

The Existence of Entrepreneurship Skills on Teachers and Prospective Teachers: A Survey

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ABSTRACT

Entrepreneurship skills are very important to be provided to prospective teachers and teachers through a learning scheme. Before designing a learning scheme, it is necessary to do a mapping to identify weaknesses and strengths in the achievement of entrepreneurship skills. This research was conducted to identify the achievement of entrepreneurship skills of prospective teachers and teachers. In addition, it also identifies the learning process carried out in order to train these entrepreneurial skills. The study was conducted using a survey method, with a total of 77 prospective teacher participants (spread over several universities in Central Java) and 119 teachers (teachers in several schools in Central Java). Questionnaires are used to investigate the achievement of entrepreneurial skills. An analysis of the lesson plan document was carried out to identify the learning process carried out in an effort to train entrepreneurship skills. The study results indicate that entrepreneurship skills still need to be improved, especially for teachers and prospective teacher students, especially the innovative aspect. In addition, this study succeeded in describing how learning activities were carried out to practice entrepreneurship skills.

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1. INTRODUCTION

Education plays an important role in shaping the mindset and ideas of students. These mindsets and ideas are very important to be instilled in students to grow the skills needed by students as provisions for living life. One of them is entrepreneurship skills. Entrepreneurship skills are one of the skills that equip individuals to be able to find solutions to problems. Someone who has entrepreneurial skills has the ability to identify problems and find ways to solve problems by changing the system (if needed) with new initiatives and efforts from within. According to Betil (2010), people who have entrepreneurial skills have the vision and determination to continue working continuously to the point where the whole system can change.

Entrepreneurship skills are very important to be presented and trained in the educational process. Arasti (2012) states that inculcating entrepreneurship skills through the classroom process is very important to promote new ways of acting and thinking about complex problems. In addition, according

to Isrososiawan (2013), entrepreneurship skills training in the educational process aims to enable students to become fully human beings who have character, understanding and skills as entrepreneurs.

In an effort to ensure the development of entrepreneurship skills to students, a teacher and prospective teacher must be well prepared so that they also have entrepreneurial skills. Preparations are made so that teachers and prospective teachers can practice these skills with their students in the future. In addition, entrepreneurship skills are also important to possess, both by teachers and prospective teachers, to support the success of their profession as educators. According to Savickas (2010), entrepreneurship skills are a set of skills needed by an educator to be successful in his profession as a teacher. This is because someone who has good entrepreneurship skills will encourage the emergence of good self-efficacy, where self-efficacy can be a means to develop their profession to be more effective (Newman, 2019). Therefore, entrepreneurship skills are very important to be cultivated to be owned by educators and prospective educators.

In addition, the growth of entrepreneurship skills is expected to be able to foster an entrepreneurial spirit so that it can become a driver of success on the economic side. For student teacher candidates, entrepreneurship plays an important role in shaping their independent character, especially in economic independence. This is very important for them to be able to be adaptive, survive, and have competitiveness in today's global era (Othman, 2020). The results of research conducted by Lubis (2018) and Budy (2017) show that entrepreneurship education has a positive and significant effect on entrepreneurship motivation and entrepreneurial skills. This is corroborated by the research findings of Marques & Albuquerque (2012), which state that education can help shape an entrepreneurial culture and can increase the effectiveness of entrepreneurial initiatives. In addition, according to Arasti (2012), the development of entrepreneurship skills for prospective teacher students is effective in improving the quality of a person to become an entrepreneur.

Efforts to inculcate entrepreneurial skills can be made through the educational process, either through non-formal education in the form of training (for teachers), or through the educational process in the classroom (for student-teacher candidates). In the context of education, efforts to develop entrepreneurship skills must be able to inspire the spirit of entrepreneurship, self-confidence, work and improve the national economy Lubis (2018). In addition, the application of entrepreneurship education needs to instill entrepreneurial values (Mulyani, 2011).

