

# The Impact of Academic Programs on the Development of Entrepreneurial Skills in Students

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**Abstract:** The current study aims to assess the educational programs of Saudi Arabia universities with a focus on the requirements and activities for developing Entrepreneurial Skills among Youth. As a way to achieve its main objective, this study investigated literature reviews and previous studies to describe the Entrepreneurial Skills of Youth and the university programs including courses, teaching practices and strategies. The instruments were prepared accordingly. A questionnaire was designed to include dimensions such as Planning learning programs and courses, teaching for developing entrepreneurial skills, student's activities, and assessing entrepreneurial skills. Hence, the validity and reliability of questionnaire were measured. The current study depends on the descriptive analytical approach, and the sample consisted of a 241 members of Tabuk University, selected randomly according to variables of specialization, job, gender, and years of experiences. The study tool was applied by analyzing and interpreting the results. The main results of this study indicate that educational programs at the university incorporate few practices for improving entrepreneurial skills among youth. No significant differences were found regarding specialization, job, gender, or years of experience. The recommendations are highly related to rewriting education programs in accordance with developing entrepreneurial skills."

**Keywords:** Assessing Education Programs, Entrepreneurial Skills, and Saudi universities.

## 1 Introduction

Higher education is a tool of the society in building the capabilities of Youth, developing both their academic life and career skills, qualifying them to join work life, participating actively in society, and paving the way towards progress according to the national vision 2030 in the Kingdom of Saudi Arabia. Higher Education Universities emphasize building young people's skills for life in the 21st century. This area requires many skills, as productivity, participation, decision-making, communication, information literacy, and digital intelligence. Furthermore, These Universities also support youth with job skills, build self-capacities needed for sustainable professional career development and change jobs according to the labor market and available resources. Entrepreneurship is a contemporary concept at the level of research and actual reality in universities. This concept is related to an innovative event, or the production of a new way of thinking, and employing it as an executive vision in the activities of institutional management. It was associated with terms such as: entrepreneurial leadership, academic leadership, technical leadership, and social leadership, and in most of them leadership is linked to the development of a leader who can manage the organization with a different thought from traditional patterns (Johnson & Schanke, 2013). The entrepreneurship as a scholarly field was defined as seeking for understanding how opportunities to bring into existence goods and services are discovered and created. Also, in the modern economic climate, the entrepreneurship, or possessing entrepreneurial spirit, is critical for driving innovation and creating a prosperous Society (Laverly, et. al, 2015).

Furthermore, the entrepreneurship skills can be defined as the processes of learning. First, learning is a dynamic process that enables entrepreneurial behavior to be shaped and empowers entrepreneurs to grow. Many studies have argued that any theory about entrepreneurship needs a theory of learning. Second, there is increasing evidence on the need for creating effective entrepreneurial learning environments in educational institutes (Zamani & Mohammadi, 2018; Lehmann & Stockinger, 2019).

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Many studies have explained the importance of integrating entrepreneurship skills in pre-university education and developing them in university education. These skills are related to developing leadership capabilities, as creativity, producing new ideas, and associated technical applications and its effects on new outputs. Also, the faculty members confirm the importance of these skills through training both university students and administrative leaders on leadership, creativity, and decision-making processes so as to develop entrepreneurship skills. For example, the university members who possess leadership skills are characterized by the abilities to develop innovative academic and administrative environments that create ideas and encourage social communication. Also, the university should link between leadership and development processes, especially technology related to the digital world. As long as, the member worked to develop the system of scientific research at the university with education and businessmen in one environment to support education in the university and schools. These procedures increase the competitiveness of the university in return (Shealy, & McCaslan 2018; Cavanagh, 2013; Bacanak, 2013; Bilén et.al, 2005).

In addition, several studies also stressed the importance of incorporating concepts and skills of entrepreneurship into university education decisions and activities. They considered this as a way that enhances students' development, enabling them to acquire the future capabilities needed for production and achievement in creative and innovative ways. These studies also showed the necessity of using an integrative approach in organizing experiences, curricula, and educational activities within universities to build entrepreneurial skills for all groups of students (Aranha, dos Santos & Garcia, 2018).

In addition to the above, educational programs for universities must include the experiences and activities that train the students in developing and measuring entrepreneurial skills. Entrepreneurship skills must be one of the objectives of academic programs and courses, be included in the description of academic content and a major part of the learning outcomes as well. Additionally, university members encourage students to develop these skills through teaching strategies that incorporate entrepreneurial skills into curriculum plans, teaching plans, and transition from traditional to participatory approaches in research and educational projects within universities (Nicoleta, 2014; Kucel et al. (2016); Goldwasser, Martin, & Harris (2017)

Finally, according to studies, there are many challenges and difficulties in the processes of developing and measuring entrepreneurial skills among students within universities. This appears in many indicators, including: lack of integration between academic courses within a program, lack of integration between educational programs within a college or university, traditional teaching practices, lack of studying student needs in relation to developing entrepreneurial skills, difficulty in activating student activities, scarcity of opportunities for voluntary work inside and outside the university, and difficulties in communicating with society (Fargion et al., 2011; Ali, 2017; Moore, 2018).

