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## Cita sugerida (APA, séptima edición).

Aiboud, Z., Lamine, H. M., Walid, A., & Djamal-Addine, A. (2026). Academic entrepreneurship in Algeria: between reality and challenges. *Revista Sociedad & Tecnología*, 9(S2), 683-697, DOI: <https://doi.org/10.51247/10.51247/st.v9iS2.788>

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## Academic entrepreneurship in Algeria: between reality and challenges

### ABSTRACT

This study analyzed the state of academic entrepreneurship in Algeria, focusing on its reality and the challenges that hinder its development. The objective was to diagnose the current situation of academic entrepreneurship and to identify the main institutional, socio-cultural, and pedagogical barriers affecting its promotion within higher education institutions. A qualitative analytical methodology was employed, based on the review of theoretical frameworks and the examination of policies, institutional initiatives, and educational practices related to entrepreneurship. The findings revealed that, despite the increasing interest in promoting entrepreneurship through university programs, incubators, and entrepreneurship support structures, significant challenges persist. These include traditional teaching methods, limited integration of entrepreneurship into curricula, lack of trained instructors, socio-cultural constraints, gender-related barriers, and bureaucratic obstacles. The study also showed that financial limitations and weak institutional coordination further restrict the effectiveness of academic entrepreneurship initiatives. It was concluded that strengthening academic entrepreneurship in Algeria requires comprehensive reforms, including innovative pedagogical approaches, institutional support, and a more flexible regulatory environment. The study highlights the importance of fostering an entrepreneurial culture within universities to enhance students' competencies, employability, and contribution to economic development.

**Keywords:** Academic entrepreneurship; higher education; Algeria; entrepreneurship education; institutional challenges.

## **Emprendimiento académico en Argelia: entre la realidad y los desafíos**

### **RESUMEN**

El presente estudio analizó la situación del emprendimiento académico en Argelia, centrándose en su realidad y en los desafíos que limitan su desarrollo. El objetivo fue diagnosticar el estado actual del emprendimiento académico e identificar las principales barreras institucionales, socioculturales y pedagógicas que afectan su promoción en las instituciones de educación superior. Se empleó una metodología cualitativa de carácter analítico, basada en la revisión de marcos teóricos y en el análisis de políticas, iniciativas institucionales y prácticas educativas relacionadas con el emprendimiento. Los resultados evidenciaron que, a pesar del creciente interés por fomentar el emprendimiento mediante programas universitarios, incubadoras y estructuras de apoyo, persisten importantes dificultades. Entre ellas destacan los métodos de enseñanza tradicionales, la limitada integración del emprendimiento en los planes de estudio, la falta de docentes especializados, las restricciones socioculturales, las barreras de género y los obstáculos burocráticos. Asimismo, se identificó que las limitaciones financieras y la débil coordinación institucional reducen la efectividad de las iniciativas existentes. Se concluye que el fortalecimiento del emprendimiento académico en Argelia requiere reformas integrales, incluyendo enfoques pedagógicos innovadores, mayor apoyo institucional y un entorno regulatorio más flexible.

**Palabras clave:** Emprendimiento académico; educación superior; Argelia; educación emprendedora; desafíos institucionales.

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## **Empreendedorismo acadêmico na Argélia: entre a realidade e os desafios**

### **RESUMO**

Este estudo analisou o estado do empreendedorismo acadêmico na Argélia, com foco em sua realidade e nos desafios que limitam seu desenvolvimento. O objetivo foi diagnosticar a situação atual do empreendedorismo acadêmico e identificar as principais barreiras institucionais, socioculturais e pedagógicas que afetam sua promoção nas instituições de ensino superior. Foi utilizada uma metodologia qualitativa de caráter analítico, baseada na revisão de marcos teóricos e na análise de políticas, iniciativas institucionais e práticas educacionais relacionadas ao empreendedorismo. Os resultados demonstraram que, apesar do crescente interesse em promover o empreendedorismo por meio de programas universitários, incubadoras e estruturas de apoio, persistem desafios significativos. Entre eles destacam-se métodos de ensino tradicionais, limitada integração do empreendedorismo nos currículos, falta de docentes especializados, restrições socioculturais, barreiras de gênero e obstáculos burocráticos. O estudo também identificou que limitações financeiras e fraca coordenação institucional reduzem a eficácia das iniciativas. Conclui-se que o fortalecimento do empreendedorismo acadêmico na Argélia requer reformas abrangentes, incluindo abordagens pedagógicas inovadoras, maior apoio institucional e um ambiente regulatório mais flexível.