Aydogmus (2021) defines entrepreneurial talents as the abilities an individual has to actualize their ideas. This skill pertains to an individual's capacity to work alone as well as in cooperation with others. Entrepreneurial abilities, in practise, refer to the utilisation of resources in a creative manner to effect change and generate value in order to fulfil specific objectives. Entrepreneurship abilities encompass various indications such as the ability to take risks, identify opportunities, possess self-confidence, exhibit emotional intelligence, and demonstrate innovation (Deveci, 2015). Recognising the significance of entrepreneurial abilities, it is imperative to establish a programme outlining the methodology for cultivating these talents through an educational framework. Universities play a crucial role in guiding educators and aspiring educators to acquire these abilities. Numerous nations prioritise incorporating entrepreneurship skills training inside the school system (Kruzic, 2010). The entrepreneurship education process primarily focuses on providing students with the necessary knowledge, abilities, and attitudes for success in the business world. It also aims to cultivate long-term goals and foster individuals' ability to become entrepreneurs.

In Indonesia, entrepreneurship education has been carried out in recent years. To evaluate the success of entrepreneurship skills training through the educational process, it is necessary to conduct a survey on the mastery of these skills. A survey on the mastery of these skills also needs to be carried out to map aspects that still need to be strengthened and need to be improved. Through this mapping, a learning scheme can be designed to strengthen aspects that still need to be improved. This research was conducted because there are still few studies that analyze the achievement of entrepreneurship skills for both prospective teacher students and teachers in Indonesia. The studies conducted have focused more

on developing entrepreneurship skills in the learning process (sumarti, 2008; Auliah, 2015; Andayani, 2016; Pratomo, 2018; Sugiarto, 2015; Muttaqien, 2019).

Therefore, this research was conducted to map the achievement of entrepreneurship skills, both for prospective teacher students and teachers. This mapping is carried out by referring to the indicators of entrepreneurship skills proposed by Deveci (2015), which include risk-taking skills, opportunity-seeing skills, self-confidence, emotional intelligence, and innovation. In addition, this study also maps the learning process that has been carried out so far in an effort to train these entrepreneurial skills to prospective teacher students.

2. METHODS

2.1 Research design

This research was conducted using a survey research design. This survey was conducted to identify the achievement of entrepreneurship skills that exist in student teacher candidates and teachers. In addition, a survey was also conducted to identify learning activities carried out by students during the lecture process in relation to entrepreneurship skills training.

2.2 Participants

The participants involved in this study consisted of two categories, namely the student teacher category and the teacher category. There were 77 student teachers involved in this study. All students are active students in several universities in Central Java who have been studying for at least two years. Meanwhile, for the category of teachers involved in this survey, there were 119 teachers. There are no restrictions on age and experience/length of teaching in involving teachers in this study. All the teachers involved in this study were teachers who taught in several schools in the Central Java region.

2.3 Data collection technique

The survey was conducted by distributing questionnaires to respondents (teachers and prospective teacher students) to measure the achievement of entrepreneurship skills. The questionnaire used adopted the questionnaire developed by Deveci (2015). Before being used, expert validity and reliability tests were carried out on the questionnaire. The test results show that the questionnaire is valid and reliable so that it can be used to conduct a survey.

Table 1. Sample Questionnaire for Measuring Entrepreneurial Skills

Statement	1	2	3	4	5
Indicator: risk-taking skills					
I am not afraid to switch to a different profession when I start my business life					
I like to offer different opinions on a topic					
Indicator: opportunity-seeking skills					
I can make future preparations in my professional life					
I follow innovation in my own profession					
Indicator: self-confidence					
I can take responsibility for my actions without hesitation					
I keep the commitments I make to others					
Indicator: emotional intelligence					
I am sensitive to other people's feelings					
I find it difficult to understand other people's point of view					
Indicator: innovation					
I voluntarily participate in a project whose subject is innovation					
Even if the idea I put forward to solve the problem is wrong, I am considered creative by those around me					

In addition to the questionnaire, this study identified the learning process carried out by the students involved in this participant. Identification of the learning process is carried out by reviewing the lesson

plans that serve as guidelines in the lecture process. Overall, all students involved in this research participant took the entrepreneurship lecture process at their respective campuses, so that the analysis of the learning process was carried out in the entrepreneurship lecture process. On this basis, the researcher takes the limitation that the entrepreneurship skills training process is analyzed only in entrepreneurship lectures.

2.4 Data analysis

The questionnaire used in this study has positive and negative statements. The scoring mechanism for positive statements is a score of 1 for the answer choices that strongly disagree, a score of 2 for the answer choices that do not agree, a score of 3 for the answer choices quite agree, a score of 4 for the answer choices agree, and a score of 5 for the answer choices strongly agree. Meanwhile, the scoring mechanism for negative statements is the opposite of positive statements.