## 2. Literature Review

Entrepreneurship is characterized by a set of skills that young people should acquire. These skills are demonstrated by their capacity to turn concepts into actionable events and to take use of environmental factors so as to provide a range of employment options. The ability to initiate new projects and oversee them with a high level of planning and organization is also indicative of creativity and productivity. Additionally, entrepreneurship urges students to never give up exploring new ideas, whether they be traditional or technical initiatives.

Furthermore, entrepreneurship is linked to a set of skills that can be categorized into several areas. These include (1) basic skills, such as understanding the environment and economic system, as well as determining career options, (2) entrepreneurship competencies and problem-solving abilities relevant to employers' needs, (3) creative applications of training in competencies and starting a new business, (4) business establishment and policy development, and (5) business growth through expansion and problem-solving. Besides (Leitch et al., 2005) categorized entrepreneurship skills into three main areas: technological skills, comprising communication and management of technical/technological businesses; building relationships and networks; organizational ability; and teamwork; business management skills, encompassing goal-setting, planning, decision-making, accounting, control, negotiation, and marketing; and personal skills comprising control, commitment, risk-taking leadership, creativity. The current study focuses on the following skills in developing entrepreneurship:

- Personal skills: ambition, innovation, responsibility, risk-taking, perseverance, cooperation, self-confidence, and acceptance of ambiguity.
- Administrative skills: planning, team management, time management, decision making, quality control, communication and networking.
- Business skills: negotiation, persuasion, marketing, accounting, and financial management.

The process of learning entrepreneurship skills aims to develop students' abilities to assume professional, social, and academic responsibilities. Correspondingly, it enhances students with the knowledge, skills, attitudes and values necessary to achieve their professional goals in life. Similarly, entrepreneurship skills prepare students to initiate their own practical

projects. These skills cultivate entrepreneurial behaviors in students, including the spirit of adventure, independence, self-directed learning, continuous professional development, effective leadership, initiative, research and learning skills, and the ability to think flexibly. Hence, Entrepreneurship education aims to foster a strong network of entrepreneurs who contribute to the advancement of society. Moreover, entrepreneurship education contributes to the development of administrative skills among students by enhancing their abilities in planning, organizing, tracking progress, evaluating outcomes, making informed decisions, being responsive to problems, accurately identifying them, and proposing alternative solutions within various contexts. In the twenty-first century, entrepreneurship enables students' participation in digital tasks and activities through technical projects and the integration of ICT into their education."

The importance of entrepreneurship skills lies in training students to make professional decisions, helping them to explore multiple career options and developing the skills needed to create their own projects. These skills can increase students' confidence levels, foster creativity, and develop problem-solving skills. Students are trained in the competencies needed for business management, including teamwork, team leadership, crisis management, initiative-taking, and calculated risk assessment. Teaching entrepreneurship skills enables a functional learning process with a leader and creates engaging learning environments that appeal to students.

Entrepreneurship skills education programs are based on five crucial elements: the environment, economy, entrepreneurs, enterprise, and enterplexity. To develop entrepreneurship skills, it is essential to establish effective programs that teach entrepreneurship skills to young people within universities. Additionally, faculty members must be trained to integrate entrepreneurship skills into learning outcomes and educational experiences in academic courses. Furthermore, there is a need for collaboration between educational institutions and community organizations to identify labor market needs and feasible project opportunities.

In addition to assessing the educational programs, university faculty members must promote entrepreneurial behavior among students. This can be achieved through the processes of teaching planning, implementation, and evaluation. Faculty members must formulate educational objectives, learning outcomes, and activities related to developing entrepreneurship skills. They must also rely on teaching strategies based on participatory, interactive, and discussion-based approaches, focusing on problem-solving, experimentation, and research-oriented projects. It is also essential to continue evaluating entrepreneurial behavior among university students through familiar and unfamiliar real-life scenarios (Bauman & Lucy, 2021)."

## 2.1 Research Questions

Given the significance of developing and assessing entrepreneurial skills among youth (university students), this study aimed to address the following research questions:

- What is the level of inclusion of youth in high school curricula from the faculty members' perspective in Saudi universities?
- What are the teaching practices of education programs in light of developing entrepreneurial skills among youth, as perceived by faculty members in Saudi universities?

## 2.2 Research Objectives

- Identifying appropriate Entrepreneurial Skills for Youth at Saudi universities.
- Assessing the level of inclusion of Entrepreneurial Skills in educational Programs in the Kingdom of Saudi Arabia.
- Assessing the levels of teaching practices, activities, assessment tools, related to developing entrepreneurial Skills for Youth at Saudi universities.
- Investigating the differences in the levels of inclusion of entrepreneurial skills in the Educational Programs and teaching practices among faculty members' perspectives in Saudi universities, considering factors such as university, faculty, job, specialization, educational qualification, and number of years of experience

## 2.3 Significance of the Study

- Program planners are provided with a list of entrepreneurial Skills to be included in the components of the scientific content and educational activities within universities programs and courses.
- Determine the teaching strategies, activities, tools, and references related to developing and measuring entrepreneurial skills among Youth in Saudi universities.
- providing a suggested scenario for developing teaching practices among the faculty Members, which is reflected in the development and measurement of entrepreneurial skills for Youth in Saudi universities.

Linking the study to Saudi Arabia Vision 2030, highlighting the necessity of developing entrepreneurial skills for youth in Saudi universities.