**Palavras-chave:** Empreendedorismo acadêmico; ensino superior; Argélia; educação empreendedora; desafios institucionais.

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### **INTRODUCTION**

The contemporary world operates within a distinctive economic paradigm characterised by complexity and uncertainty. This situation has shaped the economic, social, and political response towards a new knowledge-based economy underpinned by capital and commitment to productive entrepreneurial activity. Consequently, it has become universally acknowledged that entrepreneurship constitutes a vital phenomenon for post-industrial society through its

contribution to economic renewal and development, serving as the driving force behind numerous national economies. Moreover, entrepreneurship confers benefits upon individuals, including satisfaction, personal fulfilment, and professional development opportunities.

Entrepreneurship has emerged as one of the most significant research domains attracting the attention of numerous scholars and experts across multiple disciplines (Schmitt, 2008; Jaziri, 2013), representing a developmental priority for many countries, particularly those confronting population growth challenges and youth unemployment. Entrepreneurship is regarded as a fundamental force for sustainable development, competitive advantage, and socio-economic progress (Wang et al., 2024). Accordingly, numerous nations and economic and social actors worldwide have turned to establishing enterprises, particularly small and medium-sized enterprises and micro-enterprises, advocating for individual initiative support and entrepreneurial activity promotion. Among these actors, the university occupies a prominent position given its central role in training human resources and transmitting values. Thus, the objectives lie in raising students' awareness regarding how to perceive enterprise creation as a potential career option and developing positive, favourable attitudes towards project organisation (Fayolle, 1999, pp. 1-4).

It is evident that professions are increasingly undergoing genuine transformations, inevitably leading to new challenges concerning talent profiles and innovation. The challenge posed is not merely the simple need to develop new competencies in terms of knowledge, training, or specialised expertise, but rather the commitment to developing "soft skills" capable of making a difference and thus ensuring minimum competitiveness. Hence, it becomes imperative that university-level teaching methodologies incorporate more profound engagement to ensure that learners reveal their potential, which is likely to permit them to enter the professional domain and, a fortiori, the entrepreneurial sphere (Mwita et al., 2023).

As a consequence of this global context, Algerian universities have implemented measures and initiatives to promote an entrepreneurial spirit in Algeria. These include, but are not limited to: teaching entrepreneurship within Algerian higher education institutions introducing "Entrepreneurship" as a specialisation at Bachelor's, Master's, and Doctoral levels establishing university incubators through organisations such as ANPT (National Agency for the Promotion and Development of Technology Parks) and ANVREDET (National Agency for the Valorisation of Research Results and Technological Development) creating the Business-University Liaison Office (BLEU), whose principal mission is to support students in the integration process and access to employment and establishing Entrepreneurship Houses within university institutions in partnership with ANADE (National Agency for Support and Development of Entrepreneurship).

The Algerian university endeavours to assist students in finding their venture within the entrepreneurial world, particularly emphasising the necessity of embedding an entrepreneurial culture within the university environment. Moreover, the interest in employing novel pedagogical approaches for teaching entrepreneurship in Algerian universities possesses a distinctive character, particularly concerning the challenge of transforming mindsets to perceive entrepreneurship as a career option and a pathway out of crisis for the Algerian economy (Soraya, 2022).

Within this study, we attempt to address the following principal question: What is the current state of academic entrepreneurship in Algeria? And what difficulties confront academic entrepreneurship?

## **MARCO TEÓRICO**

### **2. Significance of the Study**

- The global (international preoccupation) and local orientation towards the phenomenon of academic entrepreneurship

- Academic entrepreneurship has become a pressing topic for numerous countries, particularly those confronting economic and social challenges
- Heightened awareness among all social and economic actors worldwide regarding the importance of establishing academic entrepreneurship
- Entrepreneurship has emerged as one of the principal solutions in addressing the challenge of youth unemployment
- The university plays a significant role in promoting entrepreneurship among students and disseminating a culture conducive to its development.

### 3. Objectives of the Study

- To attempt a diagnosis of the reality of academic entrepreneurship in Algeria
- To present epistemological elements pertaining to the subject of academic entrepreneurship
- To ascertain the university's role in creating student awareness and transforming their mindset towards entrepreneurship
- To diagnose the practical difficulties confronting academic entrepreneurship.

