Creative techniques to develop the entrepreneurship's skills and performance: case of Abu tlemcen's entrepreneurship house

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Abstract:

The objective of this study is to examine the impact of entrepreneurship's creative techniques training on the development and enhancement of entrepreneurial skills that may be essential to improve ventures effectiveness. We conducted a selective exploratory survey with 80 futur entrepreneurs. We strived towards a deeper understanding of the programs and tried to identify a link between Creative Techniques and entrepreneurial activities.

SPSS was used to analyze the data gathered. Findings from the study reveal that the behavioral component of the students' attitude toward entrepreneurship's creative techniques training was positive. The data demonstrates that the entrepreneurship's creative techniques training appear to create openness, confidence, and trust among the participants in this study.

Keywords: entrepreneurship; creative techniques; entrepreneur; skills; performance.
Jel Classification Codes: I23, L26, O32

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1. INTRODUCTION

Creativity is the ability to make or otherwise bring into existences something new, whether a new solution to a problem, a new method or device, or a new artistic object or form. Scientists and artists alike have studied creativity, and some of the experts have discovered some very useful ways to help you become more creative. These methods are good for any entrepreneur, but particularly for those who code, write, design, or create for a living.

In recognition of this, Higher Education Institutions (HEI) have been supported through government policy to provide training programs for universities and centers of training aimed at developing a higher level of skills that will support small business growth and futur entrepreneurs. Many eminent scholars recommended applied teaching methodological approach for the entrepreneurship training.

Boosting creativity is justified in that creative activity is educated, even if some native elements have their own importance in the creative process. If we start from the idea that most barriers to creative thinking are all human creations, tributaries of the left hemisphere, will have to find alternative responses to stimulation, shaping and maintaining the creative process and even create organizational culture conducive to the creative process.

1.1. Problematic:

Being creative can seem like an insurmountable task, and often it is assumed that people are either born creative or not. However, it's completely possible to develop creativity and a creative way of thinking. Everyone has potential to be creative; it just needs to be harnessed, nurtured and strengthened. One way to do is to foster new neural connections by learning new hobbies and practicing challenges. Learning a new art form has been shown to be one of the best methods to develop creative skills for problem solving, something that is of immense value in running a business.

This paper explores entrepreneurial approaches and discusses the creative methods and techniques used for teaching entrepreneurship within the context of Design and Creative Technologies.

Here we must be asked the following question: **what is the importance of using the creative techniques by the institution in directing the skills of futur entrepreneurs and improving their performance?**

In order to understand this main question, the following sub-questions have been asked:

- What is the importance of the characteristics of the entrepreneur's participant culture?
- What is the modern role of entrepreneurial training?
- What are the goals achieved by the creative techniques models?

1.2. Study hypothesis:

This study is based on a basic premise that the mastery of using creative techniques is an imperative necessity for the futur entrepreneurs to keep pace with the economic developments taking place and achieve effective skills and performance.

1.3. Research Objectives:

The objective of this study is to understand the relationship between creativity and entrepreneurship, the influence of creative techniques and the entrepreneurship's skills and performance; we conducted a selective exploratory survey with 65 entrepreneurs. We strived towards a deeper understanding of the programs and tried to identify a link between Creative Techniques and entrepreneurial activities.

In addition, we studied whether Creative Techniques methods are used during entrepreneurial activities and whether creative Techniques can influence the creative process. Furthermore, we sought to gain insights about the ideation process of entrepreneurs and how an idea is shaped into a business model. This includes insights about how many people were involved in the idea finding process and to what extend creative methods that used.

2. Literature review

2.1. Concept of Entrepreneurship:

Entrepreneurship can be currently regarded as part of a strategy to boost the economy. It can be undertake as a challenging task, either internally within organizations, either externally, by the creation of new businesses that are sustainable in a market and in a complex economic environment. Examples are studies on the importance of entrepreneurship in transition economies (McMillan, J. and Woodruff, C, 2002).

The origin of the word 'entrepreneurship' is 'rooted in the Latin language, from the words prehendere and apprehension. Entrepreneurship can be understood as an individual or collective system and internal or external to the organizational structure, developing something new, from conception of ideas to the creation of a business.

The concept of applied entrepreneurship (Miller, D., & Friesen, P. 1983) argues that an entrepreneurial firm focuses on innovation, is open to risk and proactive in relation to its competitors. Entrepreneurship has grown as a concept, and in the level of importance placed on the development and sustainability of the economy.

