

***Fostering the Entrepreneurial Mindset of Students Through Pioneering  
Teaching Pedagogies: An Empirical Study on a B-School***

Vaibhav Goutham Suresh, JAIN (Deemed-to-be University), India  
Sakshi Chhabra, JAIN (Deemed-to-be University), India  
Dinesh Nilkant, JAIN (Deemed-to-be University), India

The Barcelona Conference on Education 2022  
Official Conference Proceedings

**Abstract**

Recent studies have shown the importance of entrepreneurship on the economy of a country. Universities and Educational institutions play a vital role in nurturing students. The study focuses on the impact of innovative teaching pedagogies such as TAP (Teaching, Application and Practice) on the entrepreneurial mindset of students. The mindset of the students was measured using the “Theory of Planned Behavior” by Dr. Azjen and “Entrepreneurial Potential Theory” and extension of this model by Quixing Yang et. al (2021) in two stages via an experimental design method over a longitudinal period of two years. An instrument has been designed and administered on a sample of 570 respondents from university for pre and post testing in order to understand the entrepreneurial mindset using simple random sampling. An attempt has been made to understand the relationship among determinants of entrepreneurial intention using Structural equation modelling analysis. The result shows that the proposed model in the present study explains 54% of the variance, explaining the existence of entrepreneurial intention among students. The purpose of the research is to inspire additional research on measuring the entrepreneurial mindset of students utilizing other innovative training pedagogies, identifying a suitable pedagogy to foster the entrepreneurial mindset of students, and creating an appropriate eco-system to develop educational policies at the national level.

Keywords: TAP-R (Teaching, Application, Practice and Research), Entrepreneurial Intent, Entrepreneurship

**iafor**

The International Academic Forum  
[www.iafor.org](http://www.iafor.org)

## **Introduction**

Innovation is the phrase that will never go out of vogue. Modern learners are well-equipped with the information readily available to them via new media such as Facebook, Instagram reels, and infographic-based knowledge sharing programs such as YODA. The duty of an educator is growing, and with it comes a greater requirement for a higher degree of innovative teaching style to hold the attention of the student. In order to capture the students' interest, the pedagogy that is developed must have a certain element of novelty. The innovation in pedagogy should also emphasize unlearning the incorrect information that is available to the student and focusing instead on education-focused correct knowledge. When compared to the teaching pedagogy of the twentieth century, the pedagogical shift in the twenty-first century may be related to the phenomena of internationalization of society and the infusion of digitalization in learning. One of the major studies in this field discusses this significant transformation in the didactics and technique of education (Mynbayeva et al, 2017).

The recent pandemic resulted in the entire move of offline courses to online classrooms, and the previous adoption of blended learning facilitated a rapid transition to a wholly online model of learning for the COVID contingency classes as well. Both of these modifications are the outcome of the present epidemic.

## **Literature Review**

It has come to light that the procedure of establishing a new company is fraught with a number of challenges due to the fact that commercial choices are made under conditions of uncertainty, in particular with respect to functional domains (Timmons et al., 2013). Therefore, those who want to start their own businesses need to demonstrate a significant amount of intellectual and practical capability.

They are required to triumph over the challenges that are inherently associated with entrepreneurial endeavors (Gibb, 2002). In light of this, research in the field of entrepreneurship education has placed an emphasis on the creation of new ideas in students so that they would be able to cope with ambiguity in the circumstances that they find themselves in (Kailer, 2009). The need of instructional methodologies that equip students to deal with the complexity of new company growth is predicated on the fact that this is the case (Biggs, 2003). Case study, individual presentation, group projects, formal lectures, seminars, guest speakers, web-based learning, group discussion, and guest speakers are just a few of the various instructional methods that have been identified in the content evaluations of entrepreneurship classes. Other instructional methods include: (Fayola et al., 2008; Lee, L et al., 2011).