### Part One: The Concept of University Entrepreneurship (Academic Entrepreneurship)

Burton Clark (1998) introduces the concept of "academic entrepreneurship" following a study conducted across five European universities, concluding that for a university to be entrepreneurial, it must possess an organisational culture conducive to entrepreneurship, particularly a readiness to accept risks. Etzkowitz et al. (2000) state: "A university that assumes an entrepreneurial character contributes to economic development as part of its third mission, following teaching and research." The new forces—"novel forms of teaching, information and communication technologies, and new social demands for change to increase youth employment opportunities..."—have led to a fresh vision of the university's role in entrepreneurship and fostering the entrepreneurial spirit (Wassila Zerroki, 2017).

Shane and Venkataraman (2000) maintain that the field of entrepreneurship constitutes "the academic study of how opportunities leading to the creation of future goods and services are discovered, evaluated, and exploited, by whom, and with what consequences" (Wassila Zerroki, 2017).

### 1. Academic Entrepreneurship: A Passing Fad or a Genuine Academic Trend?

Professions have recently witnessed genuine transformations within the entrepreneurial world, inevitably leading to new challenges concerning entrepreneurial talent profiles. The challenge posed transcends the mere need to develop new competencies in terms of knowledge, training, or specialised expertise, extending to a commitment to developing non-technical skills (soft skills) capable of making a difference and thereby ensuring minimum competitiveness (Mwita et al., 2023).

The effects of entrepreneurship education remain insufficiently understood at the global level. Numerous previous studies in America and Europe have identified a positive impact of university entrepreneurship education programmes on the attractiveness and feasibility of launching new ventures, or even on actual start-up activity, such as: Tkachev and Kolvereid's study (1999), Peterman and Kennedy (2003), Fayolle et al. (2004), and Souitaris et al. (2007). Conversely, other studies have found evidence of negative effects, such as Oosterbeek et al. (2010). This divergence in study findings may be attributed to purely methodological reasons for the literature's failure to produce consistent evaluations, as numerous previous studies employ pre-post designs, with fewer incorporating control groups. Most studies and scientific literature focus on self-selected participants with a predisposition towards entrepreneurship education, potentially biasing results in favour of educational interventions (Georg von Graevenitz, 2010).

## **2. The Reality of Teaching Entrepreneurship at University: Between Meaning and Motivation**

Entrepreneurship education constitutes a principal debate within institutes, colleges, and universities through a series of questions: Can we leave it solely to the university to raise awareness about careers in entrepreneurship and teach the steps in creating and developing an enterprise? Should all educational resources be utilised to ensure the quality of entrepreneurship training programmes? These various questions concerning the university's position and various societal organisations in entrepreneurship education form the foundation upon which systematic thinking for establishing entrepreneurial projects is built.

Teaching entrepreneurship requires an active pedagogical and educational approach through which the instructor must become more involved in structuring the learning process. Furthermore, knowledge acquisition is not merely intellectual and cognitive but also involves developing skills that assist in refining the development of each future student entrepreneur to shape their own profile. This presents a challenge for instructors because it is illogical to establish a rigid evaluation of entrepreneurship training programmes based solely on knowledge without focusing on the skills to be enhanced among learners. Hence, entrepreneurship education should shift from focusing on creating or managing small businesses to emphasising creativity and change.

In the era of globalisation, this interest in acquiring entrepreneurship-specific skills comes at the expense of knowledge, not to undermine educational theories but to change the perspective within which we believe students will integrate them. Thus, J.O. (2000) proposes an action-based pedagogical approach that leads students to become active in their learning and offers them various activities or experiences to accomplish this. It also presents a particularly original method by closely involving students in developing learning activities—for example, by inviting them to imagine concrete exercises themselves to support the integration of a particular theory or model (Mwita et al., 2023).

In entrepreneurial education that places the student at the heart of their learning, the teacher's role will be to provide students with activities that lead them to expand their competency field regarding entrepreneurship. In this manner, the university develops new pedagogical approaches more suited to teaching entrepreneurship at university.