2.1.1 Entrepreneurship skills:

The skills that are required by entrepreneurs fall into three distinct categories: technical skills, business management skills, and personal entrepreneurial skills. Technical skills include written and oral communication, technical management, and organizing skills. Business management skills are managerial skills like planning, decision-making marketing and accounting. Entrepreneurs also should have personal skills such as innovation, risk taking, and persistence (Henry et.al, 2005).

Students can learn these skills through effective entrepreneurship education to become successful entrepreneurs; Rae defines the term "entrepreneurial learning as learning to recognize and act on opportunities through initiating , organizing , and managing ventures in social and behavioral ways" (Rae, 2006, P. 16).

Although there seems to be wide variations in the personalities and characteristics of each kind of entrepreneur, the willingness to undertake risk and the possession of entrepreneurial skill sets are common themes prevalent in every style.

Understanding the role of entrepreneurial education on the creation of this willingness to undertake risk and the development of an entrepreneurial skill set is the focus of this study. It is against this background that this research is set. More explicitly, we deal with the question.

Modern accounting education offers students an extensive battery of entrepreneurial skills (Henry and Treanor, 2012) engendering, among students, a positive entrepreneurial attitude with respect to launching new business ventures in conformity with what Hynes and Richardson (2007) observed about the intertwining of learned vocational skills supportive of Self-employment with encouragement of new venture formation on the part of students.

2.1.2 Entrepreneurship performance:

The performance requires objectivity to make the decision for specifications or goals (Dransfield, 2000). Entrepreneurial Performance is the individual's ability to be effective in many careers help to achieve better outcomes in negotiations to obtain company success. Entrepreneurial performance is to promote primary company concepts, developing new products, identifying market opportunities, make a modern environment, building healthy investor relationships, and also ready to react upon amazing market patterns.

Taylor stated that creative performance must show a certain meaning economic, social, cultural, scientific, technical, etc., value that is recognized and the results of creative activity must be made consistent intelligible.

Entrepreneurship can serve as a career path diverging from employment if prior skill-sets and performance in the area of self-employment have been inculcated (Hattab, 2014). In actuality, equipping accounting students to be self-employed is one of the effective solutions addressing the surfeit of graduates with accounting majors given that the labor market in most Arab economies cannot absorb them purely in the capacity of professional accountants.

2.2. Creative techniques:

In today's ever-growing and changing world, being able to think creatively and innovatively are essential skills. It can sometimes be challenging to step back and reflect in an environment, which is fast paced or when you are required to assimilate large amounts of information. Making sense of or communicating new ideas in an innovative and engaging way, approaching problems from fresh angles, and producing novel solutions are all traits, which are highly sought after by employers.

Creativity techniques are methods that encourage creative actions, whether in the arts or sciences. They focus on a variety of aspects of creativity, including techniques for idea generation and divergent thinking, methods of re-framing problems, changes in the affective

environment and so on. They can be used as part of problem solving, artistic expression, or therapy.

Some techniques require groups of two or more people while other techniques can be accomplished alone. These methods include word games, written exercises and different types of improvisation, or algorithms for approaching problems. Aleatory techniques exploiting randomness are also common.

2.2.1. Creativity:

"*Organizations can create a climate for creativity by considering the people, the process and the structure of the organization*", (Proctor , 2002).

Creativity is the ability or capacity to produce something new and valuable" according to others it is a process through which the new product (Rosca, 1981). Being creative means seeing the same thing but to think of something different. As a particularly complex mental formation, creativity is characterized by a multitude of ways: productivity, energy-efficient on, value, ingenuity, novelty, originality.

According to Boden (1998), there are three main types of creativity, involving different ways of generating the novel ideas:

a) The "combinational" creativity that involves new combinations of familiar ideas.

b) The "exploratory" creativity that involves the generation of new ideas by the exploration of structured concepts.

c) The "transformational" creativity that involves the transformation of some dimension of the structure, so that new structures can be generated.

2.2.2. Techniques:

The etymological root of the words technique and technical is the same, from the Greek technikos: "skillful in an art." A typical dictionary definition1 of technique includes the following:

1. The manner in which technical details are treated… or basic physical movements are used…

2. Also the ability to treat such details or use such movements: a) A body of technical methods <as in a craft or scientific research> b) a method of accomplishing a desired aim.