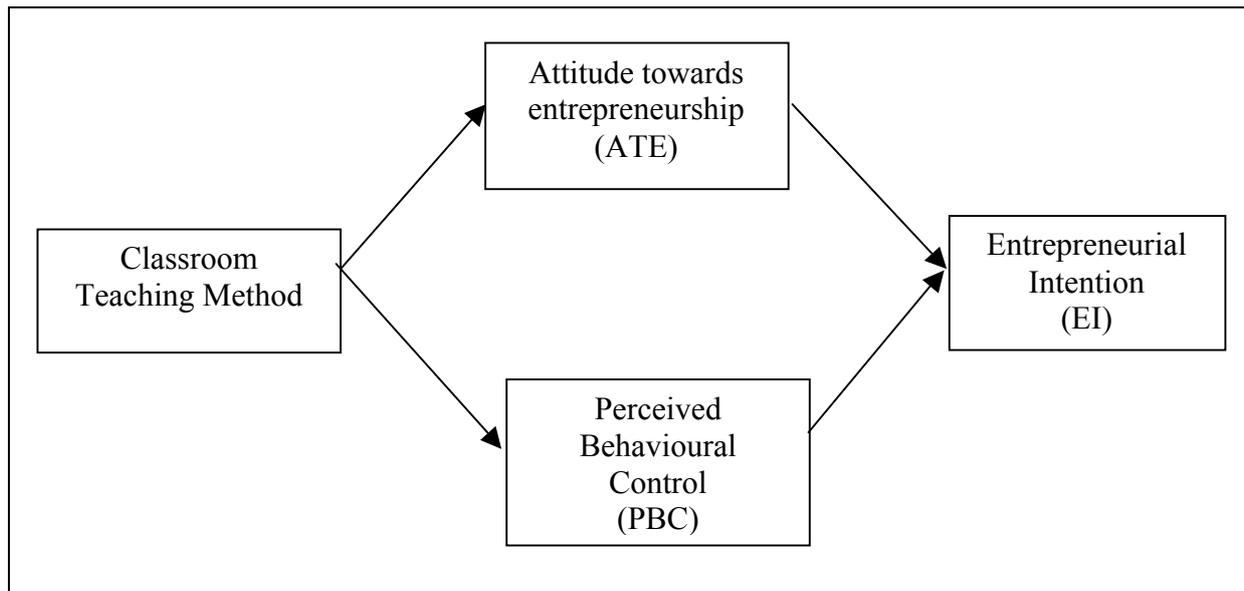
The literatures on entrepreneurial education have not been able to reach a consensus regarding the particular criteria for selecting those teaching techniques that will be most effective for a given group of students in terms of transfer of entrepreneurial knowledge and motivation for future learning (Balan, 2012). This is the case despite the availability of such a wide variety of teaching techniques.

Therefore, the primary problem is to locate the most innovative tactics for regulating learning skills and to find the optimal match between teaching methods and the requirements of students (Lee et al., 2007). In this research study, we will investigate the significance of using

the model TAP(Theory , Application and Practice) and its extension as TAP R(Theory, Application, Practice and Research) as one of the innovative methods of teaching and learning that exist, with the goal of better facilitating the dissemination of entrepreneurial education and enhancing the overall learning process.

### Proposed Framework for the Study

The proposed framework for the study has been adapted from the Ajzen Theory of planned behavior(Ajzen, 1991) and Dr. Krueger and Brazeal model of Entrepreneurial potential model. The conceptual model used for the study is presented below in figure 1.



**Fig 1:** Proposed Framework for the Study

*(Adopted from Ajzen Theory of Planned Behavior 1991 and study on “How to Develop Entrepreneurial Talent More Effectively? A Comparison of Different Entrepreneurship Educational Methods” by Qixing Yang et. al,2021)*

The framework asserts that the classroom teaching methods and pedagogies forms the attitude toward entrepreneurship, and perceived behavioral control to shape an entrepreneurial intent among students. As stated in the suggested framework, the purpose of this research was to investigate the change in entrepreneurial attitude among students as a result of the usage of TAP R modular teaching for delivering a course. The hypothesis are formulated as per the proposed framework for the study and are presented as below:

H1: There is a significant relationship in the Pre test and Post test scores of Attitude towards entrepreneurship.

H2: There is a significant relationship in the Pre test and Post test scores of Perceived Behavioral control.

H3: There is a significant relationship in the Pre test and Post test scores of Entrepreneurial Intention

### Data Analysis

This research employed an experimental design via ANOVA test to analyse data gathered over the course of a full two years of the MBA degree (Batch 2020–2022). Data was

collected twice, first at the beginning of the MBA programme in 2020 and again at the end of the MBA programme in 2022.