## **3. Dimensions of Academic Entrepreneurship Education**

Entrepreneurship is an attitude, a practice, a set of techniques, and a discipline that can be learned and strengthened within the university. To this end, and in addition to its traditional missions (teaching and research), the university is called upon to assume a new mission: fostering initiative and entrepreneurship. Accordingly, the university can play an important role in promoting entrepreneurial careers among students and disseminating a culture conducive to the development of an entrepreneurial spirit. Many universities worldwide have thus begun introducing and integrating entrepreneurship courses into their training curricula. The objectives of entrepreneurship education may be structured around three dimensions:

First: raising awareness of entrepreneurship

Second: specialisation and training programmes aimed at enabling students to specialise in entrepreneurship-related fields and encouraging them to create ventures

Third: supporting and mentoring students who have business-creation projects. These dimensions may be explained as follows:

### **a) Awareness-raising and entrepreneurship literacy**

Awareness-raising and educational courses stimulate and awaken capacities for creativity, initiative, and innovation, and they expose students to the possibility of alternative career paths available to them over the course of their professional lives. Awareness aims to present entrepreneurship as an extension of choice and as a career stage.

## **b) Specialisation and training programmes**

This category focuses on how a programme defines strategic orientations and key planning requirements. In the case of an entrepreneurship programme, such a requirement entails developing a strategic plan that specifies the programme's purpose and mission, the key performance requirements for students and for the programme overall, the external factors affecting plan implementation, internal resources, and the university-level barriers to change, as well as success factors (Vesper & Gartner, 1997).

Training through a business plan offers advantages in terms of empowering learners, acquiring technical content, directing learning towards an objective to be achieved (the productive dimension), and engaging learners in their own learning process (Taktak-Kallel, 2023).

The primary purpose of specialisation courses is also to enable students who wish to work in entrepreneurship and business creation to deepen their knowledge and learning and to understand the entrepreneurial spirit. Thus, the aim is not only to prepare business founders, but also to prepare individuals who—even if they do not intend to start a business—will have a solid understanding of the forms and issues of entrepreneurship and will be able to work in activities related to business creation.

### **c) Support and assistance for project leaders**

The purpose of this type of intervention is to provide support and advice to students who have plans to start or take over a business, or who are engaged in implementing such projects within the context of entrepreneurship education. The focus is not only on acquiring intellectual and cognitive knowledge, but above all on developing skills and learning activities that guide the individual in their own entrepreneurial approach.

## **2. Measures Adopted by Algerian Universities in Support of Academic Entrepreneurship**

Following this scholarly review of academic entrepreneurship through an examination of the scientific and sociological literature, we now seek to shed light on practices and orientations towards academic entrepreneurship within Algerian higher education. To this end, we present the efforts undertaken by Algerian universities to develop entrepreneurship: first through teaching, second through the Entrepreneurship House, and finally through university incubation.

### **Teaching entrepreneurship at university**

The teaching of entrepreneurship in Algerian higher education institutions is relatively recent and remains in its early stages it is still in a preparatory phase. Among the measures adopted by the Ministry of Higher Education and Scientific Research to foster an entrepreneurial spirit among students through education are the introduction of an "Entrepreneurship" module within university training programmes. It should be noted that this module has only been incorporated into training curricula in recent years. Although it is mandatory, it was initially launched in faculties of economic, commercial, and management sciences. Over time, it was extended to fields in engineering and technical sciences, as well as to the humanities and social sciences, with the aim of strengthening academic entrepreneurship, raising student awareness of its developmental importance, and encouraging them to consider entrepreneurship as an alternative career.

We also note the creation of an "Entrepreneurship" specialisation at the Bachelor's and Master's levels. This specialisation is offered to management sciences students and has been integrated only recently. It is not available in all faculties of economics, business, and management rather, it is offered in only a limited number of faculties. It is worth noting that these measures to promote the entrepreneurial spirit in higher education institutions were introduced in the context of shifts in the country's economic environment and efforts to modernise the higher education system. Nevertheless, some initiatives in entrepreneurship

education had been previously undertaken by universities, such as opening a professional degree in entrepreneurship and, in 2006, integrating a module on business creation and management at the University of Constantine.

It can be argued that, if the goal is to develop entrepreneurial skills and spirit in Algerian universities, integrating additional modules into training programmes is necessary, and these should be mainstreamed across different sectors and specialisations. It is also necessary to introduce a professional Master's degree specialised in business creation and in strengthening entrepreneurial culture.

It is also noteworthy that, with regard to educational supervision, there are no instructors specifically trained in entrepreneurship education. Instead, entrepreneurship courses are delivered by "classical" academics—those whose background is primarily academic and who have never established or even managed a business. However, experience indicates that the best results are achieved when experienced entrepreneurs—capable of drawing on real entrepreneurial practice—are involved in teaching. Hence, there is a need to graduate PhD students in entrepreneurship who are likely to take on teaching roles subsequently.