## 3. Methods

The current study employs a descriptive-analytical approach to achieve its objectives. A review of the literature and previous studies were conducted to identify a list of entrepreneurial skills. This list is expected to be included in the

education programs of universities in the Kingdom of Saudi Arabia. Additionally, the study depends on content analysis to examine the level of inclusion of entrepreneurial skills in the elements of educational programs. Moreover, the study assesses teaching practices among faculty members' perspectives in Saudi universities, with a focus on their practices related to developing and measuring entrepreneurial skills.

### 3.1 Participants

The Kingdom of Saudi Arabia includes 30 public universities. The University of Tabuk is an independent university with 18 Colleges. These Colleges are distributed over the Tabuk city, and the governorates belonging to the Tabuk region. and many study programs. The University of Tabuk consisted of 1997 faculty members, and it includes 29407 students. This sample of this study consisted of (N = 241) members from the University of Tabuk. The study was implemented in Tabuk University of the Tabuk region in the Kingdom of Saudi Arabia. Table (1) shows that the current study's sample was selected randomly. The sample of the current study represents the original population of the study according to many variables. The study sample is described in Table 1.

The Kingdom of Saudi Arabia is home to 30 public universities, with the University of Tabuk being an independent institution comprising 18 colleges. These colleges are situated across the Tabuk city and the governorates within the Tabuk region, offering a diverse range of study programs. The University of Tabuk has a total of 1997 faculty members and approximately 29,407 students. The sample for this study consisted of 241 faculty members from the University of Tabuk. The study was conducted at the University of Tabuk, located in the Tabuk region of the Kingdom of Saudi Arabia. Table 1 illustrates that the current study sample was selected randomly. The sample represents the original population of the study according to various variables, as described in Table 1.

**Table 1. Description of the study sample.**

Specialization		Title of job		Courses		years of experience	
	No.	Type	No.	Type	No.	Type	No.
Scientific	107	Full Prof.	56	Undergraduate	73	Less than 10	46
social science	84	Associate Prof.	89	Postgraduate	40	10-15	82
literary	50	Assistant Prof.	96	All	128	More than 15	113
Total = 241							

Table illustrates that the current study sample was selected randomly. The sample represents the original population of the study according to various variables, as described in Table 1.

### 3.2 Material and Procedures

A comprehensive analysis of the literature and previous studies on the components of entrepreneurial skills was conducted to determine the study variables and prepare a list of entrepreneurial skills (ES) that includes programs, teaching practices, and their indicators. A list of entrepreneurial skills was used to develop a questionnaire for the study sample. The questionnaire was collected from 241 faculty members in the sample. The questionnaire comprised four main strands: (i) planning learning programs or courses; (ii) teaching for developing entrepreneurial skills; (iii) student activities; and (iv) assessing entrepreneurial skills. Each strand included the standards and indicators. These four strands were used with the entrepreneurship skills identified in this study.

Table 2 presents a description of the questionnaire:

**Table 2. Description of questionnaire.**

No.	Strands	Standards	Numbers of indicators
1	Planning learning programs or courses (P)	Planning of developing Personal skills (P1)	8
		Planning of developing administrative skills(P2)	6
		Planning of developing business skills(P3)	5
2	Teaching for developing entrepreneurial skills(T)	Teaching for developing Personal skills(T1)	8
		Teaching for developing administrative skills(T2)	6
		Teaching for developing business skills(T3)	5
3	Students' activities(S)	Design activities for developing Personal skills(S1)	8
		Design activities for developing administrative skills(S2)	6
		Design activities for developing business skills(S3)	5
4	Assessing entrepreneurial	Assessing Personal skills(A1)	8

	skills(A)	Assessing administrative skills(A2)	6
		Assessing business skills(A3)	5
Total	4	12	76

Table 2 presents a description of the questionnaire list of entrepreneurial skills (ES) , and shows that each main strand includes 3 criteria, each one related to a main entrepreneurship skill.

Each main criterion is linked to a sub-skill set in entrepreneurship. For example, the first field measures the extent to which the main skills (the three criteria) and associated sub-skills (indicators) are included in practices of planning programs and courses. It is noted that the sub-skills (indicators) are constant across the four main strands or areas, as the current study aims to assess them in each area separately. The current study relies on participants' responses on a 5-point Likert scale, which includes five levels of response: strongly disagree (1.0-1.8), disagree (1.8-2.6), somewhat agree (2.6-3.4), agree (3.4-4.2), and strongly agree (4.2-5.0).

To prepare the tool for this study, researchers communicated electronically with participants to clarify the purpose of the study and ensure they understood how to respond to items on the questionnaire. Additionally, participants were able to comprehend the technique for responding to items and received clear instructions for completing the questionnaire. The researchers discussed and wrote items related to sets of indicators, with each item associated with a sub-skill (indicator) showing how much it is included in program and course planning, teaching practices, student activities, and evaluation processes. Moreover, the questionnaire was applied electronically during the first semester of 2021/2022, and data from this study were prepared for statistical processing.

#### 4. Results

To answer to the question , "To what extent are entrepreneurship skills included in the objectives and procedures of program and course planning for the development of these skills among youth of Saudi universities?" The main strands, standards, and indicators included in the entrepreneurship skills measurement instruments were described using the calculated averages and standard deviations in the following order, based on the Likert scale: very large (4.2–5.0), large (3.4–4.2), medium (2.6–3.4), weak (1.8–2.6), and very weak (1.0–1.8).The following tables show the main results of applying the questionnaire.

