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An Analytical Study of the Development of Entrepreneurial Culture among University Students in Higher Education Institutions in Algeria from 2013 to 2020

Amira Allouit[1] Abdelwafi Boulouiz[2] M'hamed Feraoun[3]

[1-] Department of Management, Faculty of Management and Economics, Khemis Miliana University, Algeria. Email: all.amira@hotmail.com.
[2-] Department of Economics, Faculty of Management and Economics, Salhi Ahmed University Center, Algeria. Email: boulouiz@cuniv-naama.dz.
[3-] Department of Management, Faculty of Management and Economics, Khemis Miliana University, Algeria. Email: m.feraoun@univ-dbkm.dz.

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Abstract:

Objective: The aim of this study is to evaluate one of the most important strategies adopted by Algeria to develop an entrepreneurial culture among university students in higher education institutions, which is entrepreneurial education. In this context, we presented and analyzed the total number of files submitted by university students through the National Agency for the Support and Development of Entrepreneurship from 2013 to 2020, as well as the statistics showing the overall number of students who went through the Entrepreneurship House during the period from 2013 to 2019.

Methods: the study will analyze and evaluate entrepreneurial education as a strategy for fostering an entrepreneurial culture among university students in Algeria, based on the total number of files submitted by university students to establish micro-enterprises at the National Agency for the Support and Development of Entrepreneurship from 2013 to 2020. Furthermore, we will assess the outcomes of activities carried out to promote entrepreneurship by entrepreneurship centers in higher education institutions nationwide in 2019.

Results: The Statistics show that the Algerian experience in teaching entrepreneurship in higher education is both recent and weak. This weakness stems from the limited role of educational programs in teaching business plan preparation and their inability to keep up with scientific advancements. Additionally, these programs fail to equip students with the knowledge, skills, and capabilities needed to start their own projects or understand how to select and invest in opportunities to create small businesses.

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Conclusions: The development of an entrepreneurial culture in universities requires collaboration across various efforts. This starts with the Entrepreneurship House, which connects students to the economic environment through awareness and training. Next are the university business incubators, which help students access support and funding. Additionally, student clubs and research labs contribute to fostering an entrepreneurial culture within the academic setting.

1. Introduction

The strategy of teaching entrepreneurship in higher education institutions has become a subject of interest for many researchers. In recent years, governments have placed significant emphasis on linking education with real-world applications, leading most of them to incorporate entrepreneurship into their educational programs, especially at the university level, considering it as a key contributor to economic development, in addition to reducing unemployment rates and creating job opportunities through launching innovative and productive projects. This is based on designed educational programs and newly established entities aiming primarily to graduate students who are capable of creating and providing job opportunities by nurturing their individual talents, building entrepreneurial values and skills, and expanding their knowledge in the field of entrepreneurship through what is called entrepreneurial education.

Oduma (2012) maintains that including entrepreneurial development in higher education will give the graduates of the entrepreneurial course a new lease on life and change their mindset. This will undoubtedly assist students in becoming self-sufficient, self-reliant, and economically engaged upon graduation in this 21st century. It is a training program that equips the beneficiary with the knowledge and skills needed to start and run a profitable business.

Algeria, like other countries, has recognized the necessity of focusing on entrepreneurship. It has undertaken many initiatives and strategies aimed at fostering an entrepreneurial culture, particularly within the university student community, as a practical approach to graduating generations of students who can recognize opportunities and take the initiative to adopt them. The first of these initiatives was launched in 2007 with the creation of the first "House of Entrepreneurship" at the University of Constantine, Algeria, in partnership with the Ministry of Higher Education and Scientific Research and the Ministry of Labor and Employment. Later, the National Agency for the Support and Development of Entrepreneurship joined the partnership, and this initiative was expanded to all higher education institutions, reaching a total of 75 Houses of Entrepreneurship by 2023. In addition, the Ministry of Higher Education and Scientific Research in Algeria reformed the educational curricula of the LMD system starting from the 2016-2017 academic year by designing national curricula for various disciplines, including courses related to entrepreneurship such as Entrepreneurship, Starting a Start-Up, and others, which are now taught

in all final-year Bachelor's and Master's programs, as well as in doctoral programs starting in 2019, in all faculties without exception. Furthermore, entrepreneurship programs have been introduced in all higher education institutions in Algeria, particularly in the faculties of economic, commercial, and management sciences. The government also enacted a decree establishing university business incubators in all higher education institutions, allocating dedicated spaces to ensure effective support for students, researchers, and innovators. On September 27, 2022, the Ministry issued a decision outlining how students in higher education institutions in Algeria could prepare a graduation project to obtain a university-start-up certificate, including a set of training programs on business plan preparation aimed at supporting students in transforming their graduation projects into start-up ventures.

2. Literature review

Entrepreneurship, derived from the French word "entreprendre" meaning "to undertake" or "to run a business," has become a significant driver of economic growth and labor employment in developed economies. (Economic Impact Catalyst, 2022) Despite its prominence, the concept lacks a universally accepted definition due to varying perspectives. Gartner (2018) argued that an entrepreneur's behavior, traits, and personality must embody entrepreneurial characteristics. (Sari, William, & Tina, 2018) Delmar (2016) linked entrepreneurship to different fields of social science, each offering its own definition. Entrepreneurship involves developing and managing a business, assuming risks, and creating value through new or innovative products or services. Entrepreneurial education equips individuals with the necessary skills for self-employment. Ottih (2014) described it as innovation, risk-taking, and organization aimed at establishing and managing ventures. The field includes self-employment, innovative business ideas, organization creation, resource utilization, and the exploitation of market opportunities.

In addition, entrepreneurship education is also considered as a means to enhance creativity and innovation, and prepare individuals to face the challenges and opportunities that exist in today's global market. Therefore, we can say that the difference between traditional education and entrepreneurial education is: Entrepreneurship education has advantages in preparing individuals to become successful and innovative entrepreneurs. In entrepreneurship education, students are taught to think creatively, develop business ideas and manage risks effectively. (Fernando & Oswald) This is in contrast to traditional education which tends to focus more on theoretical knowledge and academic skills. Entrepreneurship education also provides opportunities for students to learn directly from successful entrepreneurs, so they can gain the insights and practical skills needed to start and manage their own businesses. In addition,

entrepreneurship education also encourages students to understand the market and business opportunities that exist, so that they can develop the right strategies to face intense competition. (Dian & Ali, 2024) Thus, entrepreneurship education not only provides knowledge and skills, but also shapes the mental attitude required to become a successful entrepreneur. Through entrepreneurship education, students are also taught to have the ability to think creatively and innovatively in developing their business ideas. They are also trained to have the courage to take risks and strategic decisions to develop their business. Thus, entrepreneurship education not only helps students to become successful entrepreneurs, but also helps them to become strong and visionary leaders in the business world. With entrepreneurship education, students also learn how to work in teams and collaborate with others to achieve common goals. They are taught to have good communication skills in order to establish good relationships with customers, business partners and employees. In addition, entrepreneurship education also helps students to understand the importance of business ethics and social responsibility so that they can become successful and morally responsible entrepreneurs. (Liren & Sheng, 2024)

2.1. The role of universities in fostering an entrepreneurial culture through entrepreneurial education

Universities play a pivotal role in shaping the entrepreneurial landscape by providing students with the necessary education and resources to develop an entrepreneurial mindset. Through entrepreneurial education, universities not only teach students the theoretical aspects of business and innovation but also offer practical experiences that encourage creativity, risk-taking, and problem-solving. This helps students acquire the skills needed to start their own businesses, contribute to economic development, and become leaders in their communities. The focus on fostering an entrepreneurial culture equips students with the tools to navigate the challenges of the modern economy and seize new opportunities. Here's a brief overview of their role: (Global Entrepreneurship Monitor,2022)

- **Providing Knowledge and Skills:** Universities offer specialized programs that equip students with essential entrepreneurial skills, such as business planning, market analysis, and management, enabling them to turn ideas into viable businesses.
- **Encouraging Innovative Thinking:** Entrepreneurial education promotes creative thinking, encouraging students to come up with innovative solutions to societal or economic challenges.
- **Practical Experience:** Universities offer practical experiences like internships, competitions, and workshops where students can apply their learning in real-world entrepreneurial settings.
- **Risk-Taking and Problem-Solving:** Education in entrepreneurship teaches students to take calculated risks, handle failures, and learn from them, which are essential skills for entrepreneurs.