Thus, in contrast to the word technology which implies systematic treatment (i.e., from Greek technologia: "systematic treatment of an art"), technique signifies manners, ways, and capabilities involved in implementing systematic technical knowledge. Thus in a general sense, technique can be any manner in which basic physical movements are used, and is sometimes associated with non-scientific activities (e.g., dance technique, flower arranging technique).

In general then, we can think of technique as a method or style of implementing systematic technological knowledge. This general definition of technique includes cultural behaviors as well as human interactions with tools and products associated with human arts, crafts, and skills.

For (Couger 1995), techniques can be classified as analytical or intuitive. Analytical techniques generate logical patterns of thinking that tend to follow a linear pattern or sequence of steps. These techniques take advantage of different ways of organizing information known to approach problems from new viewpoints, by means of a linear pattern or a sequence of steps. Intuitive techniques rely on a single image or symbol to provide a one-time response and jump-start solutions. In general, they skip steps of a sequence.

2.3. The adequation between creative techniques and entrepreneurship's skills and performance:

Creativity can be defined as 'all the ways of thinking that lead to something new and useful for the thinker'. A creativity technique should help generate new ideas.

Creativity tools can:

> Come up with new ideas;

> Break through fixed ways of thinking;

> 'Think out of the box' - thinking beyond current solutions;

> Build upon each other's ideas; and Develop new inspiring and surprising ideas.

To understand how the techniques work and how they can contribute to the product development process it is necessary to put them into practice.

Table 1. Most cited creativity techniques.

Creativity technique	Author	Number of citations
Storyboarding	Vance (1982)	**2**
Morphological Analysis	Zwicky (1969)	**3**
Lateral Thinking	De Bono (1970)	**4**
TRIZ	Altshuller (1984)	**5**
Six Thinking Hats	De Bono (1970)	**5**
Force field analysis	Lewin (1947)	**5**
Synectics	Gordon (1961)	**13**
Brainstorming	Osborn (1963)	**23**
Brainwriting	Rohrbach (1969)	**28**

Source: Adapted from Puccio, Murdock and Mance (2005).

As for the classification of creativity techniques (Roozenburg and Eekeles 1995) and (Schlicksupp 1989), propose their stratification into two types: associative and provocative. The techniques of provocation are based on the works developed by (De Bono 1970), and are widely used to foster creativity. They differ from associative techniques, since they seek to break with the preconceived elements, while associative techniques seek in the recombination of elements to generate new ideas. To understand the use of creativity techniques it is important to consider the cognitive aspects involved in the application of these tools. For (Beaudot 1979), there are two fundamental concepts regarding the types of intelligence (in terms of creativity): that of convergent intelligence and that of divergent intelligence. The first is simply called intelligence and is measured with IQ tests (intelligence based on standards, such as what is taught in schools), while the second is what makes us think outside standardized ways, which makes us doubt that two and two are 4. The first allows us to

recognize the present; the second helps us to perceive the uncertain delimitations of the future.

Table 2. Analysis of creativity techniques

Creative techniques / Characteristics	Storyboarding Vance (1982)	Synetics Gordon (1961)	Morphological Analysis Zwicky (1969)	TRIZ Altshuller (1984)	Brainwriting Rohrbach (1969)	Six Thinking Hats De Bono (1970)	Lateral Thinking De Bono (1970)	Force Field Analysis Lewin (1947)	Brainstorming Osborn (1963)
Application	**Collective**	**Collective**	**Individual and Collective**	**Individual and Collective**	**Collective**	**Individual and Collective**	**Collective**	**Individual and Collective**	**Individual and Collective**
Type of Thinking	Divergent and Convergent	Divergent and Convergent	Convergent	Convergent	Divergent and Convergent	Divergent and Convergent	Divergent	Convergent	Divergent and Convergent
Average Session Time	30-45 min.	Until task completion	Until task completion	Until task completion	30 min.	60 min.	Until task completion	Until task completion	10-60 min.
Operating Criteria	Exploration and validation	Exploration, combination and validation	Exploration and transformation	Exploration and validation	Exploration	Exploration, combination, transformation and validation	Combination and transformation	Combination and transformation	Exploration and combination
Material Resources	Cards	No material	No material	No material	Blank sheets	6 colorful hats	No material	Blackboard	No material
Approach	Analytical Technique	Associative Technique	Analytical Technique	Analytical Technique	Associative Technique	Analytical Technique	Provocation Technique	Analytical Technique	Provocation Technique

Source: Creativity techniques: a systematic literature review; p98.