**Table 3. Standards and indicators of the strand: Planning learning programs or courses**

Standards	Indicators	Mean	Standard deviation
Planning of developing Personal skills (P1)	Introduce the ambition concept and its importance to the youth and community	3.07	0.93
	Incorporate innovation as a primary goal in the program or course	2.84	0.87
	Provide educational experiences that foster responsibility skills, such as taking ownership of tasks and setting personal goals.	3.47	1.29
	Develop risk-taking skills through experiential learning activities and problem-solving exercises.	2.49	0.85
	Emphasize the value of perseverance in affective learning outcomes, such as resilience and determination.	2.97	0.93
	Formulate educational goals and experiences related to cooperation.	3.55	1.34
	Formulate educational goals and experiences related to the acceptance of ambiguity.	2.99	0.96
	Formulate many educational activities to develop self-confidence skills.	3.18	0.88
	Total of standard: Planning of developing Personal skills	3.07	0.81
Planning of	Encompass educational experiences related to developing planning	3.62	1.38

Standards	Indicators	Mean	Standard deviation
developing administrative skills (P2)	skills.		
	Encompass educational experiences related to developing team managementskills.	3.35	1.06
	Encompass educational experiences related to developing timemanagementskills.	3.26	1.15
	Formulate educational goals and experiences related to decision making skills.	2.43	0.89
	Encompass educational goals and experiences related to thequality acceptance of performance skills.	2.66	0.96
	Implement a range of educational activities to develop communication and social skills.	3.61	1.41
	Total of standard: Planning of developing administrative skills	3.16	0.88
Planning of developing business skills (P3)	Include educational experiences related to developing negotiation skills.	2.46	0.87
	Encompass educational experiences related to developing Persuasion skills.	2.54	0.88
	Formulate educational goals and experiences related to marketing skills.	2.67	0.94
	Encompass educational goals and experiences that emphasize accounting skills.	2.77	0.96
	Implement a range of educational activities to develop essential financial skills	2.33	0.85
	Total of standard: Planning of developing business skills.	2.55	0.84

Table 3 shows the most important results of applying the questionnaire, which include:

The first standard, “*planning for the development of skills*”, had a mean score that was moderate in magnitude, as Table 3 demonstrates. While scores for other indicators were moderate, the indicator that relates to creating cooperative learning experiences and educational goals received a big score. It also shows that the second standard, “*planning for the development of administrative abilities*”, had a moderate mean score. This standard had a range of scores for small, moderate, and high magnitudes. Furthermore, it shows that, based on the study’s sample responses, the indication “*Formulate educational goals and experiences connected to decision making abilities*” obtained the lowest score, indicating a lack of practices relevant to this indicator.

Table 3 reveals that the mean score for the third standard, planning of developing business skills, was small, with indicator scores varying between small and moderate magnitudes. Furthermore, it shows that the indicator Include many educational activities to develop financial skills received a small score. This suggests a need to revisit university curricula, programs, and courses to ensure they align with the requirements of entrepreneurship skills. In particular, curricula should prioritize developing planning skills among students, such as strategic planning, risk management, and goal-setting.

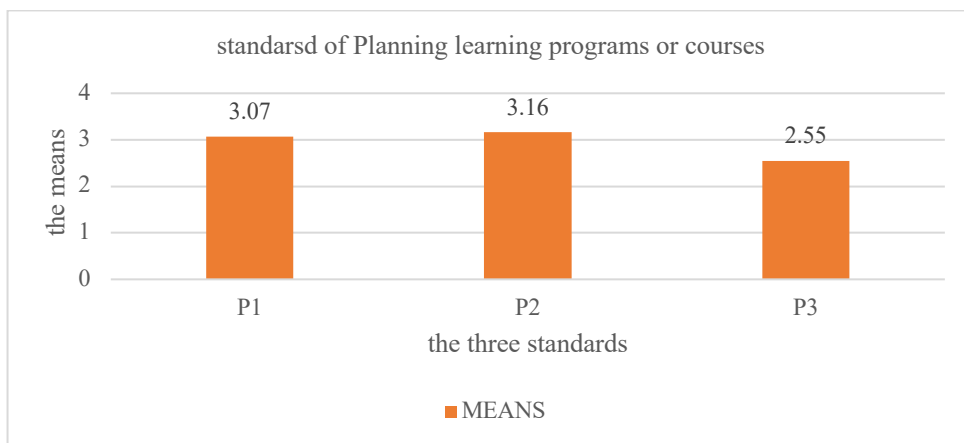


Fig. 1 compares the means of the standards within the strand: Planning learning programs or courses.