- Industry Collaboration: Universities connect students with industry experts, entrepreneurs, and businesses, providing networking opportunities and mentorship to help students launch their ventures.
- Promoting Entrepreneurial Awareness: Universities foster an entrepreneurial mindset, encouraging students to consider entrepreneurship as a career path rather than traditional employment.
- Entrepreneurship Centers: Many universities have dedicated entrepreneurship centers that provide resources, mentoring, and funding to help students develop their business ideas.
- Social and Economic Innovation: Entrepreneurial education also focuses on social innovation, encouraging students to develop projects that address social and environmental issues.

2.2. Agreements of the Ministry of Higher Education and Scientific Research to Develop an Entrepreneurial Culture in Higher Education Institutions in Algeria.

In order to integrate youth in general, and university students and graduates of Algerian higher education institutions in particular, into the national development process and the economic recovery program through the promotion of the development of small enterprises and entrepreneurship, and considering the need to achieve the goals outlined in the government's action plan, especially those related to supporting the creation of wealth-generating activities through promoting individual and collective entrepreneurial initiatives, and considering the Ministry of Higher Education's policy of enhancing communication and coordination between universities and the economic environment to establish science and valorize the results of scientific research to serve the requirements of the national economy, the Ministry of Higher Education and Scientific Research has signed numerous agreements aimed at supporting and developing an entrepreneurial culture within the academic community. The most notable of these are:

2.2.1. Framework Agreement Between the Ministry of Higher Education and Scientific Research and the Ministry Delegate to the Prime Minister in Charge of Small Enterprises.

The framework agreement between the Ministry of Higher Education and Scientific Research and the Ministry Delegate to the Prime Minister in Charge of Small Enterprises aims to promote entrepreneurial thinking within universities and support the creation of small businesses. Signed to foster collaboration between the two ministries, it focuses on developing entrepreneurship among students and graduates, guiding them to create their own projects. The agreement includes creating an idea bank based on graduation theses and research that can be transformed into real projects. The Ministry of Higher Education will provide premises for entrepreneurship hubs, equip them with necessary tools, and

establish an electronic platform for monitoring activities, while also promoting the "entrepreneurial student" program. (Framework Agreement Between the Ministry of Higher Education and Scientific Research and the Ministry Delegate to the Prime Minister in Charge of Small Enterprises., 2022)

The Ministry Delegate, represented by the National Agency for the Support and Development of Entrepreneurship, is responsible for managing and activating the entrepreneurship hubs in universities, providing support to innovative students through guidance and mentorship, as well as organizing interactive activities such as Entrepreneurial Week and workshops.

In conclusion, the agreement aims to support university students by encouraging entrepreneurship, fostering innovation, and helping them turn their ideas into real projects that contribute to the national economy.

2.2.2. Framework Partnership Agreement between the Ministry of Labor, Employment, and Social Security and the Ministry of Higher Education and Scientific Research.

The framework partnership agreement between the Ministry of Labor, Employment, and Social Security and the Ministry of Higher Education and Scientific Research aims to strengthen and promote entrepreneurship within the university community by creating a joint framework that contributes to advancing entrepreneurial thinking among students and researchers. The agreement, signed on March 9, 2017, targets the following objectives: (Ministry of Higher Education and Scientific Research of Algeria, 2025)

- Promote and develop entrepreneurial thinking within the university community through partnership and consultation.
- Expand the role of entrepreneurship across all higher education institutions.
- Foster an entrepreneurial spirit among students and researchers through programs that promote a culture of entrepreneurship.
- Create an idea bank based on graduation theses and research results, transforming them into investment projects.
- Value expertise in the field of entrepreneurship.

A. Commitments of the Ministry of Labor, Employment, and Social Security, represented by the National Agency for the Support and Development of Entrepreneurship:

- Provide the necessary resources to implement the agreement.
- Manage and activate entrepreneurship hubs in universities.
- Prepare and monitor a joint annual action plan.
- Involve students with creative projects in the activities organized by the agency.

B. Commitments of the Ministry of Higher Education and Scientific Research:

- Provide the necessary premises and pedagogical resources to implement the agreement.

- Assign representatives to manage the entrepreneurship hubs in higher education institutions.
- Contribute to the preparation and monitoring of the joint annual action plan.
- Involve the agency in activities related to entrepreneurship.

To achieve these goals, a joint national committee has been established, consisting of representatives from both ministries and the agency, as well as local joint committees in each university to define and monitor the implementation of programs.

This agreement aims to strengthen the entrepreneurial environment in Algerian universities and encourage students to transform their ideas into viable projects.

2.2.3. Agreement Related to Cooperation in Supporting Innovative Projects and University Incubators.

The cooperation agreement between the Ministry of Higher Education and Scientific Research and the Ministry Delegate to the Prime Minister in Charge of Knowledge Economy and Start-ups aims to support innovative projects and university incubators, as well as enhance the entrepreneurial environment within universities. It focuses on assisting students and graduates in establishing start-ups. The agreement seeks to establish a reference regulatory framework for cooperation between the relevant bodies to develop the knowledge economy and innovation, with an emphasis on supporting university incubators and innovative projects, and encouraging students and researchers to turn their ideas into start-up companies. The key objectives of the agreement include: (Agreement Related to Cooperation in Supporting Innovative Projects and University Incubators., 2017)

- Support university incubators to obtain the "Incubator Label" and encourage innovative university projects to achieve the "Innovative Project Label".
- Support the creation of start-ups by providing consultancy and assistance in obtaining "Start-up Status" and facilitating the process for acquiring national and international patents.
- Promote cooperation between incubators and social and economic partners to enhance the role of incubators in the economic fabric.
- Implement joint activities in areas such as scientific research, technological development, and providing specialized training in knowledge economy and innovation management.
- Develop a national network for incubators and start-ups through research and innovation cooperation and the exchange of scientific and technical information.

The ultimate goal is to support entrepreneurship within Algerian universities, stimulate innovation and technology, and contribute to the development of the knowledge economy in the country.

2.2.4. Establishment of a National Coordinating Committee to Monitor University Innovation and Entrepreneurship.

The National Coordinating Committee for Monitoring University Innovation and Entrepreneurship was established by a decision issued on March 1, 2023. This committee serves as a coordination, advisory, and monitoring body aimed at promoting entrepreneurship within the academic and research environments in collaboration with higher education and research institutions, as well as the knowledge economy sector and small and start-up enterprises. Key tasks of the committee include: (Regarding the Establishment of a National Coordinating Committee to Monitor University Innovation and Entrepreneurship, Article 2, 2023)

- Proposing sectoral policies to promote innovation and technological transformation.
- Monitor the implementation of entrepreneurship and innovation policies in universities and research centers.
- Facilitate coordination between the academic sector and the knowledge economy sector to enhance cooperation between academic institutions and the economic and social environment.
- Oversee business incubators, entrepreneurship hubs, and technology and innovation support centers.
- Provide a conducive environment for students and researchers to launch their innovative projects and transform them into patents or start-ups.
- Support the establishment of university business incubators and technology support centers.
- Encourage connections between public support mechanisms, such as the National Agency for the Support and Development of Entrepreneurship, to help students enter the world of entrepreneurship.
- Monitor manufacturing labs and activities related to innovation projects in universities.
- Appoint qualified coordinators to train students in entrepreneurship.

The primary goal of the committee is to enhance innovation and entrepreneurship within Algerian universities, encouraging students and researchers to turn their ideas into successful projects.

2.3. Preparing a Graduation Thesis Project to Obtain a University Degree – Start-up Company by Students of Higher Education Institutions in Algeria.