Data analysis was carried out in stages, namely (1) calculating the percentage of overall entrepreneurial skill achievement and determining the category of achievement; (2) calculate the percentage of achievement of entrepreneurial skills for each indicator and determine the category of achievement; (3) calculate the percentage of the number of students in each category of overall achievement; (4) calculate the percentage of students in each category of achievement for each indicator of entrepreneurial skills. The categorization of achievement of entrepreneurial skills refers to Table 2.

Table 2. Categorization of Entrepreneurial Skill Achievements

Range of Achievements (%)	Category
$20 \leq x \leq 36$	Very low
$36 < x \leq 52$	Low
$52 < x \leq 68$	Medium
$68 < x \leq 84$	Good
$84 < x \leq 100$	Very good

Furthermore, an analysis of the learning process is carried out by conducting a document study of the lesson plans used in entrepreneurship lectures. The analysis focused on the learning activities carried out.

3. FINDINGS AND DISCUSSION

The results showed that overall, both teachers and prospective teachers had entrepreneurship skills in a good category. Elliott (2020) states that someone who has experience and a high level of education will be more receptive to technological changes in society, so they have a higher ability to seize entrepreneurial opportunities. More details on this achievement data as a whole can be seen in Table 3. Based on the data, even though it is in the same category, the achievement of entrepreneurship skills for student teacher candidates is lower than that of teacher entrepreneurship skills.

Based on the findings, the researcher suspects that the existence of entrepreneurship skills can still be improved, both by prospective teacher students and teachers. Based on the data in Table 3, the results obtained still need to be improved so that the average percentage can be above 84% (very good category). If we look at Table 4, there are several teachers and student teacher candidates who have entrepreneurship skills in the low and medium categories. For student teacher candidates, 2.6% are in the low category and 25.1% are in the medium category. Meanwhile, for teachers, 1.4% are in the low category and 17.7% are in the medium category. This means that some teachers and student teacher candidates do not yet have good entrepreneurship skills. Therefore, efforts need to be made to train these skills through the educational process. More specifically for student teacher candidates.

Table 3. Percentage of Overall Entrepreneurial Skill Achievement

Respondent	Achievements (%)	Category
Prospective Teacher	75,2	Good
Teacher	79,6	Good

Table 4. Total Entrepreneurial Skill Achievements for Each Category

Category	Amount (%)	
	Prospective Teacher	Teacher
Very low	0	0
Low	2,6	1,4
Medium	25,1	17,7
Good	59,7	51,8
Very good	12,6	29,1

In addition, this study also analyzes the trend of achievement of entrepreneurship skills, both student teacher candidates and teachers for each indicator. The data on the percentage of entrepreneurship skills attainment for each indicator can be seen in Table 5. The data in Table 5 corroborate the findings set forth in Table 3 and Table 4. These findings indicate that the achievement of entrepreneurship skills of prospective teacher students for each indicator is lower than that of teachers. According to the researcher's suspicion, this is due to the maturity of thinking and experience in dealing with the real world. Teachers have better thinking maturity and experience compared to prospective teacher students. According to Denizalp (2007), people who are skilled in entrepreneurship will always be aware of the problems that exist in their surrounding environment. Then, be able to solve the problem in a way that may not have been done before. A teacher, armed with his teaching experience, is trained by his environmental situation to think carefully when faced with a problem. This resulted in the teacher being able to determine the best and innovative steps when faced with a condition to overcome the problem. This is of course different from student teacher candidates. Dias (2020) said that entrepreneurship skills are the result of the accumulation of traits obtained as a result of knowledge, information, and experience that have been obtained.