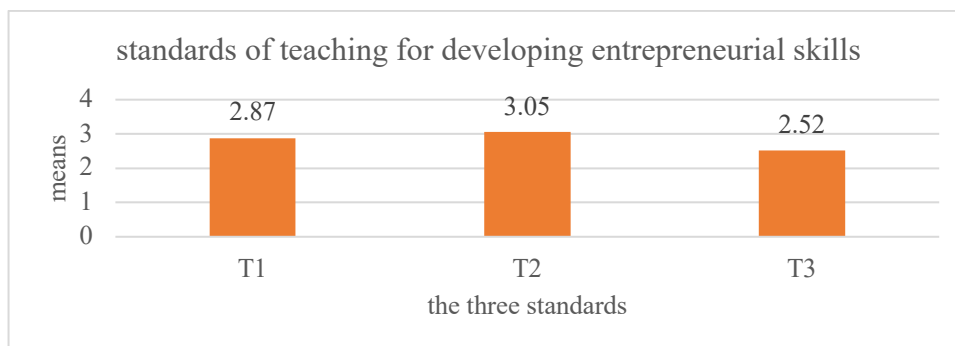
**Table 4. Standards and indicators of the strand: teaching for developing entrepreneurial skills.**

Standards	Indicators	Mean	Standard deviation
Teaching for developing Personal skills.	Designing activities and experiences to Introducing and develop the ambition's skills.	3.17	0.98
	Designing open educational situations to develop innovation skills	2.84	0.91
	Motivating students to practice taking responsibility during collaborative tasks.	3.59	1.35
	Training students on the skill of calculated risk-taking in practical situations	2.44	0.84
	Training students in the skills of perseverance in clear thinking and learning processes.	2.36	0.87
	Emphasizing the importance of cooperation work in completing tasks with a high degree of accuracy.	3.40	1.04
	Training students to work and learn in some styles and forms that require ambiguity.	2.37	0.94
	Providing continuous reinforcement and support to build self-confidence among students.	2.77	0.92
	Total of standard: Teaching for developing Personal skills.	2.87	0.83
Teaching for developing administrative skills.	Training students on the planning skills in practical situations.	3.28	1.12
	Promoting collaborative investigative activities to train students in team management skills.	3.47	1.24
	Training students on effective time management skills in real situations	2.96	1.03
	Designing open educational activities to enable students to develop decision-making and justification skills.	2.85	0.95
	Incorporating the educational goals and experiences related to acceptance of quality of performance skills.	2.30	0.88
	Employing discussions and network discussions to develop communication and connection skills.	3.41	1.14
	Total of standard: Teaching for developing administrative skills.	3.05	0.82
Teaching for developing business skills.	Training students to be more adept at negotiating skills in authentic educational situations.	2.54	1.03
	Training students to be more adept at Persuasion skills in authentic educational situations.	2.49	0.97
	Designing educational experiences and activities to develop marketing skills among students.	2.63	0.90
	Designing educational experiences and activities to develop accounting skills among students.	2.56	0.88
	Training students to be more adept at financial skills in authentic educational situations.	2.37	0.87
	Total of standard: Teaching for developing business skills.	2.52	0.81

Table 4 shows the standards and indicators of the strand: teaching for developing entrepreneurial skills And Table 4 reveals that the mean score of the fourth standard, "Teaching for developing Personal skills", was moderate,

with indicator scores varying among small, moderate, and large magnitudes. The score for "Training students in the skills of perseverance in clear thinking and learning processes" was small and ranked last on the standard level. The mean score for the fifth standard, "Teaching for developing administrative skills", was moderate in magnitude, with indicators varying between large, moderate, and small magnitudes. The indicator "Encompass educational goals and experiences related to acceptance of quality of performance skills" scored low and ranked .Furthermore , also shows that the mean score for the sixth standard, "Teaching for developing administrative skills", was small in magnitude, with indicators varying between moderate and small magnitudes. The indicator training students to be more adept at finance skills in authentic educational situations scored low and ranked last.

These findings indicate a shortcoming in "preparing educational activities to build students' skills in entrepreneurial skills. The current teaching strategies do not promote the development of entrepreneurial skills among university students. Therefore, it is essential to review curricula, programs, and teaching strategies to better prepare students for entrepreneurial activities. Specifically, curricula should focus on training students to participate positively in activities related to entrepreneurial skills (Personal skills, administrative skills, and business skills) and continuously practice these skills.



**Fig. 2.** compares the means of the standards within the strand: Teaching for developing entrepreneurial skills.

**Table 5. Standards and indicators of the strand: student activities.**

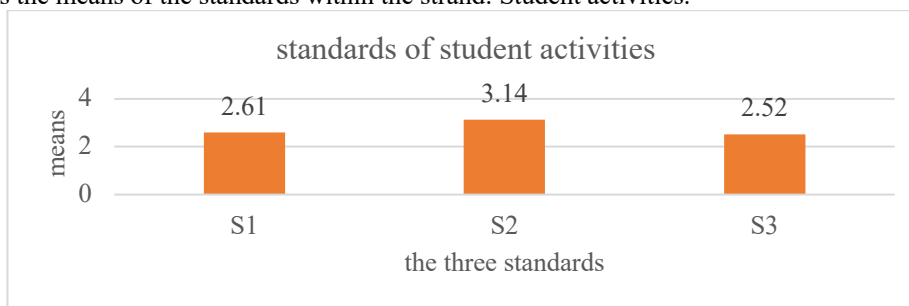
Standards	Indicators	Mean	Standard deviation
Design activates for developing Personal skills.	Employing students' ambition to meet their needs and inclinations in accordance with their true abilities.	2.64	0.96
	Designing enrichment programs and free activities to build talent, excellence, and develop innovation skills.	2.53	0.97
	Training students to self-evaluate and plan their own learning programs to support their responsibility for their learning.	2.87	1.08
	Training students to choose from various alternatives according to calculated risk-taking skills.	2.30	0.88
	Designing some student activities, including (thinking like a scientist), to train students to persevere in monitoring problems and solving them through alternatives.	2.37	0.94
	Emphasizing the importance of cooperation work in completing tasks with a high degree of accuracy.	2.96	1.12
	Designing educational tasks, including research projects, to train students to work with ambiguity to solve the unfamiliar.	2.49	0.86
	Motivating students to participate in various competitions and student activities to build self-confidence.	2.75	1.04
	Total of standard: Designing activities for developing Personal skills.	2.61	0.82
Design activates	Training students on the planning skills in practical situations.	3.44	1.35