As part of supporting and developing entrepreneurship within the university community, the Ministry of Higher Education and Scientific Research issued a decision dated September 27, 2022, outlining the procedures for preparing a graduation thesis project to obtain a "University Degree – Start-up Company" certification by students in higher education institutions. The goal is to create a generation of entrepreneurial students who have the ability and desire to pursue innovative entrepreneurship and establish start-up companies that generate

wealth and create job opportunities. These start-ups are based on the principles of innovation and technology and aim to provide technical, technological, or digital solutions for existing businesses or self-sustaining enterprises.

Preparing a graduation thesis project to obtain a "University Degree – Start-up Company" certification by students in higher education institutions in Algeria is an important step toward developing entrepreneurial skills and transforming academic ideas into marketable projects. The stages involved in preparing this project are as follows: (Ministry of Higher Education and Scientific Research of Algeria)

- **Choosing the Project Idea:** Students begin by selecting an innovative idea related to their academic field that meets market needs or provides solutions to specific challenges. The idea must be feasible for transforming into a start-up in terms of technological or economic viability.
- **Feasibility Study:** Students prepare a comprehensive feasibility study for the project, which includes market analysis, identification of the target audience, competition assessment, and estimation of potential costs and revenues. This study aims to determine the project's viability and its potential for success in the market.
- **Business Plan Preparation:** A detailed business plan is developed, outlining the stages of project development, marketing strategies, and financial plans. It also includes the legal and operational aspects required to establish the start-up.
- **Mentorship and Support:** Students are accompanied during the preparation of their projects by university business incubators and entrepreneurship hubs, which provide technical and financial guidance. They also collaborate with government agencies such as the National Agency for the Support and Development of Entrepreneurship to support innovation and help turn projects into growth-oriented start-ups.
- **Presentation for Discussion:** After completing the thesis, students present their project for discussion in front of a specialized academic committee that includes university professors and professionals in the field of entrepreneurship. The project must include practical aspects that can be implemented, in addition to academic elements.
- **Support and Guidance towards Implementation:** After defending the thesis and obtaining the university degree, students who have proven the viability of their projects receive support through programs and initiatives aimed at supporting start-ups. This includes assistance with securing funding, providing office spaces for the start-up, and offering technical support.

2.4. Academic Institutions Supporting the Development of an Entrepreneurial Culture in Higher Education Institutions in Algeria.

In Algeria, various academic bodies and institutions have been established to foster and support the growth of an entrepreneurial culture in higher education.

These institutions play a critical role in providing students and researchers with the resources, guidance, and skills necessary to pursue entrepreneurship and innovation.

2.4.1. Entrepreneurship House:

The Entrepreneurship House is an institution established in various higher education institutions in Algeria, including universities, university centers, and national higher schools. It is the result of a partnership between the Ministry of Higher Education and Scientific Research and the Ministry of Labor, Employment, and Social Security, with the university serving as its headquarters. The Entrepreneurship House acts as a meeting point between the university and the National Agency for the Support and Development of Entrepreneurship. Its main objective is to promote a culture of entrepreneurship and foster an entrepreneurial spirit among university students in Algeria.(https://cde.dz)

A. History of the Establishment of Entrepreneurship Houses in Algerian Higher Education Institutions:

Algeria adopted the initiative to establish Entrepreneurship Houses at universities in 2007, with the first one launched at the University of Constantine (Algeria), which became a pioneering experience at the national level. This institution was responsible for organizing seminars and workshops for those interested in starting businesses, as well as offering courses in entrepreneurship across all university departments. Following this, other universities joined the initiative in 2013, and by 2014, the initiative was expanded to all universities across the country.

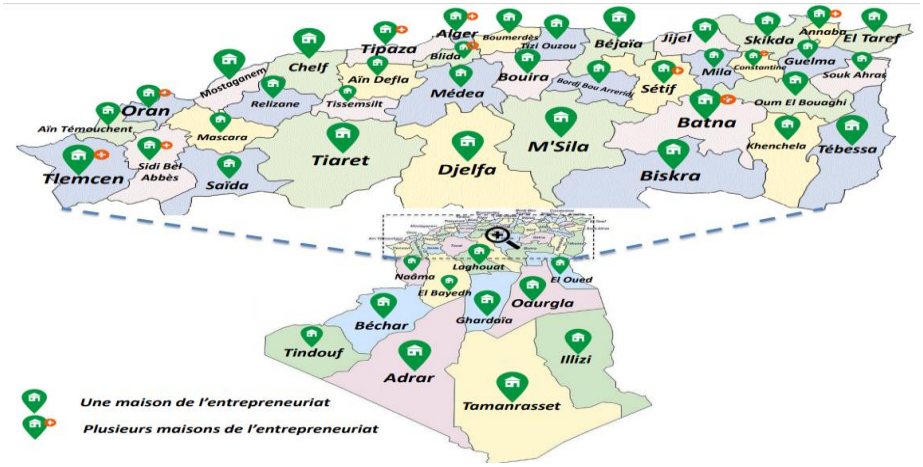


Fig 1. Map of the Spread of Entrepreneurship Houses across All Higher Education Institutions in Algeria

B. The Objective of Establishing Entrepreneurship Houses in Algerian Higher Education Institutions:

The objective of establishing Entrepreneurship Houses in Algerian higher education institutions is as follows:

- Spreading the culture of entrepreneurship among university students by raising awareness of the benefits of starting small businesses, both in terms of personal growth and the added value to the overall economy.
- Training students, particularly those approaching graduation, and motivating and supporting them in studying their ideas to transform them into real small businesses.
- Introducing university students to the various facilities and advantages offered by support organizations for small businesses, notably the National Agency for the Support and Development of Entrepreneurship.
- Guiding and assisting students in studying and evaluating their ideas to help them achieve their goals.
- Clarifying the procedures for establishing a small business and connecting students with various support and guidance organizations.

C. The Mission of Entrepreneurship Houses in Algerian Higher Education Institutions:

The mission of the Entrepreneurship Houses is as follows:

- Raising awareness and encouraging openness to the business world.
- Supporting youth to succeed in their projects, starting from the university, to facilitate their interaction with economic partners with the necessary expertise.
- Acting as a link between graduates holding degrees and the institution that will supervise their funding.
- Providing students with access to entrepreneurship support institutions in Algeria.
- Offering training and developing specific skills for project management and business creation.
- Accompanying and supporting creative projects, providing advice to students, and facilitating communication with support and funding structures.

D. Functions and Tasks of Entrepreneurship Houses in Algerian Higher Education Institutions:

- **Awareness Raising:** This process aims to develop the entrepreneurial aspirations of university students after their graduation. The impact of awareness raising becomes evident over time, as it challenges the notion that organizing projects requires prior professional experience. Many successful entrepreneurs are recent graduates. In the context of a challenging economic environment, students need to start working on securing their professional future as soon as possible.

- Support: The second function of the Entrepreneurship House is to receive and accompany ideas, turning them into projects. It gathers educational and technical resources to support the project. While the primary goal of the Entrepreneurship House is to foster an entrepreneurial mindset among students and researchers, it is, in fact, the structure capable of helping adopt an idea and transform it into a project by connecting project owners with appropriate support networks.

2.4.2. Tasks of the Entrepreneurship House in Algerian Higher Education Institutions:

A. **Preliminary Support:** This refers to raising awareness and encouraging students within the university campus to gradually shift from the idea of public sector jobs towards entrepreneurship and creating their own economic ventures, whether service-based or production-oriented.

B. **Training:** This involves organizing training sessions on the following topics:

- Finding a Business Idea: This focuses on developing the student's mindset, moving them away from conventional ideas towards innovative, creative ideas.

- Starting a Business: This involves explaining the steps to establish a business and preparing a business plan.

- Managing a Business: The training team educates students on modern techniques for managing a business.

- Follow-up and Research Support: The Entrepreneurship House team tracks students with innovative ideas and assists them in bringing those ideas to life in the form of small businesses.