With regard to the teaching methods used, they remain largely traditional (e.g., lectures), and therefore do not genuinely encourage the development of entrepreneurial thinking. For this reason, it is necessary to adopt experiential, practice-based teaching methods and to introduce innovative pedagogical practices into entrepreneurship training and enterprise management.

We also observe that entrepreneurship teaching has not been sufficiently integrated into the curricula of Algerian higher education institutions, and that Algeria faces a marked shortage of entrepreneurship training. Moreover, training provision remains extremely limited across universities.

### **Establishing Entrepreneurship Houses (Maison de l'Entrepreneuriat)**

The Maison de l'Entrepreneuriat is a "space for reception, information, guidance, and support for students with project ideas." The term "house" is used to convey friendliness and to instil entrepreneurial values, rather than to justify the construction of a specific building. It is a structure tasked with promoting the entrepreneurial spirit and awakening the core values and skills required to ensure business sustainability and success among future entrepreneurs. Through its activities, it seeks to ensure linkage between the world of knowledge and understanding and the world of the economy and wealth creation (Kouraiche, 2018; Ubogu, 2020; Binks & Lumsdaine, 2003).

The primary role of the Entrepreneurship House is to identify and clarify the contours of a culture of initiative and entrepreneurship—namely the following attitudes: responsibility, risk-taking, autonomy, confidence, solidarity, and mutual assistance.

In Algeria, the first Entrepreneurship House was established in 2007 at the University of Constantine in partnership with the National Agency for Youth Employment Support (ANSEJ). In 2014, the concept was generalised across universities and national higher schools throughout the country. By 2016, the number of Entrepreneurship Houses had reached 58. In our view, this large number indicates a significant level of commitment on the part of Algerian universities, as Entrepreneurship Houses were created in roughly half of higher education institutions.

The approach adopted by the Maison de l'Entrepreneuriat to instil entrepreneurial values aims to bring together and connect all actors operating within the business environment (banks, taxation services, insurance, land services, etc.) in order to improve students' professional integration into entrepreneurship. The institution's principal missions within the university are structured around three areas of action: awareness-raising, training, and entrepreneurship support, with the purpose of preparing young graduates to take the step towards creating their own small ventures through the various state schemes (ANSEJ, the National

Unemployment Insurance Fund, the National Microcredit Management Agency, etc.), facilitating their integration into the economic fabric and contributing to its development (Kouraiche, 2018; Kayyali, 2023; Srivastava & Thomas, 2017).

### **Awareness-raising**

The core function of the Maison de l'Entrepreneuriat is to raise awareness of entrepreneurship. It seeks to activate students' entrepreneurial motivation through awareness programmes and by disseminating an entrepreneurship culture. It helps students better understand themselves and identify their entrepreneurial potential. Such activities are organised by the university through inviting figures from the entrepreneurial and innovation ecosystem to provide field-based perspectives on business-creation opportunities at the regional level. To this end, entrepreneurship events (study days, entrepreneurship seminars, roundtables, etc.) are organised, both to develop cooperative and partnership relations with the socio-economic sphere and to raise awareness of entrepreneurship and innovation culture, while supporting integration into working life. These encounters constitute spaces for reflection and analysis in which methodologies are proposed to help students find their own entrepreneurial pathway, particularly by reinforcing entrepreneurship culture within the university environment. Their main objectives are to:

Develop and strengthen students' spirit of initiative

provide a field-based perspective on business-creation opportunities in the region

connect students with institutions that provide assistance, encouragement, support, and guidance for business creation

prepare students for the future and for better professional integration

enable students to reflect on their personal career project.

### **Training**

In addition to awareness measures, the contribution of the Maison de l'Entrepreneuriat should also be considered from the training perspective through programme development and implementation. Training topics focus on business creation and management and on entrepreneurship culture. The aim should be to train students and prepare them for future professional situations by delivering targeted courses in entrepreneurship or business creation.

Training is provided through summer or winter universities offering courses on business creation, with the participation of ANSEJ partners. It is delivered over a short period—ranging from one to two weeks—in the form of introductory sessions intended to familiarise students with the ANSEJ scheme and the business-creation environment, while giving them an initial exposure to entrepreneurship.