Standards	Indicators	Mean	Standard deviation
for developing administrative skills.	Promoting collaborative investigative activities to train students in team management skills.	3.51	1.26
	Training students on effective time management skills in real situations	3.17	1.15
	Designing open educational activities to enable students to develop decision-making and justification skills.	2.93	1.06
	Encompassing educational goals and experiences related to acceptance of quality of performance skills.	2.48	0.94
	Employing discussions and network discussions to develop communication and communication skills.	3.29	1.27
	Total of standard: Design activates for developing administrative skills.	3.14	0.91
Design activates for developing business skills	Training students to be more adept at negotiating skills in authentic educational situations.	2.56	0.98
	Training students to be more adept at Persuasion skills in authentic educational situations.	2.46	0.94
	Designing educational experiences and activities to develop marketing skills among students.	2.57	0.96
	Designing educational experiences and activities to develop accounting skills among students.	2.67	0.88
	Training students to be more adept at financial skills in authentic educational situations.	2.35	0.87
	Total of standard: Design activities for developing business skills.	2.52	0.84

Table 5 shows Standards and indicators of the strand: student activities which include: reveals that the mean score of the seventh standard, "Designing activities for developing Personal skills", was moderate, with indicator scores varying between moderate and small magnitudes. The score for "Training students to choose from various alternatives according to calculated risk-taking skills" was low and ranked last. The mean score for the eighth standard, "Designing activities for developing administrative skills", was moderate in magnitude, with indicators varying between moderate and small magnitudes. The indicator "Encompassing educational goals and experiences related to acceptance of quality of performance "scored low and ranked last. Table 5 also shows that the mean score for the ninth standard, Design activities for developing business skills, was moderate in magnitude, with indicators varying between moderate and small magnitudes. The indicator training students to be more adept at finance skills in authentic educational situations scored low and ranked last. These results indicate that student activities at the university are not fully meeting students' needs in developing entrepreneurship skills. To address this issue, it may be necessary to revise the design of student activities to better incorporate entrepreneurship skills development.

Figure 3 compares the means of the standards within the strand: Student activities.



**Fig. 3.** compares the means of the standards within the strand: Student activities.

**Table 6. Standards and indicators of the strand: assessing entrepreneurial skills.**

Standards	Indicators	Mean	Standard deviation
assessing Personal skills	Employing students' ambition to meet their needs and inclinations in accordance with their true abilities.	2.77	1.03
	Designing enrichment programs and free activities to build talent, excellence, and develop innovations skills.	2.35	0.99
	Training students to self-evaluate and plan their own learning programs to support their responsibility for their learning.	2.63	1.15
	Training students to choose from various alternatives according to calculated risk-taking skills.	2.31	0.94
	Designing some student activities, including (thinking like a scientist), to train students to persevere in monitoring problems and solving them through alternatives.	2.29	0.88
	Emphasizing the importance of cooperation work in completing tasks with a high degree of accuracy.	2.74	1.32
	Designing educational tasks, including research projects, to train students to work with ambiguity to solve the unfamiliar.	2.68	1.26
	Motivating students to participate in various competitions and student activities to build self-confidence.	2.80	1.16
	Total of standard: Assessing Personal skills.	2.57	0.85
assessing administrative skills	Training students on the planning skills in practical situations.	2.94	1.02
	Promoting collaborative investigative activities to train students in team management skills.	2.64	0.96
	Training students on effective time management skills in real situations	2.72	1.08
	Designing open educational activities to enable students to develop decision-making and justification skills.	2.66	1.13
	Encompassing the educational goals and experiences related to acceptance of quality of performance skills.	2.27	0.87
	Employing discussions and network discussions to develop communication and connection skills.	2.71	0.93
	Total of standard: Assessing administrative skills.	2.66	0.82
assessing business skills	Training students to be more adept at negotiating skills in authentic educational situations.	2.33	
	Training students to be more adept at Persuasion skills in authentic educational situations.	2.28	0.95
	Designing educational experiences and activities to develop marketing skills among students.	2.71	0.99
	Designing educational experiences and activities to develop accounting skills among students.	2.57	0.87
	Training students to be more adept at financeskillsin authentic educational situations.	2.43	0.86

Standards	Indicators	Mean	Standard deviation
	Total of standard: Assessing business skills.	2.46	0.81

Table 6 shows Standards and indicators of the strand: assessing entrepreneurial skills

Table 6 shows that the mean score for personal skills (Tenth standard) was low, with indicator scores ranging from moderate to low in magnitude. The indicator “Designing student activities, including ‘thinking like a scientist’, training students to persevere in monitoring problems and solving them through alternatives” had the lowest score among the standards. The mean score for administrative skills (Eleventh standard) was moderate, with indicator scores varying in magnitude between moderate and small. The indicator “Encompassing educational goals and experiences related to acceptance of quality of performance skills” had the lowest score. The mean score for business skills (Twelfth standard) was low, with indicator scores ranging from moderate to small. The indicator “training students to be more adept at persuasion skills in authentic educational situations” also had a low score.