The study also involves testing the existence of significant relationships between the antecedents of entrepreneurial intention as per the proposed framework used for the study. The data has been collected using stratified random sampling based on the area of specialization chosen by students. Survey method has been used to collect the responses from students by administering the questionnaire in prior with the help of expert opinions i.e researcher, field experts and academicians working in the similar lines.

### Experimental Design Analysis

The experimental design has been used to understand the pre and post behavior of students that has undergone a full time MBA programme(2020-2022) using TAP R modular teaching approach. The results obtained from pre and post experimental design through ANOVA test are presented in Table 1 and 2.

**Table 1.** Results obtained from ANOVA Testing (Paired Sample Statistics)

H1					H2						
PAIRED SAMPLES STATISTICS					PAIRED SAMPLES STATISTICS						
		Mean	N	Std. Deviation	Std. Error Mean			Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE_ATE	4.0674	570	.70812	.05263	Pair 2	PRE_PBC	4.0374	570	.60812	.05263
	POS_ATE	5.0707	570	.80628	.05993		POS_PBC	5.1307	570	.88628	.05993
PAIRED SAMPLES CORRELATIONS					PAIRED SAMPLES CORRELATIONS						
		N	Correlation	Sig.			N	Correlation	Sig.		
Pair 1	PRE_ATE & POS_ATE	570	.857	.000	Pair 2	PRE_PBC & POS_PBC	570	.788	.000		

**Table 2.** Results obtained from ANOVA Testing (Pre and Post Results)

Pre Test(Control) Post Test(Treatment)	Difference Between the Means	F Statistic
CG_ATE	2.23	0.675
TR_ATE		
CG_PBC	0.14	0.754
TR_PBC		
CG_EI	1.17	0.741
TR_EI		
TR_IN		

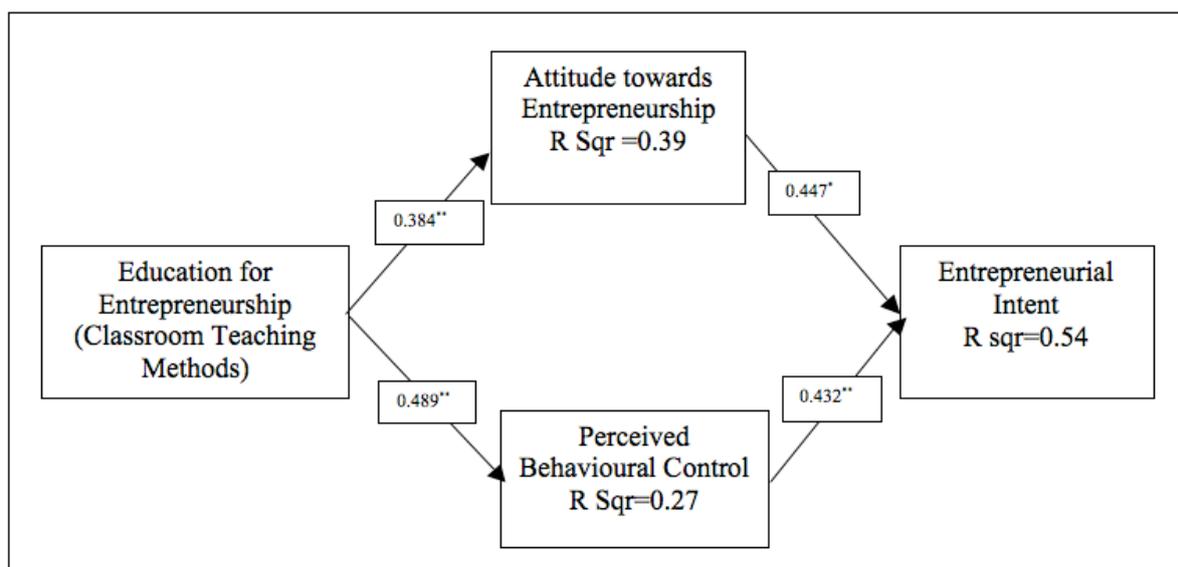
All the hypothesis are found to be in acceptable ranges indicating the F Statistic value  $>0.6$  explaining the significance of existence of relationship between Pre and Post experiments.

Also, the results obtained have indicated that entrepreneurial intent is influenced by attitude towards entrepreneurship which in further influenced by classroom teaching method and perceived behavioral control among the students.