3. Research Method

This work focuses on highlighting the importance of mastering the use of creativity techniques to stimulate the culture of creative ideation in entrepreneurship. Ideation takes shape through a set of methods or techniques that boost creativity stimulate and develop imagination and invention.

In this context, we carried out a quantitative study among the students of the entrepreneurship house of The tlemcen University by developing a questionnaire and processing the data with the SPSS software. The study concluded that mastering different ideation techniques had a positive effect as well as an effective mechanism for the development of creative ideas. It also represents a solid foundation explains the complementary role played by the house of entrepreneurship to fill these gaps.

We developed a survey, which was completed by all 80 participants. The survey had several continues questions, that build on each other. Thus, not every participant answered every item. The complete survey and the data are attached to the paper. With our findings, we attempt to provide valuable information to entrepreneurs, who consider using creativity support techniques to enhance their creative process spirit and improve their overall business.

3. RESULTS AND DISCUSSION

The data of this research was collected from march to April 2020 using online questionnaires, as they were distributed to a group of tlemcen University students studying at the undergraduate (Bachelor's and Master's levels) and postgraduate studies (PhD). Tlemcen University (Abu Bakr belkayed) was chosen because it is the university to which the researcher belongs. The questionnaire was distributed on the social media sites of tlemcen University students, and only 75 responses were received. The questionnaire was formulated using a Likert scale ranging from strongly. Agree (5) to strongly disagree (1) to provide information on creative techniques.

Table 3. Characteristics of study's sample

Variable	Frequency (75)	percentage
Age		
18-25	38	50.66%
26-30	29	38.67%
More than 30	08	10.67%
Gender		
Male	52	69.33%
Female	23	30.67%
Specialty		
Economic, commercial and management sciences	44	58.67%
humanities, social, political sciences, languages, and law …	18	24%
exact sciences and life sciences (mathematics, computer sciences, medicine, pharmacy, geology …)	13	17.33%

Source: made by researchers using the outputs of SPSS 21

Majority of students (50.66%) were within the 18-25 years age group with 19 years being the least age; 38.67% were within the 26-30 years age group while (10.67%) were above 30 years old. The population was majorly male as (69.33%) were male while (30.67%) were females.

Most of students (58.67%) were studying economic, commercial and management sciences, 24% were studying humanities, social, political sciences, languages, and law…, 17.33% specialised in exact sciences and life sciences.

In order to now the validity and reliability of the study questionnaire, we relied on Cronbach's alpha coefficient. Moreover, found it equal to (0.875) and it is bigger than (0.7) which means that the study tool has consistency, which indicates a good internal consistency for all the questionnaire variables, and the results are shown in the table below:

Table 4. The validity and reliability of the questionnaire

Cronbach's alpha	Number of items
0.875	30

Source: made by researchers using the outputs of SPSS 21

Table 5. Cognitive component of student's skills

S/N	VARIABLE	MEAN	SD
1	Due to entrepreneurship's creative techniques, I am able to identify business opportunities.	4.20	0.72
2	Due to entrepreneurship's creative techniques, I can now anticipate, tolerate and manage setbacks and risks.	4.06	0.80
3	Due to entrepreneurship's creative techniques, I now have the skills to create a new business.	3.82	1.05
4	Due to entrepreneurship's creative techniques, I can successfully develop a business plan.	4.26	0.76
5	Due to entrepreneurship's creative techniques, I do many experimentations to come up with a New workable idea.	3.92	1.15
6	Due to entrepreneurship's creative techniques, I can perform feasibility studies to check if my business ideas work.	4.11	0.84
7	Creative techniques are seen almost as a prerequisite to manage change and renewal, it is a key skill for leaders and organizations	4.08	0.84
8	Using of creative techniques, is induced it can generate original, appropriate and useful products or responses, as well as being assertive and valuable to the task.	3.86 4.16	1.06 0.86
9	Mastery of creativity techniques belongs to the strategic skills and according to it is one in a set of complete functional and behavioral qualities that, when fully realized, can help lead to professional success.		
10	techniques make it possible to promote the generation of ideas as a source for innovation in organizations	4.09	0.80

Source: made by researchers using the outputs of SPSS 21

Analysis of the Cognitive component of student's skills towards entrepreneurial creative techniques, revealed positive means ranging from 0.72 to 1.15. The statement

"Due to entrepreneurship's creative techniques, I can successfully develop a business plan" had the highest mean (4.26) while the statement "Due to entrepreneurship's creative techniques, I now have the skills to create a new business" had lowest mean (3.82).