### **Mentoring and support**

This function contributes to preparing students for the step towards creating their own projects through the ANSEJ scheme, as the main channel through which Algerian youth proceed before embarking on entrepreneurship. In practice, the support process provided by this scheme covers the stages of company creation, launch, and expansion.

According to the report prepared by the National Agency for Youth Employment Support (ANSEJ) in 2017, the proportion of university graduates registered within the ANSEJ scheme rose from 8% to 30% over the period (2008–2016). The implementation of the annual action plan enabled the completion of 1,623 activities over the period (2013–Q1 2017). The rate of small project creation by university graduates increased from 6% in 2013 to 13% in 2015, and to 18% in 2016 (Kouraiche, 2018).

### **Establishing University Incubators**

An incubator is a space for hosting and supporting project leaders—especially innovative projects—for a defined period, during which logistical, administrative, and advisory services are provided. The mission of incubators is to facilitate the market introduction of innovative firms, products, and processes.

In Algeria, Executive Decree No. 12-293 of 21 July 2012, concerning the missions, organisation, and operation of shared scientific and technological research services, defines the university incubator as “a structure for hosting and supporting an innovative project with a direct link to research.” It assists the project leader in formally developing their idea and assessing its long-term feasibility. It provides support in terms of training, advice, and financing, and hosts project leaders until the creation of the company. It is therefore responsible for implementing two missions: a promotion mission and an awareness mission.

Within Algerian universities, the concept of the incubator remains recent and has not yet been implemented in a truly effective manner in any case, it is still only in its initial stages. Nevertheless, the Ministry of Higher Education and Scientific Research recognises the need to strengthen the establishment of these structures in universities, both for students implementing projects and for teacher-researchers seeking to valorise the outcomes of their research work.

In order to encourage the creation of incubators, several measures have been adopted, including:

Establishment of the National Agency for the Valorisation of Research Results and Technological Development (ANVREDET)

The National Agency for the Valorisation of Research Results and Technological Development (ANVREDET) was established in 1998 by executive decree and placed under the supervision of the Ministry of Higher Education and Scientific Research. It is a public industrial and commercial establishment and serves as an instrument for promoting research and innovation. Among its most important missions are:

Identifying and selecting research outputs to be valorised and promoted

Developing and strengthening valorisation systems and methods

Supporting and mentoring innovative ideas

Organising technological intelligence (technology watch) through the establishment of observatories and networks.

### **3. Difficulties Facing Academic Entrepreneurship**

Pedagogical and educational challenges

To begin with, the weakness of university teaching methods may be identified as one of the main obstacles to entrepreneurship education within the university—both locally and globally. This reality reveals a relative lack of strategic thinking regarding the design of training content and the systems required for its implementation. It would therefore be prudent to orient university teaching methods on the basis of rigorous planning. Beyond lectures and simulations related to business-plan development, attention should also be given to the possible managerial approaches that could be adopted at the university level and mobilised for entrepreneurship training (Jaziri & Levy-Tadjine, 2009; Richomme-Huet et al., 2012).

According to certain studies, lecture-based teaching methods are the least likely to foster the development of the entrepreneurial process. Hence, a change in the instructor’s posture is required: the teacher becomes a guide (coach) to learning rather than a transmitter of knowledge. Since these methods differ substantially from the delivery of explicit knowledge, the instructor adjusts their teaching to focus on tacit knowledge (Slišane et al., 2021; Mitchell & Chesteen, 1995).

Thus, if entrepreneurship is defined as the discipline that studies the process by which entrepreneurs identify, explore, and exploit opportunities, the question becomes whether entrepreneurship can be taught. As with all disciplines, entrepreneurship can indeed be taught—but what, specifically, is taught? How is it taught? And how can the impact of such teaching on students' learning be measured?

Béchar and Grégoire (2005, 2009) stress the importance of the teacher's ontological stance in shaping their capacity to determine teaching methods, and they propose an analytical framework for the different models of entrepreneurship education. In this regard, teaching may alternate among several models to provide appropriate continuity however, achieving this requires a change in posture, insofar as learning entrepreneurship as an academic discipline is not sufficient—one must also learn how to be an entrepreneur (Béchar, 1998).

