 3476–3490. Retrieved from http://www.dge.mec.pt/sites/default/files/Basico/Legislacao/dl_139_2012.pdf
- Dickson, P. H., Solomon, G. T., & Weaver, K. M. (2008). Entrepreneurial selection and success: Does education matter? *Journal of Small Business and Enterprise Development*, 15(2), 239–258. https://doi.org/10.1108/14626000810871655
- Edwards, L., & Muir, E. (2012). Evaluating enterprise education: Why do it? *Education + Training*, 54(4), 278–290. https://doi.org/10.1108/00400911211236136
- European Commission. (2014). Entrepreneurship education: A guide for educators. Brussels: Entrepreneurship 2020 Unit. Directorate-General for Enterprise and Industry. European Commission. Retrieved from http://ec.europa.eu/DocsRoom/documents/7465/attachments/1/translations/en/renditions/native&usg=AFQjCNEAZENuwg06uXIDQR_CK8zmSko5Lw&sig2=kjtnBVqQOeVNEhNWeBUSrw&cad=rja
- European Commission. (2015). Entrepreneurship education: A road to success. A compilation of evidence on the impact of entrepreneurship education strategies and measures. Brussels: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs. European Commission. Retrieved from http://ec.europa.eu/DocsRoom/documents/8564/attachments/1/translations/en/renditions/pdf
- Fayolle, A., & Gailly, B. (2008). From craft to science: Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32(7), 569–593. https://doi.org/10.1108/03090590810899838
- Gautam, M., & Singh, S. (2015). Entrepreneurship education: Concept, characteristics and implications for teacher education. *Shaikshik Parisamvad (An International Journal of Education)*, 5 (1), 21–35. ISSN 2231 2404 (Online). Retrieved from http://www.spijebhu.in/SPIJ-Jan15% 2021-35.pdf
- GEM. (2013). GEM PORTUGAL 2013|2004–2013: Uma Década de Empreendedorismo em Portugal. Lisboa: Gem. Retrieved from https://repositorio.iscte-iul.pt/handle/10071/8058
- Greene, F. (2002). An investigation into enterprise support for younger people, 1975–2000. International Small Business Journal, 20(3), 315–336. https://doi.org/10.1177/0266242602203005
- Hoppe, M. (2016). Policy and entrepreneurship education. *Small Business Economics*, 46(1), 13–29. https://doi.org/10.1007/s11187-015-9676-7
- Jones, C., Matlay, H., Penaluna, K., & Penaluna, A. (2014). Claiming the future of enterprise education. Education + Training, 56(8/9), 764–775. https://doi.org/10.1108/ET-06-2014-0065
- Katz, J. A. (2003). The chronology and intellectual trajectory of American entrepreneurship education: 1876–1999. *Journal of Business Venturing*, 18(2), 283–300. https://doi.org/10.1016/S0883-9026(02)00098-8

- Kirby, D. A. (2004). Entrepreneurship education: Can business schools meet the challenge? *Education and Training*, 46(8/9), 510–519. https://doi.org/10.1108/00400910410569632
- Lackéus, M. (2015). Entrepreneurship in education: What, why, when, how. Paris: OECD. Retrieved from http://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf
- Loué, C., & Baronet, J. (2012). Toward a new entrepreneurial skills and competencies framework: A qualitative and quantitative study. *International Journal of Entrepreneurship and Small Business*, 17(4), 455–477. https://doi.org/10.1504/IJESB.2012.050164
- Middleton, K. W., Mueller, S., Blenker, P., Neergaard, H., & Tunstall, R. (2014). Experience based learning in entrepreneurship education A comparative study of four programes in Europe. In *Proceedings RENT (Research in Entrepreneurship and Small Business) XXVIII*. Luxembourg, November 19–21. Retrieved from https://www.researchgate.net/publication/267060736
- Moberg, K. (2014). Assessing the impact of entrepreneurship education From ABC to PhD. PhD Series. Copenhagen: The Danish Foundation for Entrepreneurship. CBS/Copenhagen Business School Department of Strategic Management and Globalization. The PhD School in Economics and Management. Online ISBN: 978-87-93155-39-8. Retrieved from http://openarchive.cbs.dk/bitstream/handle/10398/8965/K%C3%A5re Moberg.pdf?sequence=1
- Neck, H. M., & Greene, P. G. (2011). Entrepreneurship education: Known worlds and new frontiers. *Journal of Small Business Management*, 49(1), 55–70. https://doi.org/10.1111/j. 1540-627X.2010.00314.x
- Nussbaum, M. (2000). Women and human development: The capabilities approach. New York: Cambridge University Press.
- O'Connor, A. (2013). A conceptual framework for entrepreneurship education policy: Meeting government and economic purposes. *Journal of Business Venturing*, 28(4), 546–563. https://doi.org/10.1016/j.jbusvent.2012.07.003
- OECD/UNESCO. (2002). Financing education Investments and returns. Analysis of the world education indicators. Paris: OECD Publications/UNESCO Publishing. Retrieved from http://www.oecd.org/education/skills-beyond-school/2494749.pdf
- Pepin, M. (2015). Apprendre à s'entreprendre en milieu scolaire: Une étude de cas collaborative à l'école primaire. Thèse de Doctorat en Psychopédagogie. Université Laval. Retrieved from www.theses.ulaval.ca/2015/31370/31370
- Pereira, M., Ferreira, J., & Figueiredo, I. (2007). Promoção do Empreendedorismo nas Escolas. Guião para Escolas do Ensino Básico e Secundário. Lisboa: Ministério da Educação Direcção-Geral de Inovação e Desenvolvimento Curricular. Retrieved from http://www.dge.mec.pt/sites/default/files/ficheiros/guiao_pdf.pdf
- Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International Small Business Journal*, 25(5), 479–510. https://doi.org/10.1177/0266242607080656
- QAA. (2012). Enterprise and entrepreneurship education: Guidance for UK higher education providers. Gloucester: Quality Assurance Agency for Higher Education.
- Raposo, M., & do Paço, A. (2011). Entrepreneurship education: Relationship between education and entrepreneurial activity. *Psicothema*, 23(3), 453–457. Retrieved from http://www. psicothema.com/pdf/3909.pdf
- Rasmussen, A., Moberg, K., & Revsbech, C. (2015). A taxonomy of entrepreneurship education Perspectives on goals, teaching and evaluation. Odense C: Danish Foundation for Entrepreneurship Young Enterprise. Retrieved from http://eng.ffe-ye.dk/media/555477/taksonomi-eng-2.pdf
- Redford, D. T. (2013). Handbook de Educação em Empreendedorismo no Contexto Português. Porto: Universidade Católica Editora.
- Reis, J. (1998). Interior, desenvolvimento e território, Perspectivas de Desenvolvimento do Interior. In J. M. Pinto & A. Dornelas (Eds.), *Imprensa Nacional*. Lisboa.

- Sánchez, J. C. (2013). The impact of an entrepreneurship education program on entrepreneurial competencies and intention. *Journal of Small Business Management*, 51(3), 447–465. https://doi.org/10.1111/jsbm.12025
- Simões Lopes, A. (2006). Encruzilhadas do desenvolvimento: Falácias, dilemas, heresias. *Revista Crítica de Ciências Sociais*, (75), 41–61.
- UNESCO. (2009). Bonn declaration. Unesco World Conference on Education for Sustainable Development. Retrieved from http://unesdoc.unesco.org/images/0018/001887/188799e.pdf
- Walker, M., & Unterhalter, E. (2007). Amartya Sen's capability approach and social justice in education. New York: Palgrave Macmillan.