Table 6. Behaviour component of student's performance

S/N	VARIABLE	MEAN	SD
1	I consider myself to be a creative person due to using creative techniques	4.45	0.80
2	Creative ideas simply occur to me without even thinking about them.	4.39	0.76
3	I often use a technique of brainstorming to come up with new ideas.	4.49	0.74
4	I am at my creative best when I work in a group.	4.30	0.86
5	If I have a problem, I allow myself to back off active problem solving, and I create some mental distance between the issue and myself.	4.06	0.89
6	I am confident that I can develop creative ideas to solve problems, and I am motivated to implement solutions.	3.97	0.97
7	the techniques aimed at generating ideas and solving problems (brainstorming/brain writing, reverse brainstorming, , case study or "lotus blossom" technique);	3.95	0.98
8	self-discovery methods e.g. self-image and "animal family" (methods adapted from psychology);	3.89	0.86
9	Use idea generating techniques such mind mapping to develop several original design ideas.	4.20	0.75
10	Use ingenuity and imagination, going outside typical approaches generate design solutions	4.44	0.74

Source: made by researchers using the outputs of SPSS 21

Analysis of the Behavior component of student's performance towards entrepreneurial creative techniques, revealed positive means ranging from 0.74 to 0.98. The statement "I often use a technique of brainstorming to come up with new ideas." had the highest mean (4.49) while the statement "self-discovery methods e.g. self-image and "animal family" (methods adapted from psychology);" had lowest mean (3.89).

Table 7. Impact components of house of entrepreneurship training

S/N	VARIABLE	MEAN	SD
1	The house of entrepreneurship course prepares students very well for entrepreneurial careers.	4.10	0.78
2	Through house of entrepreneurship's training at creative techniques, I now understand the importance of creativity than innovation in entrepreneurship.	4.05	0.80
3	Through house of entrepreneurship, my knowledge, skills, and interest in entrepreneurship have overall improved.	4.01	0.80
4	Overall, I was very happy and satisfied with how the creative programme was taught.	4.20	0.80
5	Introduce methodological and conceptual models that can be used as models when researching techniques in the field of entrepreneurship as well as practical tools to analyze growth opportunities and obstacles within a firm and act on it.	3.95	0.98

6	Stimulating the practice of a wide range of entrepreneurial skills such as opportunity seeking and grasping, networking, taking initiatives, persuading others and taking intuitive decisions. This demands a comprehensive range of pedagogical tools.	4.22	0.72
7	Creating the capacity for relationship learning, network management, building 'know-who' and managing based on trust-based personal relationships.	3.65	1.08
8	Creating the capacity to design entrepreneurial organizations of all kinds in different contexts and understand how to operate them successfully.	3.98	0.98
9	Introduce methodological and conceptual models that can be used as models when researching growth in the field of entrepreneurship as well as practical tools to analyze growth opportunities and obstacles within a firm and act on it.	4.44	0.74
10	encouraging the entrepreneurial intention of engineering students who have developed an entrepreneurial intention but are still reluctant to start a business;	4.13	0.83

Source: made by researchers using the outputs of SPSS 21

Analysis of the Impact components of house of entrepreneurship training towards entrepreneurial creative techniques, revealed positive means ranging from 0.72 to 1.08. The statement "Introduce methodological and conceptual models that can be used as models when researching growth in the field of entrepreneurship as well as practical tools to analyze growth opportunities. and obstacles within a firm and act on it" had the highest mean (4.44) while the statement Creating the capacity for relationship learning, network management, building 'know-who' and managing based on trust-based personal relationships." had lowest mean (3.65).

6. CONCLUSION

The criteria for the operationalization of creativity techniques were rep resented in four groups: exploration, combination, validation and transformation.

Using the problem definition as a starting point we can apply a number of creative thinking techniques to identify potential solutions, then further analyze and refine these to give us an optimum solution for the problem at hand. This paper discusses some of the successful creative thinking techniques used by business analysts and describes a generic model that can be used to guide the process.

Therefore, studies relevant to this field deal with individual and collective processes, especially when discussing creative techniques. Such techniques make it possible to promote the generation of ideas as a source for innovation in organizations, although some adaptation to the characteristics of the organization, type of innovation and the work team among other factors is required. Therefore, there is a need for research regarding the implementation and improvement of these tools with teams of ideation and / or innovation. Finally, it is worth emphasizing that it is necessary to reflect on the usefulness of these tools and the interferences that the stimulating factors of creativity present in their approaches can influence in the application of creativity techniques.

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