#### Gender-related challenges and the socio-cultural context

Women and female university students in particular—within traditional and conservative societies are often victims of mental barriers and stereotypes that prevent them from entering the business world. A particularly important observation within Algerian families is that women themselves may tend to underestimate their capabilities as a result of social normalisation processes exercised by societal institutions. Values, beliefs, norms, and the education system function as facilitating or inhibiting factors that determine whether an entrepreneurial spirit emerges among women. Cultural elements are decisive in supporting and sustaining women's entrepreneurial motivation. Female entrepreneurship thus appears simultaneously as an outcome of culture and a producer of culture. It is therefore evident that this specificity renders the study of women's academic entrepreneurship a contextual topic, closely linked to each country's socio-cultural factors.

Women's entrepreneurship currently attracts many researchers seeking to understand its emergence worldwide. Some have concluded that the study of female entrepreneurship must be situated within its original context—in other words, the position of the woman entrepreneur must be examined within her country's socio-cultural environment. Furthermore, while research on female entrepreneurship is extensive in developed countries, relatively little work has been conducted in this area in non-OECD economies and developing economies (Hisrich & Ayse Öztürk, 1999).

Challenges related to the rentier nature of economic activity: A rentier economy contributes to weakening the spirit of risk-taking, fostering a culture of fear, and reducing university youth's willingness to establish their own enterprises—unlike a productive economy, which helps instil an entrepreneurial culture and nurture successive generations of entrepreneurs.

#### Challenges of burdensome bureaucracy

Despite the state's efforts to promote academic entrepreneurship in Algeria and the simplification measures (notably in taxation) implemented over many years, the regulatory and institutional framework associated with academic business creation remains insufficient and weakly incentivising, in addition to an inflated bureaucracy. Financial and environmental constraints also create instability in the business climate, hindering academic entrepreneurship in general.

#### Challenges related to the institutional and regulatory framework

The institutional and especially the regulatory—framework of Algerian universities appears to suffer from weaknesses that generate administrative conflicts between university leadership and the leadership of its faculties and schools. Algerian universities also face difficulty in building cooperative links with the external environment and with economic and social partners in order to encourage academic entrepreneurial learning.

On this basis, it can be argued that academic entrepreneurship in Algeria confronts an administrative, financial, social, cultural, structural, and economic reality that prevents the construction of an effective relationship with various economic and social partners.

#### **4. Findings (RESULTADOS)**

A reading of the historical trajectory shows a growing interest in entrepreneurship research and entrepreneurship education studies due to changing socio-cultural conditions in the global market. Despite the prominence of this trend, there remains a lack of understanding regarding the role played by university entrepreneurship.

As shown throughout this study, the most significant challenges facing the student entrepreneur who wishes to start a business and create an enterprise include social fear stemming from prevailing stereotypes about university entrepreneurship within Algerian society limited financial resources that do not allow them to expand entrepreneurial activities insufficient social and moral support from those around them and a socio-cultural context that does not, in general, encourage the empowerment of university students in the business world. To overcome these constraints, the Algerian state has turned to establishing government support structures and business incubators, providing available tax advantages, and attempting to actively involve local authorities and associations in promoting university-based business creation.

Our study also indicates that building an entrepreneurial personality over the life course does not occur all at once rather, it develops gradually—from primary school through to university graduation. At each stage of this journey, education professionals can take appropriate measures to raise awareness among learners.

Finally, this study reveals that the implementation of entrepreneurial action at its outset is often the result of collective synergy. Accordingly, entrepreneurship education aims to raise participants' awareness of the individual and/or collective dimensions embedded in the entrepreneurial spirit.

It can be said generally that the teaching of entrepreneurship in Algeria remains confined to the higher education sector. At the same time, however, we note certain initiatives by the Ministry of Education at the primary level concerning how to prepare pupils for entrepreneurship through various projects within educational institutions. Nevertheless, following the recent reforms of the university education system under the "LMD" framework, entrepreneurship has been introduced as a transversal module—yet it has evidently not received significant attention, given that students show little enthusiasm for it. This may be attributed to weak internal communication within the university, in addition to a lack of enthusiasm among teaching staff for delivering the module. Consequently, we have frequently observed instructors declining to teach it due to a lack of experience on the one hand and insufficient scientific material on the other as a result, the module is often cancelled and replaced with another course, particularly since entrepreneurship was introduced as an optional module accompanying other subjects.

If we wish to develop entrepreneurship education and refine entrepreneurial and business skills within Algerian universities, integrating additional modules into training programmes is essential. These should be mainstreamed across various sectors and specialisations. It is equally necessary to introduce a professional Master's degree specialised in business creation and the promotion of entrepreneurial culture.