2.4.3. Organization of the Entrepreneurship House in Algerian Higher Education Institutions:

The organization of the Entrepreneurship House is based on a national joint committee and local joint committees responsible for defining programs and monitoring their implementation. The national joint committee is composed of the following members:

- Two representatives from the Ministry of Labor, Employment, and Social Security.
- Four representatives from the Ministry of Higher Education and Scientific Research.
- Two representatives from the National Agency for the Support and Development of Entrepreneurship.

The committee is responsible for setting an internal regulation that defines its operational conditions and also prepares an annual report on the status of program implementation, which is then sent to the ministers in charge of employment, social security, and higher education and scientific research.

At each academic institution, the local joint committee is composed of the following members:

- One representative from the local Directorate of Employment.
- Two representatives from the local branch of the Anade agency.

- Two representatives from the concerned university.

These committees are responsible for preparing the annual report and submitting it to the national committee.

2.4.4. Analysis of the Results of the Entrepreneurship House Activities in Algerian Higher Education Institutions for 2019

It is worth noting that the total number of Entrepreneurship Houses in Algeria reached 78 across all higher education institutions in 2019. Among these, 52 houses were actively involved in entrepreneurial activities, distributed as follows: 18 in the eastern region, 24 in the central region, and 10 in the western region. On the other hand, 26 houses were not active, with 5 in the east, 8 in the center, and 13 in the west.

This situation can be considered negative in terms of fostering an entrepreneurial culture in the academic environment. It can be explained by the failure of some higher education institution leaders to follow instructions for establishing an Entrepreneurship House in every academic institution, as well as the lack of activation of the activities specific to these houses by certain officials. This reflects poor management and a lack of entrepreneurial spirit, in addition to the absence of a clear strategy for promoting entrepreneurship in higher education institutions.

This lack of vision, mission, and goals regarding the development of entrepreneurship in academic institutions further exacerbates the issue. To address this, it is essential to form higher-level committees within each higher education institution to oversee and ensure the effective implementation of all related entrepreneurial initiatives within the academic community.

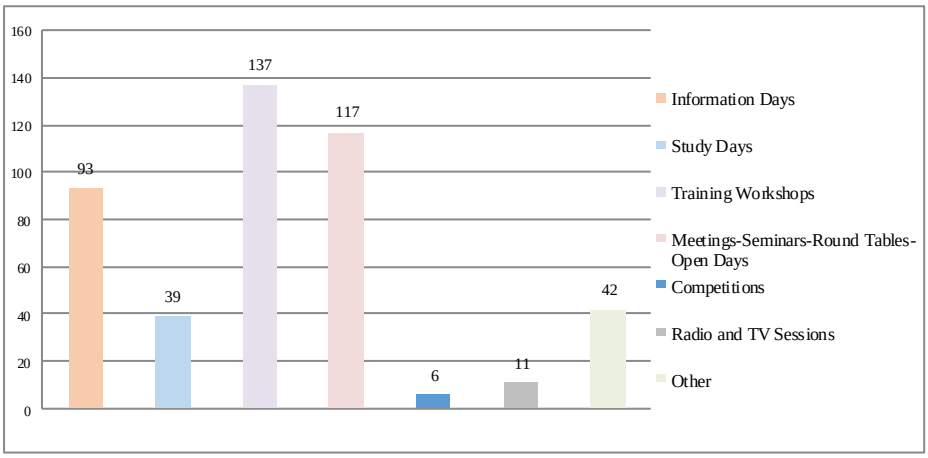


Fig 2.Outcome of Entrepreneurship House Activities in Higher Education Institutions in Algeria for the Year 2019

In 2019, the total number of activities aimed at all students reached 226, while those directed at final-year students totaled 118 activities, and those aimed at students with entrepreneurial projects amounted to 100 activities. This can be interpreted as Algerian higher education institutions focusing more on raising awareness and sensitizing students about the culture of entrepreneurship rather than developing the training aspect that is essential for enhancing the entrepreneurial knowledge and skills of university students. This includes preparing business plans, analyzing the surrounding environment to identify opportunities, and helping students discover ideas that they can transform into real-world projects.

Thus, higher education institutions in Algeria are still in the initial phase of implementing their entrepreneurship development strategy within the academic community. This phase is focused primarily on awareness and sensitization, rather than on more advanced stages such as practical training and entrepreneurial project development.

The results of the entrepreneurship houses that organized activities in higher education institutions, broken down by region, show that 24 institutions in the East, 18 in the Center, and 10 in the West participated in such activities. The table below provides more detailed information on this distribution.

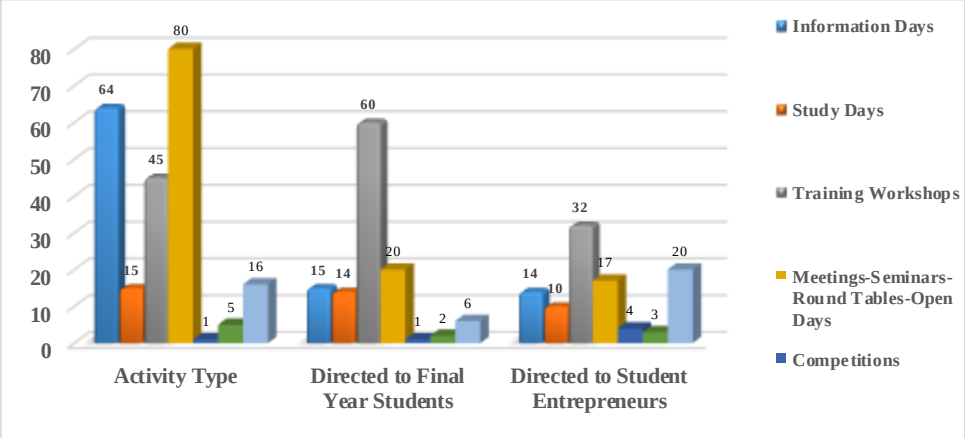


Fig 3. Outcome of Activities Implemented for Promoting Entrepreneurship by Entrepreneurship Houses in Higher Education Institutions at the National Level for the Year 2019.

A- The Number of Entrepreneurship Houses in Higher Education Institutions by Region from 2013 to 2019.

The Table below shows the number of entrepreneurship house in Algerian higher education institutions by region (East, Center, and West) during the period from 2013 to 2019. This table reflects the activation of entrepreneurship houses across

various educational institutions in Algeria, showing the geographical distribution of active and inactive houses, as well as those institutions without an entrepreneurship house.

Table 1. Number of Entrepreneurship houses in Higher Education Institutions by Region from 2013 to 2019

	Without Entrepreneurship House			With Entrepreneurship House but No ctivities			Without Entrepreneurship House		
Higher Education Institutions	**West**	**Center**	**East**	**West**	**Center**	**East**	**West**	**Center**	**East**
Universities	01	01	04	06	04	05	04	12	13
University Centers	00	01	00	04	01	00	03	02	02
Higher National Schools	02	05	03	03	03	00	03	10	03
Higher Teacher Training Schools	03	02	05	00	00	00	00	00	00
University Branches	02	00	00	00	00	00	00	00	00
Total	08	09	12	13	08	05	10	24	18

As shown in table1, we find that universities in the eastern and central regions lead in the number of active entrepreneurship houses. Universities in the east report 13 active hubs, while in the center, there are 12 active houses, reflecting a significant focus on supporting entrepreneurship in these areas. In contrast, universities in the west show a decline in the number of active entrepreneurship houses, with only 4 houses recorded.

As for the university houses, the geographical distribution shows variation between the regions. In the east and west, there are active entrepreneurship houses in university centers, while in the center, there are more centers with inactive houses. Additionally, the higher national schools in the center recorded the highest number of active hubs (10 houses), compared to other regions.

In the teacher training colleges, there are no active entrepreneurship houses in any of the regions, suggesting that these institutions may face challenges in activating entrepreneurship houses or that this field has not received the same level of attention in these types of schools. As for the university branches, they do not have any active entrepreneurship houses, highlighting the absence of this initiative in this category of institutions.