The results of this study indicate that the university’s evaluation and follow-up programs are weak and ineffective in developing and measuring students’ entrepreneurship skills. Moreover, the university’s assessment programs still rely on traditional methods and approaches.

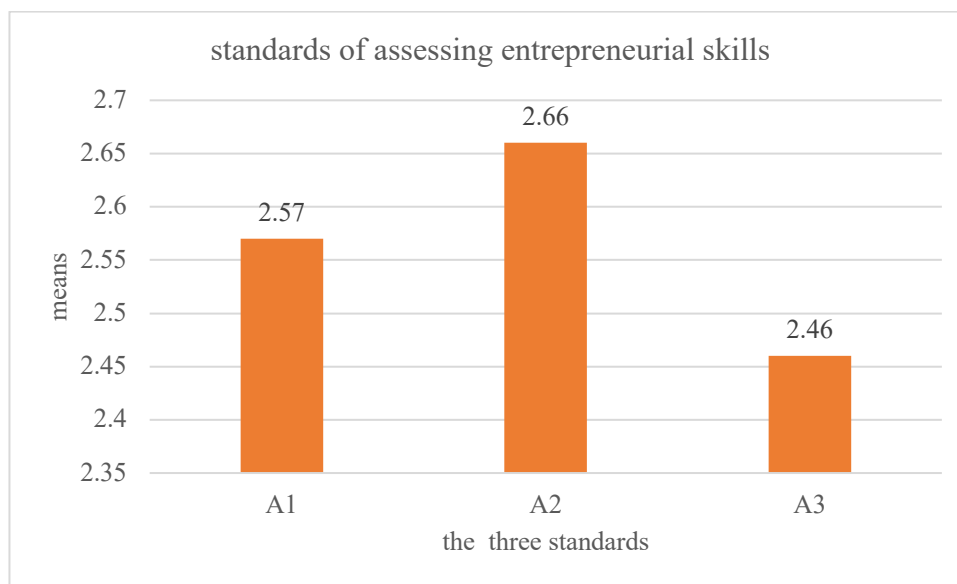


Fig. 4. compares the means of the standards for assessing entrepreneurial skills.

Table 7. Strands and standards of Entrepreneurial Skills.

No.	Strands	Standards	Mean	Standard deviation
1	Planning learning programs or courses	Planning of developing Personal skills (P1)	3.07	0.81
		Planning of developing administrative skills(P2)	3.16	0.88
		Planning of developing business skills(P3)	2.55	0.84
Total of the strand (1): Planning learning programs or courses (P)			2.93	0.78
2	Teaching for developing entrepreneurial skills	Teaching for developing Personal skills (T1)	2.87	0.83
		Teaching for developing administrative skills(T2)	3.05	0.82
		Teaching for developing business skills(T3)	2.52	0.81
Total of the strand (2): teaching for developing entrepreneurial skills (T)			2.81	0.77
3	Student's activities	Designing activities for developing Personal	2.61	0.82

No.	Strands	Standards	Mean	Standard deviation
		skills(S1)		
		Designing activities for developing administrative skills (S2)	3.14	0.91
		Designing activities for developing business skills (S3)	2.52	0.84
Total of the strand (3): student activities (S)			2.76	0.81
4	assessing entrepreneurial skills	Assessing Personal skills (A1)	2.57	0.85
		Assessing administrative skills (A2)	2.66	0.82
		Assessing business skills (A3)	2.46	0.81
Total of the strand (4): Assessing entrepreneurial skills (A)			2.56	0.75
Total of Entrepreneurial Skills			2.71	0.68

Table 7 shows Strands and standards of Entrepreneurial Skills.

Table (7) shows also that the mean scores of the strands and standards of Entrepreneurial Skills were generally moderate. Additionally, the values of the means of 4 strands varied between small or moderate. Table (7) also shows that the mean score of the strand (1): Planning learning programs or courses was large, while the scores of the strand (4): assessing entrepreneurial skills were low, with last ranked. Also, table (7) shows that the scores of most standards were moderate. The mean score of the standard *Design activates for developing administrative skills* was large, the mean score of the standard while assessing business skills was small, with the last ranked. The following figure (5) compares the means of the strands.

Table 6 reveals that the mean score of the tenth standard, assessing Personal skills, was small, with indicator scores varying between moderate and low magnitudes. The indicator designing some student activities, including thinking like a scientist, to train students to persevere in monitoring problems and solving them through alternatives scored low and ranked last among the standards. The mean score for the eleventh standard, assessing administrative skills, was moderate, with indicator scores varying in magnitude between moderate and small. The indicator Include educational goals and experiences related to acceptance of quality of performance skills ranked last with a low score.

The mean score for the twelfth standard, assessing business skills, was small, with indicator scores varying in magnitude between moderate and small. The indicator Training students to be more adept at Persuasion skills in authentic educational situations scored low and ranked last.