It is also worth noting that, with regard to educational supervision, there are no instructors specifically trained in entrepreneurship education. Courses in academic entrepreneurship are delivered by "classical" academics—those whose backgrounds are primarily academic and who have never established or even managed a business. Experience indicates, however, that the best results are achieved when entrepreneurs with practical experience in entrepreneurship are able to manage their own ventures. For this reason, it would be advisable to employ

doctoral students specialising in entrepreneurship and business creation as instructors or lecturers.

## **CONCLUSION**

In the era of globalisation, demand for higher education in entrepreneurship is increasing as a result of the close interconnection between local and regional economies, in order to help societies address the challenges of employment and economic development. While the introduction of this discipline into curricula worldwide is undeniable, it leaves open the question of whether the quality of such programmes is genuinely effective—because for entrepreneurship to evolve from a topic to a strategic priority, it must become a central educational subject in which all schools and universities participate.

Changes in economic and social life have led to an evolution in the role of the university—such as the introduction of information and communication technologies and social demand for skilled employment. The university now has a role focused on socio-economic development through the creation of sustainable employment opportunities it is the principal actor in shaping the human capital required to meet the new demands of businesses and in social development. It also bears the mission of conducting research and creating new knowledge capable of meeting corporate needs and government expectations.

Based on its fundamental role in the country's economic development, the university now appears to face multiple pressures from its socio-economic environment. The teaching of entrepreneurship within the Algerian university education system remains a largely unfamiliar phenomenon given the novelty of these initiatives.

## **Recommendations and Suggestions**

Based on the general findings of the study, we propose a set of recommendations that Algerian universities may consider:

Modifying and reforming university curricula and entrepreneurship courses to align with the spirit of the times

Cultivating an entrepreneurial culture among university students, beginning from primary education through to higher education

Raising student awareness and motivating them towards academic entrepreneurship

Opening training pathways in entrepreneurship across all faculties and university specialisations, whether in technical, humanities, or social science disciplines

Diversifying teaching methods and approaches in entrepreneurship education by adopting methods employed in international universities, rather than relying solely on traditional approaches

Reducing the prevalence of a culture of improvisation (bricolage) and bureaucracy, whilst fostering a stimulating regulatory environment

Undertaking clear and transparent regulatory and legal reforms to attract national investors and encourage the development of private enterprise

Drawing upon foreign and Arab experiences in the field of academic entrepreneurship.

## **LIMITATIONS OF THE STUDY**

This study presents certain limitations that should be acknowledged. First, the research focused exclusively on the Algerian context, which may limit the generalizability of the findings to other countries with different socio-economic and institutional conditions. Second, the study relied primarily on a qualitative and analytical approach, without extensive quantitative validation, which may restrict the empirical measurement of the relationships identified. Third, the complexity of academic entrepreneurship—particularly its socio-cultural and institutional

dimensions—may not be fully captured through the selected theoretical and descriptive analysis. Despite these limitations, the study provides relevant insights into the current state and challenges of academic entrepreneurship in Algeria.

## **FUTURE STUDIES**

Future research should incorporate quantitative and mixed-method approaches to empirically validate the relationships between entrepreneurship education, institutional support, and entrepreneurial outcomes. Comparative studies across different countries and regions are also recommended to identify contextual differences in academic entrepreneurship development. Additionally, further research may explore the role of digital transformation, innovation ecosystems, and policy reforms in strengthening academic entrepreneurship, particularly in developing economies.

## **ACKNOWLEDGMENTS**

The authors express their sincere gratitude to the academic experts and researchers who contributed to the development of this study through their valuable insights and constructive feedback. Special thanks are extended to Mohamed Lamine Debaghine University of Sétif 2 and all institutions that facilitated access to scientific resources and relevant information necessary for the completion of this research.

## **AUTHOR CONTRIBUTIONS**

**Zitouni Aiboud:** Conceptualization, research design, manuscript drafting, and final revision.

**Mohamed Lamine:** Data collection, literature review, and analytical development.

**Attia Walid:** Theoretical framework, data interpretation, and writing of results.

**Achouri Djamal-Addine:** Supervision, methodological validation, and critical revision of the manuscript.

## **CONFLICT OF INTEREST STATEMENT**

The authors declare that there are no conflicts of interest regarding the publication of this study. The research was conducted independently and without any financial or commercial relationships that could influence its results.

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