Table 5. Percentage of Achievement in Entrepreneurial Skills for Each Indicator

Code	Aspects of Entrepreneurial Skills	Prospective Teacher		Teacher	
		Achievements (%)	Category	Achievements (%)	Category
A1	Risk-taking skills	73,2	Good	75,8	Good
A2	Opportunity-seeking skills	77,2	Good	81,4	Good
A3	Self-confidence	78,8	Good	83,4	Good
A4	Emotional intelligence	77,0	Good	83,1	Good
A5	Innovation	67,9	Medium	72,4	Good

Interesting findings in Table 5 are on the innovation aspect. Both teachers and student-teacher candidates, the innovative aspect gets the lowest score among other aspects. In fact, for student teacher candidates, the achievement of innovative aspects is in the medium category. This indicates that the innovative aspect needs special attention to be trained. According to Deveci (2015), innovation is related to the ability to generate new ideas which are closely related to goal setting and creative development, taking into account needs.

Innovative aspect is the most important part in developing entrepreneurial skills. When this aspect is good, the other aspects will also be good. Therefore, if this aspect can be improved, it will increase the performance in other aspects. According to Dima (2021), the most important tool for an entrepreneur is innovation. Innovation is a skill related to creativity to be able to create value (Verdin, 2015).

Table 6. Number of Entrepreneurial Skills Achievements for Each Category in Each Indicator

Category	Amount (%)									
	Prospective Teacher					Teacher				
	A1	A2	A3	A4	A5	A1	A2	A3	A4	A5
Very low	0	0	0	0	0	0	0	0	0	0
Low	0	1,3	1,3	1,3	5,2	1,7	0	0	0	4,2
Medium	24,7	11,7	5,2	13	49,3	25,2	11,8	5,9	8,4	33,6
Good	63,6	61,0	63,6	66,2	37,7	52,9	52,9	49,6	46,2	47,9
Very good	11,7	25,0	29,9	19,5	7,8	20,2	35,3	44,5	45,4	14,3

The finding of the low level of innovativeness is corroborated by the results of the data analysis presented in Table 6. Based on Table 6, the lowest and most moderate category achievements are mostly in the innovative aspect, both for teachers and student-teacher candidates. This indicates that indeed the innovative aspect needs special attention to be trained. This training process can be carried out using certain strategies that are integrated into the learning process, either through direct entrepreneurship lectures, or other lectures. According to Isrososiawan (2013), the development of entrepreneurship skills in education aims to make a complete human being who has the character, understanding and skills as an entrepreneur. Through the entrepreneurship education process, students can be facilitated to develop competencies and all potentials related to entrepreneurship that they can pursue (Othman, 2020). In addition, entrepreneurship education has an impact in developing positive perceptions among students about business continuity (Bae, 2014; Jones, 2004), as well as opening up insights to create their creativity into something valuable (Baron, 2008; Ferreira, 2017).

This study also found a scheme of the educational process carried out to train entrepreneurship skills that had been carried out in several universities producing teacher candidates. The findings of the analysis related to the entrepreneurship skills training scheme can be seen in Figure 1. Based on the figure, the training process is specifically carried out through entrepreneurship lectures. Entrepreneurship education is often defined as the development of students' abilities in aspects of knowledge, attitudes, and skills for entrepreneurship (Ahmed, 2017; Hutasuhut, 2020; Lackeus, 2014) in order to form a new business (Karimi, 2016; Kuckertz, 2017). In the process, learning activities are carried out using discussion activities, cooperative learning, case studies, and project-based learning. The learning activities are carried out to teach the basic concepts of entrepreneurship, field analysis, and entrepreneurship practices.

According to Bakker (2017), the entrepreneurial process begins with looking for business opportunities, where entrepreneurs can identify new ways to produce products and services, or improve existing products. The entrepreneurial process will take advantage of opportunities (Kuckertz, 2017) and successful entrepreneurs, will have the ability to identify these opportunities (Short, 2010). This activity can be trained through field analysis. In the scheme carried out in entrepreneurship lectures, field analysis is intended to conduct studies on strengths, weaknesses, and analysis of business opportunities that can be carried out. Of course, opportunity analysis cannot be done directly without basic knowledge. Therefore, it is necessary to instill the basic concept of entrepreneurship.