Based on this data, it can be concluded that there is a significant variation in the activation of entrepreneurship houses across different regions in Algeria, with the east and center showing more interest and activation of this field compared to the west and some other categories of higher education institutions.

B- Number of students who attended entrepreneurship houses and established small businesses at the national level.

University students join the entrepreneurship houses at their respective universities by registering for the courses organized by these houses. This is done by filling out an information form for each candidate student, which provides various details that help identify the training needs. Based on these needs, training sessions are programmed. Typically, each training session is organized for 20-25 students.

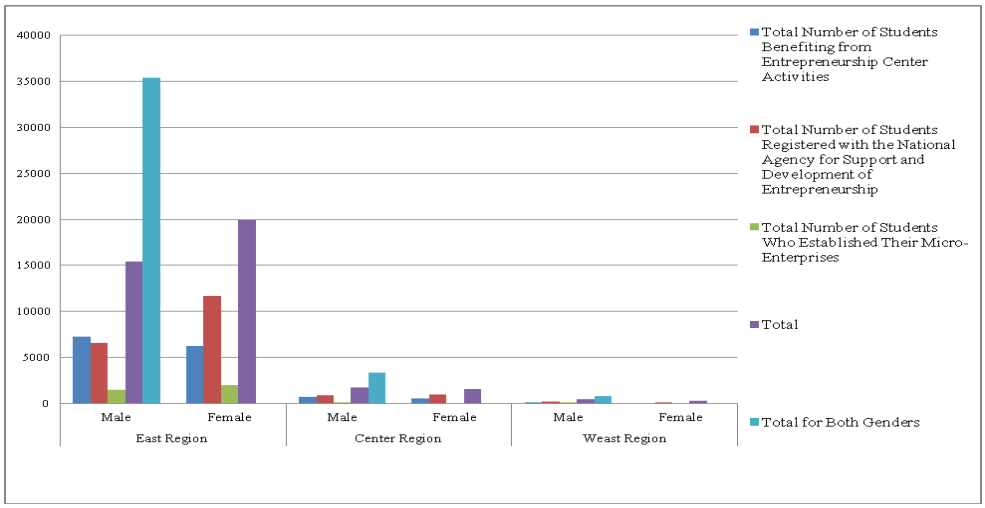


Fig 4. Total Number of Students Who Went Through Entrepreneurship housess and Established Micro-Enterprises (From the Establishment of the Entrepreneurship houses Until December 31, 2019).

In the figure 4, we notice that 2.26% of university students who established their small businesses, and who benefited from activities conducted within the framework of entrepreneurship houses between 2013 and 2019, were involved. It is also worth mentioning that the establishment of these businesses has not been verified, and there has been no assessment of their actual presence in the field. As a result, they are registered with the National Agency for the Support and Development of Small and Medium Enterprises. This can be interpreted as a lack of full transparency in the follow-up and supervision of small projects registered within The National Agency for Support and Development of Entrepreneurship system, which could lead to an environment that is not conducive to the future of small enterprises. This includes facilitating suspicious transactions through various means, such as inflating invoices, diverting public funds from their intended entrepreneurial support purposes, and creating fictitious businesses.

Moreover, this reflects a non-proportional relationship between the total number of students who benefited from the activities organized under the

entrepreneurship houses and those registered with The National Agency for Support and Development of Entrepreneurship**,** compared to the total number who established their small enterprises. This discrepancy may be attributed to the fact that from 2013 to 2019, the activities of the entrepreneurship houses were extremely limited. This could be because the strategy was new, and it operated without a clear work plan or coordination, which would have enabled the development of an entrepreneurial culture among university students in Algeria. Additionally, this decline could be due to the lack of qualified trainers and the professionalism of the partners involved in the creation and development of small businesses.

2.5. The National Agency for Support and Development of Entrepreneurship

The National Agency for Support and Development of Entrepreneurship was established in 1996. It is a public institution with a special nature, enjoying legal personality and financial independence. The agency is under the supervision of the minister delegated to the prime minister in charge of small enterprises. Its goal is to support youth employment by encouraging the creation and expansion of production activities for goods and services by young project holders.

The agency operates through a nationwide network comprising 61 provincial agencies and 173 branches. It is managed by a guidance council and run by a general director. It is now under the supervision of the Ministry of Knowledge Economy, Start-ups, and Small Enterprises.

2.5.1. The Strategy of the National Agency for Support and Development of Entrepreneurship

In accordance with the program of the President of the Republic, especially the encouragement of creating new activities and improving the performance of the National Agency for Support and Development of Entrepreneurship, a new strategy was adopted based on a purely economic vision (Council of Ministers held on August 23, 2020, under the presidency of the President of the Republic). This approach is based on the following key areas:

A- Revitalizing and Modernizing the Agency's Structure:

Re-aligning the agency’s tasks in accordance with the new strategy, Reviewing the agency's regulatory framework, Reviewing the support measures and benefits granted to project holders, Reorganizing and adjusting the joint guarantee fund to cover the risks of loans provided to young project holders.

- Creating Ecosystems for Supporting and Promoting Small Enterprises.
- Supporting Small Enterprises Facing Difficulties.

B- Tasks and Qualification Conditions of the National Agency for Support and Development of Entrepreneurship

The tasks of the National Agency for Support and Development of Entrepreneurship include:

- Raising Awareness and Promoting Entrepreneurial Culture: Encouraging the adoption of an entrepreneurial mindset among youth and the broader community.

- Providing Advice and Financial Support to Project Holders: Offering guidance and financial assistance to young entrepreneurs to help launch their ventures.

- Supporting Young Entrepreneurs: Assisting young individuals in transforming their business ideas into actual projects.

- Developing Technical Skills and Training for Small Business Managers: Enhancing the capabilities of those managing small enterprises.

- Ensuring Continuous Support and Monitoring: Providing ongoing follow-up and support to ensure the sustainability of small businesses.

C- Qualification Criteria for the National Agency for Supporting and Developing Entrepreneurship:

The qualification criteria for receiving support from the agency are as follows:

- Age: The individual must be between 18 and 55 years old.

- Professional Qualifications: The individual must hold a certificate or professional qualification, or possess recognized knowledge and skills, evidenced by a certificate or any other professional document.

- Personal Contribution: The individual must contribute personally in the form of private funds.

- No Previous Benefits: The individual should not have previously benefited from assistance for starting a business activity.

- Elimination of the Unemployment Requirement: The unemployment requirement has been removed.

D- Financing Mechanisms for Micro-Enterprises under the National Agency for Supporting and Developing Entrepreneurship in Algeria:

The financing mechanisms are as follows:

- Triangular Financing: This type of financing involves banks or financial institutions and is made up of three main components. The first is the Personal Contribution**,** which refers to the young entrepreneur's own financial investment in the project. The second is the Non-equivalent Loan**,** an interest-free loan provided by the National Agency for Supporting and Developing Entrepreneurship. Lastly, it includes a Bank Loan with Reduced Interest**,** where the entrepreneur receives a bank loan with a 100% reduced interest rate, which is guaranteed by the Joint Guarantee Fund to cover the loan risks for young entrepreneurs.

- Bilateral Financing: This type of financing does not involve banks or financial institutions and is composed of two key components. The first is the Personal Contribution**,** which refers to the young entrepreneur’s own financial input into the business. The second component is the Non-

equivalent Loan**,** an interest-free loan provided by the National Agency for Supporting and Developing Entrepreneurship to assist the entrepreneur in their venture.

- Self-financing: This type of financing consists entirely of the young entrepreneur's personal contribution, which accounts for 100% of the funding.

E- Forms of Investment:

The agency offers two types of investment:

- Creation Investment: This type of investment is related to the establishment of new micro-enterprises by one or more young individuals in various activities, excluding commercial activities. The following conditions apply: The young individual must be unemployed and not enrolled in social security systems, The age of the individual should be between 19 and 25 years, with an exception up to 40 years for managers who commit to creating three permanent job positions, The individual should have the relevant professional and academic qualifications for the anticipated activity, The entrepreneur must provide a personal contribution to finance the project and be registered with the National Employment Agency as a job seeker.