The results of this study indicate that the university's evaluation and follow-up programs are weak and difficult to employ in developing and measuring students' entrepreneurship skills. Moreover, the university's assessment programs still rely on traditional methods. To better develop entrepreneurship skills, assessment approaches should focus on allowing students to carry out real tasks, such as projects, assignments, presentations, etc.

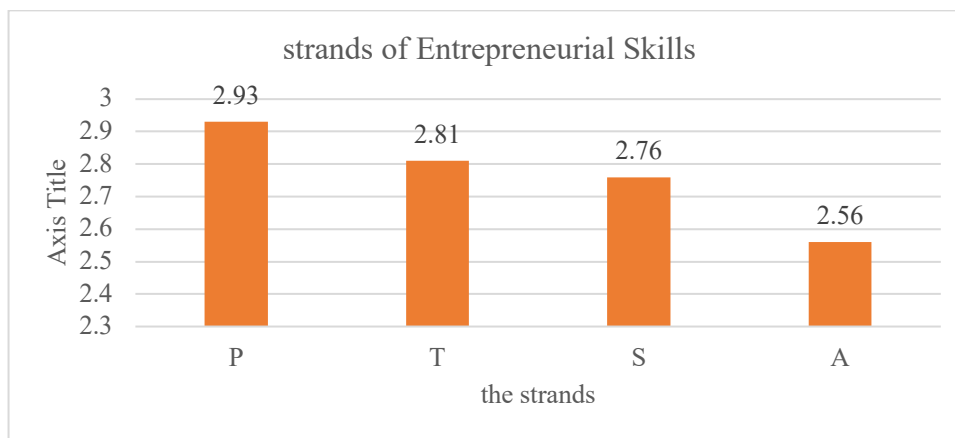


Fig.5. compares the means of the standards within the strand: Assessing entrepreneurial skills.

To answer the question “Are there differences among the respondents based on the Specialization, Title of job, Courses, and years of experience?” comparison among groups was done using one way ANOVA (Table 8).

To answer the question “Are there differences among the respondents based on specialization, job title, courses, and years of experience?”, we compared groups using one-way ANOVA (Table 8).

**Table 8. One way ANOVA of study variables.**

Variables	variance	Sum of Squares	df	Mean Square	F	Sig.
Specialization	Between Groups	.196	2	.098	.681	.507
	Within Groups	34.328	238	.144		
	Total	34.524	240			
Title of job	Between Groups	.012	2	.006	.042	.959
	Within Groups	34.512	238	.145		
	Total	34.524	240			
Courses	Between Groups	.196	2	.098	.681	.507
	Within Groups	34.328	238	.144		
	Total	34.524	240			
years of experience	Between Groups	.011	2	.006	.039	.962
	Within Groups	34.513	238	.145		
	Total	34.524	240			

Table 8 shows One way ANOVA of study variables.

Table 8 shows that there are no statistically significant differences between the study groups due to variables such as Specialization, Title of job, Courses, and years of experience. The findings indicate that the means were generally similar between groups for each variable, with no statistically significant differences.

The results of the current study also show great agreement among the study sample regarding the effectiveness of university programs in developing entrepreneurship skills among their students.

## 5. Discussion

Learning programs and teaching practices often neglect students’ activities at university, which are essential for building students’ abilities and entrepreneurship skills. This is consistent with previous studies that emphasize the importance of integrating entrepreneurship standards into educational objectives (Johansen & Schanke, 2013; Bista & Saleh, 2014; Krelová et al., 2015; Pratomo et al., 2021; Portuguese & Marcela, 2021). To address this issue, curricula and content should be designed to integrate entrepreneurship skills into educational objectives. Educational experiences should focus on standards and indicators of entrepreneurship skills. Faculty members should tailor their teaching practices to meet the interests, needs, and requirements of students to enhance these skills. It's essential to continuously measure entrepreneurship skills among university students and identify deficiencies that need to be addressed. Faculty members need to develop strategies for integrating these skills into learning and teaching processes. To achieve this, faculty members will need ongoing professional development to develop learning programs that incorporate digital tools and interactive teaching methods. They will also need training on how to use these tools effectively.

Overall, it’s crucial that educational activities at university prioritize the development of entrepreneurship skills among students by providing them with appropriate learning experiences and opportunities for growth.

## 6. Conclusion

An entrepreneurship skills standard is one of the contemporary and necessary core concepts and skills for Youth, especially in the 21st century. The university's program and curricula represent educational tools for building concepts and skills to promote entrepreneurship skills among students, especially at the university stage. Education Programs include objectives, content, learning and instructional activities, teaching strategies and practices, students' activities and assessment methods. The results of the study indicated that there are shortcomings in Education Programs in terms of developing standards and indicators of entrepreneurship skills. Therefore, the current study recommends integrating strands, standards, and indicators of entrepreneurship skills according to a multidisciplinary approach, across Education Programs. Education Programs must include entrepreneurship skills as an integrative concept and skills. In addition, the training of faculty Members on learning and teaching strategies and practices is very important to link scientific content and life situations, design student-centered real educational experiences, and enhance entrepreneurship skills development practices. The study also highlights the constant need to measure the entrepreneurship skills among students using appropriate measuring tools.

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