The research demonstrates a paradigm change in the students' mindset from the time they entered the MBA programme to the time they graduated. 15 percent of students are on the brink of obtaining seed funding and have produced a business plan throughout their MBA programme while the rest 50% of the students have started thinking in the lines of having their own business in near future. In addition, results obtained from paired tests explain the relevance of existing correlations between two samples.

### Structure Equation Modeling (Overall Model for the Study)

The model explains the existence of substantial correlations between the different entrepreneurial intention categories. The resultant value was determined to be between 0.384 and 0.489 at the 0.01 and 0.05 significance level. The R-square value was calculated using SEM analysis on 570 completed surveys. The R square values for perceived attitude toward entrepreneurship and perceived behavioural control were found to be .39 and .27, respectively, which explains 34 and 27 percent of the total number of components. The result for the overall structural model is 0.54, meaning that the model explains 54% of the constructs. According to the overall structural model, attitude toward entrepreneurship and perceived behavioral control play a significant impact in entrepreneurial intention. Students with a greater attitude toward sustainable entrepreneurship via education (classroom teaching such as TAP R) and perceived behavioral control are more likely to choose entrepreneurship as a vocation, according to the findings of this research. The whole model is shown in figure 2 below:



\*\* Correlation is significant at the 0.01 level (2-tailed)

\* Correlation is significant at the 0.05 level (2-tailed)

**Fig 2:** Overall Model for the study (Correlations obtained from SEM analysis)

## **Conclusion and Recommendations**

This study aimed to comprehend the paradigm change in the entrepreneurial attitude of MBA students from the time they enter the programme till they graduate. The research demonstrates that the TAP R is a proven innovative teaching pedagogy that has had a substantial impact on the entrepreneurial spirit of students. In addition to the modular teaching strategy, the research aspect via entrepreneurial projects, project-centric learning, and entrepreneurship-oriented courses with an emphasis on experiential learning plays a crucial role in shaping students' attitudes toward entrepreneurship. This study investigated the impact of education on entrepreneurial attitude and perceived behavioural control on entrepreneurial intent. To verify and establish the link between constructs, hypotheses were tested.

This research proposes that educational institutions should develop a curriculum matrix that includes both discipline-specific and entrepreneurial electives providing entrepreneurial classes and programmes. This will provide students with an awareness of the entrepreneurial environment and the core skills necessary for future business success and longevity. Moreover, the study also recommends that the government create research and development programmes to assist the diffusion of additional business expertise.

## **Acknowledgement**

We would like to thank our honorable Director Dr. Dinesh Nilkhant for ideating and implementing TAP R teaching approach at CMS Business School, Jain (Deemed-to-be University).

## References

- Ajzen I. (1991). Organizational Behavior and Human Decision Processes, 50(2),179-21.
- Biggs, J. (2003). Constructing learning by aligning teaching: Constructive alignment. Teaching for Quality Learning at University: What the Student Does, Open University Press, Philadelphia, PA.
- Fayolle, A. and Gailly, B. (2008). From craft to science: Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32(7), 569-593.
- Gibb, A. (2002). In pursuit of a new “enterprise” and “entrepreneurship” paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Review*, 4, 233–269.
- Kailer, N. (2009). Entrepreneurship education: empirical findings on proposals for the design of entrepreneurship education concepts at universities in German-speaking countries. *Journal of Enterprising Culture*, 17(2), 201-231.
- Lee, L., and Wong, P. (2007). Entrepreneurship education- A Compendium of related issues in Zoltan, J. and David B. Audretsch. International Handbook Series on Entrepreneurship, 3. 79-105.
- Mynbayeva, A., Sadvakassova, Z., & Akshalova, B. (2017). Pedagogy of the twenty-first century: Innovative teaching methods. *New Pedagogical Challenges in the 21st Century-Contributions of Research in Education*, 3-20.
- Quixing Yang et. al (2021).How to Develop Entrepreneurial Talent More Effectively? A Comparison of Different Entrepreneurship Educational Methods. *Frontiers in Psychology*, 12,1-14.
- Tasnim, Y. (2012). Playing entrepreneurship: Can games make the difference? *Entrepreneurial Practice Review*, 2(4), 4-18.
- Timmons, J.A., Gillin, L.M., Burshtein, S.L and Spinelli, S. (2011). New Venture Creation: Entrepreneurship for the 21st Century: A Pacific Rim Perspective, McGraw-Hill, Sydney.

**Contact email:** sakshichhabra@cms.ac.in