- Expansion Investment: This type of investment pertains to micro-enterprises established under the agency that aim to expand their production capacities within the same activity or in a related activity. The eligibility conditions for this form of investment include: Regular payment of the non-interest loan installments, Repayment of 70% of the non-interest loans in the case of dual financing, Submission of tax returns to demonstrate the positive growth of the micro-enterprise (for the first three years), A declaration of existence to prove the years of operation in regular areas or 6 years in special zones.

2.5.2. Analysis of the Files Submitted by University Students to Establish Small Enterprises with the National Agency for the Support and Development of Small and Medium Enterprises

A- Total Files Submitted by University Students to Establish Small Enterprises with the National Agency for the Support and Development of Small and Medium Enterprises from 2013 to 2020 According to Age.

From the Figure 5, we observe that the largest number of files submitted by university students to establish small businesses with the National Agency for the Support and Development of Small and Medium Enterprises corresponds to the age group of 25-30 years, with 49.8% (16,170 university students). This is followed by the 30-35 year age group at 25.68% (8,340 university students), and the 20-25 year group at 14.14% (4,591 university students). The 35-40 year age group follows with 9.25% (3,003 university students). The lowest percentage of files submitted by university students for establishing small businesses belongs to the age group over 55 years, at 0.012% (4 students), which is due to the integration with Anade.

These figures can be explained by the fact that the 25-30 and 30-35 year age groups have the highest number of submissions. The 25-30 year group typically corresponds to the post-graduation period, where students, after searching for employment and finding the public sector saturated, begin to seriously consider starting their own business. The 30-35 year age group consists of those who have gained professional experience (3 to 7 years after graduation), especially in freelance professions like doctors, lawyers, and pharmacists, which leads them to consider entrepreneurship. The 35-40 year age group consists of experienced professionals who are seeking a new challenge, often to break free from the constraints of employment. Additionally, the merger with Anade raised the age limit for eligibility, allowing applicants from 30-50 years to submit applications for establishing their own businesses.

For the 40-50 year age group, the number of applications is lower compared to the other groups, which may be explained by the fact that they are less inclined to take risks. The under-20 group, still at the beginning of their university education, is generally more focused on progressing through their studies than on starting a business. Only a small percentage (0.037%, or 12 students) show interest in entrepreneurial activities at this stage. Finally, the lowest percentage of applications for establishing a business (0.012% of the total) comes from those over 55 years old, which is due to an executive decree that continues to provide funding and support to unemployed individuals between 30-55 years who had received a non-repayable loan before the decree's publication. Those who had not received funding by the time of the decree are now handled by the National Agency for the Support and Development of entrepreneurship.

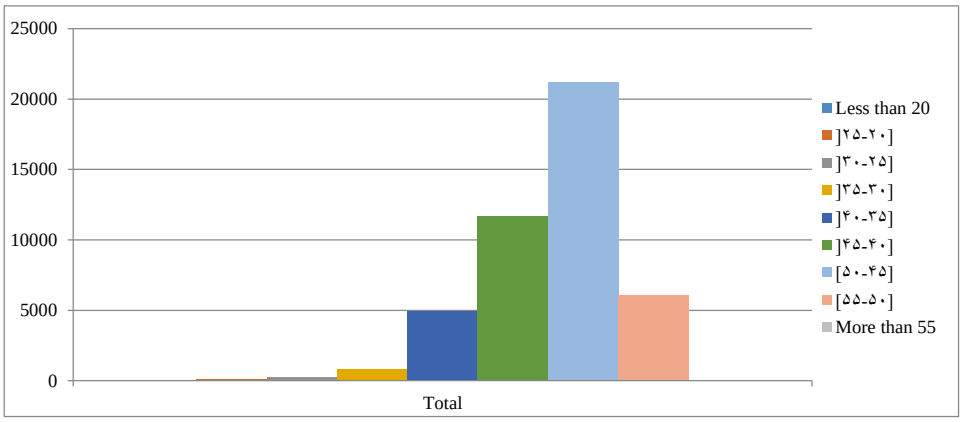


Fig 5. Total Files Submitted by University Students to Establish Small Enterprises with the National Agency for the Support and Development of Small and Medium Enterprises from 2013 to 2020 According to Age

B- Total number of applications submitted by university students to establish small businesses with the National Agency for the Support and Development of Small and Medium Enterprises from 2013 to 2020 by year:

The table 2 represents the number of files submitted by university students to establish small businesses in the National Agency for Support and Development of Entrepreneurship during the period 2013-2020. In 2013, a total of 5,639 applications were submitted, representing 17.36% of the total. A gradual increase in the number of applications occurred in 2014, with 7,065 applications submitted, representing 21.75% of the total. This can be attributed to several factors, including the social crisis Algeria experienced in 2011-2012, which led to widespread social and economic protests across the country due to poor living conditions, such as unemployment, high living costs, housing shortages, and rising food prices. As a response, the government implemented several political decisions in 2012 to address social unrest and mitigate public dissatisfaction by using a redistribution system aimed at reducing youth unemployment. One of these measures was the provision of small loans for young people wishing to start their own businesses, to promote self-employment among job seekers. Therefore, the number of applications submitted to establish private businesses in 2013 accounted for 17.36%, corresponding to 5,639 university students.

Then, there was a gradual decline starting from 2015 to 2017, with the number of applications submitted to establish small businesses reaching 4,169, 1,906, and 1,719, respectively, representing 12.84%, 5.87%, and 5.29% of the total. This decline can be attributed to the saturation of the number of projects granted based on political decisions without considering economic aspects, which led university students to refrain from submitting their applications. On the other hand, the decline in oil prices contributed to limiting the number of projects, which had already reached a saturation point. In March 2015, the General Director of the agency (formerly Ansej) announced that funding for many projects would be halted. Instructions were issued to all regional directorates to reject projects related to the rental of equipment, plastic industries, bakeries, and dry-cleaning shops, as well as any projects that do not provide more than one job. Following the freeze on funding for transportation projects of all types (passenger, goods, and freight transport), the General Directorate of the National Agency for the Support and Development of entrepreneurship decided to halt the funding of many activities that were experiencing significant inflation in the field and were economically inefficient, such as the production of plastic bags, bread, and the rental of all types of equipment and vehicles. It is worth noting that these activities were not frozen in the desert regions.

The number of applications started to gradually rise again from 2018 to 2020, with 4,257, 4,142, and 3,582 applications, respectively, representing 13.11%, 12.75%, and 11.03% of the total. This increase can be attributed to a wave of

encouragement for entrepreneurship within university communities during this period, unlike other periods. Specifically, the establishment of entrepreneurship hubs in higher education institutions in Algeria began in 2017 and was further strengthened in 2019. Additionally, a new type of funding, self-financing, was introduced for freelancers, who were primarily looking for tax incentives during the years 2018, 2019, and 2020. Starting in 2020, the agency shifted its focus toward quality activities rather than quantity, aligning with the interests of university students.

As we can see from the table, the number of applications submitted by university students to establish micro-enterprises in the National Agency for Support and Development of Entrepreneurship (Anade) in the period from 2013 to 2020 ranged between 1,919 and 1,387 files for northern provinces such as Batna, Bejaia, Tizi Ouzou, Algiers, Setif, Constantine, and Oran. This can be attributed to:

- High population density.
- Presence of basic infrastructure.
- Existence of industrial zones and commercial activities.
- Presence of educational institutions (universities and institutes).

These factors encouraged people in these regions to apply for micro-enterprise creation.

Furthermore, the provinces in the interior of the country, such as Oum El Bouaghi, Biskra, Bouira, Tiaret, Tlemcen, Djelfa, M'sila, Bordj Bou Arreridj, and Mila, saw the number of applications range between 1,000 and 500 files during the same period. On the other hand, the southern provinces, including Adrar, Tamanrasset, and El Oued, saw fewer applications, with numbers ranging from 45 to 451 files. This is lower than the northern regions, and the reasons can be attributed to the following factors:

- Lower living standards.
- Traditional lifestyles and customs.
- Lower population density as we move southward.
- The difference in lifestyle and proximity to central administrative bodies, which makes it easier to access information and administrative procedures.

This is despite the fact that some activities in the southern regions are not subject to the suspension of funding.

Table 2. Number of files submitted by university students to establish small businesses in the National Agency for Support and Development of Entrepreneurship during the period 2013-2020 by year.

Years	2013	2014	2015	2016	2017	2018	2019	2020
Total	5639	7065	4169	1906	1719	4257	4142	3582

C- Total number of files submitted by university students to create a micro-enterprise at the National Agency for Support and Development of Entrepreneurship from 2013 to 2020, according to gender.

Through the figure 6, we observe that the highest percentage of files submitted to the National Agency for Support and Development of Entrepreneurship to create a micro-enterprise by university students was from male students, with 21,375 files, representing 65.81% of the total files submitted. Meanwhile, female students submitted 11,104 files, which accounts for 34.19%. These results show that the size of female entrepreneurship is relatively small compared to the number of projects funded by males. This can be explained by the nature of the work environment in Algeria, where most annual activities are concentrated in certain sectors (services, crafts, trade), while males dominate activities that require physical effort, such as construction and public works, agriculture, and industry. Additionally, this disparity is due to the fact that entrepreneurial thinking is more widespread among males than females, due to various social, economic, and cultural factors in Algerian society. Furthermore, women often prefer to complete their studies and pursue stable professions.

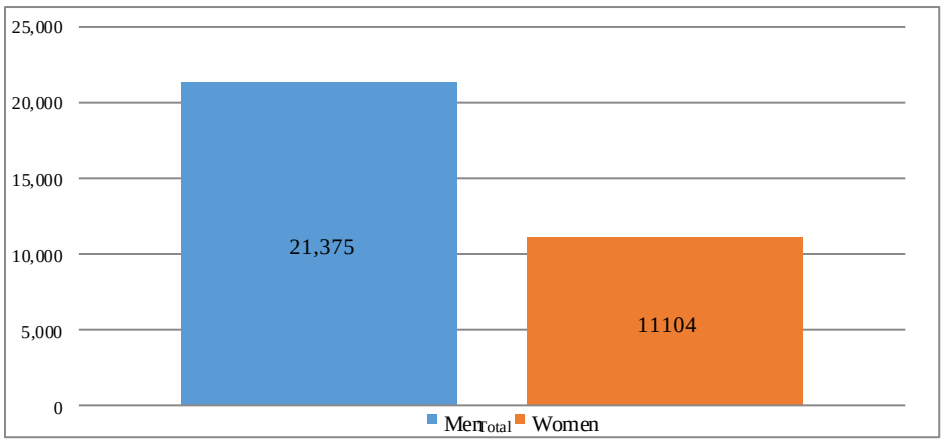


Fig 6. Total number of files submitted by university students to create a micro-enterprise at the National Agency for Support and Development of Entrepreneurship from 2013 to 2020, according to gender.

D- Total number of applications submitted by university students to establish a micro-enterprise at the National Agency for Support and Development of Entrepreneurship from 2013 to 2020, according to the type of funding

From 2013 to 2020, the agency registered a total of 32479 applications submitted by university students, aimed at establishing their own projects. These included 896 applications for microfinance under various financing categories provided by the agency, 1640 applications for mixed financing, and 29943 applications for tri-financing.

The number of applications submitted to the agency for establishing micro-enterprises, according to the type of financing at the national level from 2013 until December 31, 2020, can be clarified through the following table.

Additionally, the agency introduced various financing schemes available to young people with investment projects. These financing schemes primarily focus on two main types of financing structures: the dual financing structure, which involves two key parties—the young investor and the agency—and the tri-financing structure, which involves three main parties: the bank as the primary funder, the young investor as the beneficiary, and ANADE as the third party. There is also self-financing, which involves full contribution from the entrepreneur, introduced recently in 2018.

From the table above, we notice that the largest number of applications submitted by university students to the National Agency for Support and Development of Entrepreneurship from 2013 to 2020, according to the type of financing, were for tri-financing, accounting for 92.19%, followed by applications for mixed financing at 5.05%, and microfinance at 2.76%.

We also observe an increase in the number of projects financed through the tri-financing scheme by the agency during the period from 2013 to 2020. This is due to the reduction of bank interest rates from 100% to 0%. In contrast, the dual financing scheme saw less interest, as university students tend to shy away from this type of financing due to its specific conditions. University students generally have low incomes, if not none at all. Therefore, they are more likely to opt for the lower personal contribution required in tri-financing (1-2%), depending on the project's cost. On the other hand, dual financing requires a much higher personal contribution (71-72%), which presents a significant barrier for university students. This explains the lower number of applications submitted under this scheme.

The limited uptake of self-financing schemes is due to the fact that they were introduced relatively recently, in February 2018, and are primarily targeted at professionals seeking tax advantages, such as pharmacists, doctors, lawyers, and notaries. Additionally, self-financing requires 100% funding from the entrepreneurial youth, offering only tax and customs benefits, which are also

available from other bodies like National Agency for the Development of Investment.

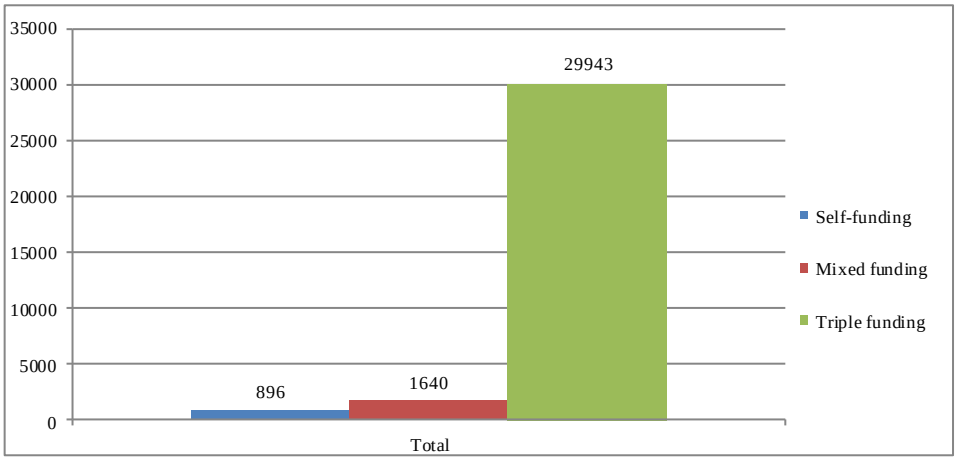


Fig 7. Total number of applications submitted by university students to establish a micro-enterprise at the National Agency for Support and Development of Entrepreneurship from 2013 to 2020, according to the type of funding.

E- Total Applications Submitted by University Students to Establish Micro-Enterprises at the National Agency for Support and Development of Entrepreneurship from 2013 to 2020 by Type of Investment.

Through the Figure 8, we observe that the largest percentage of applications submitted relates to the first type of investment under the agency's framework, accounting for 97.03%, or 31,513 applications. As for the applications related to expansion within the agency, they account for 2.97%, or 966 applications.

The decline in the number of applications for expansion funding is due to the fact that eligibility for expansion requires that the investment project has been operational for more than 3 years in regular areas, 6 years in special areas, or 10 years in southern regions. Additionally, it is required to repay 70% of the bank loan granted, and there must also be positive results during the previous phase. There are issues such as the unavailability of industrial land and the scarcity of industrial zones in some regions. Full repayment of the bank loan is also required if there is a change of bank or a shift from tri-party financing to dual financing.

Therefore, the reason for the low number of applications for expansion is the inability of many investors to expand their activities due to the heavy debt burden, the failure and lack of sustainability of some projects, as well as the difficulty in implementing expansion strategies (e.g., diversifying activities, products, and entering new markets).

In this study, entrepreneurship education is taken to cover all educational activities '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.'2 It hence covers a broad range of activities across all levels of education - from creativity classes in primary education to Business Master Studies.

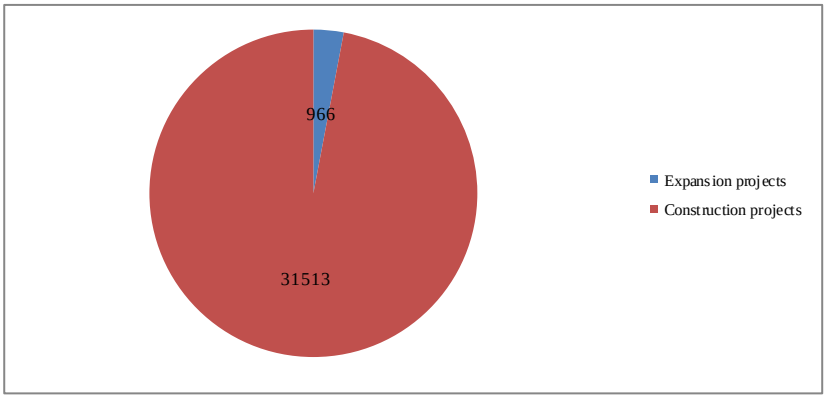


Fig 8. Total Applications Submitted by University Students to Establish Micro-Enterprises at the National Agency for Support and Development of Entrepreneurship from 2013 to 2020 by Type of Investment.

3. Results

The development of an entrepreneurial culture within the university environment is a process that requires the collaboration of various efforts to implement related strategies. First, there are the efforts of the Entrepreneurship House, which acts as a bridge between university students and the economic environment through awareness, sensitization, and training activities. This is followed by the efforts of university business incubators, which facilitate and accelerate the path for students to access various support and funding bodies. Additionally, student clubs and research laboratories also play a role in fostering the culture of entrepreneurship within the academic environment.

Statistics have shown that the Algerian experience in teaching entrepreneurship in higher education institutions is both recent and weak. This weakness results from the limited role played by educational programs that contribute to explaining how to prepare a business plan, in addition to their inability to keep up with scientific advancements. In addition, these programs do not essentially provide students with the knowledge, skills, and capabilities needed to qualify them to start their own projects, nor do they equip them with the understanding of how to carefully select opportunities and invest them to create small projects. As a result, teaching methods lack flexibility and modernity, including curricula,

study plans, and the teaching methods and techniques associated with them. This has affected the implementation of real projects on the ground, despite the increase in the number of files submitted by university students to establish small businesses at the National Agency for Supporting and Developing Entrepreneurship from 2013 to 2020. However, these projects remain weak and limited, year after year. Through the studied statistics, we observed that, according to the field of activity, all the submitted files consist of merely replicated activities. This contradicts the principle of entrepreneurship (creativity and innovation), as all the projects lack originality. Consequently, the most important body supporting entrepreneurship in higher education institutions is not committed to the principle of creativity. This demonstrates the presence of a moderate level of effectiveness in developing an entrepreneurial culture among university students. We can also explain this by the lack of focus on developing students' abilities in creative thinking, as well as providing them with the necessary skills to establish successful entrepreneurial projects. Therefore, the entrepreneurial culture acquired by students is purely theoretical and not experiential. Additionally, this can be attributed to the traditional methods used in teaching entrepreneurship-related courses, as they do not provide a fertile environment to cultivate an entrepreneurial culture among students. Moreover, the lack of awareness among faculty members regarding teaching methods for entrepreneurship is another contributing factor, as university professors lack the internal motivation to develop their teaching skills in entrepreneurship. Furthermore, universities do not provide specialized training that would enable them to improve their practical skills and knowledge in this field.

Additionally, the results regarding the outcomes of the Entrepreneurship House activities showed that students were not significantly influenced by the university activities held in the field of entrepreneurship, such as lectures, roundtables, and informational days. It is observed that the individuals in charge of the Entrepreneurship Houses make significant efforts to promote an entrepreneurial culture, as reflected in the large number of activities organized annually by the Entrepreneurship Houses. However, these weak results may be attributed to the lack of competence among the trainers and facilitators of those lectures and awareness-raising events. Sometimes, we find that the trainer themselves needs further training or lacks the ability to influence university students and make them interested in the activity. This results in students becoming disengaged, leading to a reluctance to attend and lost opportunities for benefit.

Additionally, we find that the topics of these activities may not be precise in content, which makes the students' benefit limited compared to what was expected. These activities tend to be repetitive every year, making them feel routine to students, which diminishes the sense of novelty. Furthermore, the individuals presenting and attending these activities often focus more on

obtaining certificates than on delivering the required content with sufficient quality. It is also worth noting that the COVID-19 crisis and its impacts on higher education institutions as a whole led to significant challenges for the public authorities, who implemented precautionary measures on campus activities. Among these measures was the mandatory suspension of in-person classes and the transition to remote learning, which halted face-to-face activities. During this period, the Entrepreneurship Houses across the country experienced a complete standstill for more than two and a half years, depriving students, particularly the 2022-2023 batch, of the opportunity to acquire knowledge and concepts in the field of entrepreneurship. Additionally, a major obstacle, which is beyond the control of the Entrepreneurship Houses, is the lack of suitable spaces or facilities that allow for student participation. The Entrepreneurship Houses at the universities under study are often limited to small offices, which are more administrative than pedagogical in nature. Furthermore, it is important to mention that after the COVID-19 crisis, the activities of the Entrepreneurship Houses were suspended for more than nine months during the 2023-2024 academic year, due to a series of changes implemented by the Ministry of Higher Education and Scientific Research.

On the other hand, another reason could be the students themselves, as they do not focus their efforts on developing their entrepreneurial culture, with only a few exceptions. University students, in general, tend to seek job security, like other students in other academic institutions. There is also a noticeable reluctance among students to attend lectures related to entrepreneurship, often citing the lack of competence of the professors assigned to teach these courses, especially among students from scientific disciplines. Moreover, it is important to note that a large number of professors simply deliver lectures in a traditional manner and assign theoretical research tasks during directed business sessions.

4. Recommendations:

Based on the previous models of past studies and the statistical test results of the current study, we propose a set of recommendations that will help activate the strategies aimed at developing an entrepreneurial culture in higher education institutions in Algeria, through the following:

- Issuing laws that allow training in the field of entrepreneurship at various levels (primary, secondary, higher education).
- Establishing an official financing fund within universities to fund student projects through loans that ensure the creation of actual businesses.
- Building a vision and mission for higher education institutions aimed at preparing students both academically and practically to establish their own businesses and projects.
- Setting the goal of excellence and advancement for higher education institutions in Algeria within the field of entrepreneurship education, along with providing

financial support and incentives for faculty members to encourage their contributions in this area.
- Building strategic partnerships with local, regional, and global communities by enhancing interaction and collaboration between higher education institutions and stakeholders (government sector, private sector, local community, and civil society organizations).
- Strengthening the practical and training approach in the pedagogical programs taught in higher education institutions and supporting the shift towards productive, hands-on programs.
- Maintaining continuous communication with scientific bodies, higher education institutions, and outstanding business sectors in the field of entrepreneurship.
- Organizing training courses on teaching entrepreneurship for faculty members.
- Aligning academic programs with the needs of the job market.
- Proposing projects by the faculty members who organize and mentor students, based on regional requirements.
- Reviewing the activities offered by student entrepreneurship clubs and transforming them into training activities that focus on the same field.
- Expanding the initiative to create student entrepreneurship clubs across all higher education institutions and activating their roles.
- Introducing professional bachelor's and master's programs in entrepreneurship.
- Reducing vague regulations in this field and working through a clear plan to develop an entrepreneurial culture among university students.
- Establishing a flexible and appropriate timetable for activities organized by both entrepreneurship houses and business incubators, especially for summer university activities.
- Providing qualified staff responsible for promoting an entrepreneurial culture among students, based on each specialization.

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