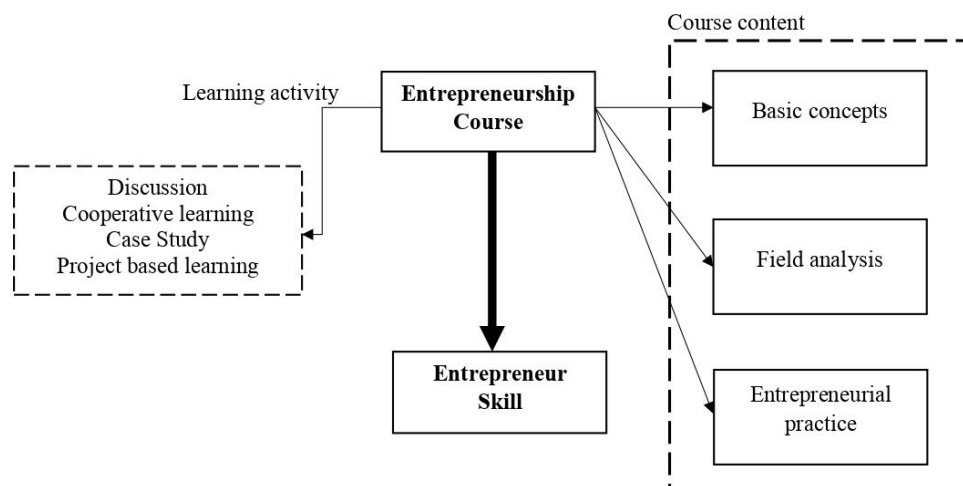


Figure 1. Entrepreneurial Skills Training Scheme

4. CONCLUSION

Based on the research findings, it can be concluded that the overall achievement of entrepreneurship skills, both for prospective teacher students and teachers is in the good category. However, even so, the innovative aspect needs special attention. For both student and teacher candidates, the achievement of the innovative aspect got the lowest score. Even for prospective teacher students, the achievement of innovative aspects is in the medium category. Furthermore, in general, the entrepreneurial skills training process is carried out through the entrepreneurship lecture process which includes learning activities such as discussion processes, cooperative learning, case studies, and project-based learning. The lecture process consists of three main sub-contents, namely the basic concepts of entrepreneurship, field analysis, and entrepreneurial practice. Given these findings, the researcher proposes further investigation into the impact of creative elements on the attainment of various aspects of entrepreneurial abilities. Furthermore, it is imperative to perform research on the optimal learning activity schemes for cultivating entrepreneurial abilities, with a particular focus on fostering innovation.

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REFERENCES

- Ahmed, T., Chandran, V. G. R., & Klobas, J. (2017). Specialized entrepreneurship education: Does it really matter? Fresh evidence from Pakistan. *International Journal of Entrepreneurial Behavior & Research*, 23(1), 4-19. doi:10.1108/IJEBR-01-2016-0005.
- Andayani, E. (2016). Analisis Praktik Kerja Industri terhadap Penguasaan Skill Siswa dalam Menghadapi Dunia Kerja di SMK NU Bululawang Malang. *Jurnal Inspirasi Pendidikan*, 6(1), 744-754.
- Arasti, Z., Falavarjani, M. K., & Imanipour, N. (2012). A Study of Teaching Methods in Entrepreneurship Education for Graduate Students. *Higher Education Studies*, 2(1), 1-10. <https://eric.ed.gov/?id=EJ1081428>.
- Auliah, A., & Husain, H. (2015). Pengembangan Model Perkuliahan Berwawasan Kewirausahaan untuk Meningkatkan Kecakapan Hidup (Life Skill) Mahasiswa Calon Guru. *Chemica: Jurnal Ilmiah Kimia dan Pendidikan Kimia*, 16(1), 61-71.
- Aydogmus, M. (2021). Investigation of the effect of social entrepreneurship on professional attitude and

- self-efficacy perception: a research on prospective teachers. *Studies in Higher Education*, 46(7), 1462-1476.
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intention. A meta-analytic review. *Entrepreneurship Theory and Practice*, 38(2), 217-254. doi:10.1111/etap.12095.
- Bakker, R. M., & Shepherd, D. A. (2017). Pull the plug or take the plunge: Multiple opportunities and the speed of venturing decisions in the Australian mining industry. *Academy of Management Journal*, 60(1), 130-155. doi:10.5465/amj.2013.1165.
- Baron, R. A. (2008). The role of affect in the entrepreneurial process. *Academy of Management Review*, 33(2), 328-340. doi:10.2307/20159400.
- Betil, İ. (2010). "Civil Society, Social Capital, Social Entrepreneurship." *Girişimcilik ve Kalkınma Dergisi* 5 (1): 21-25.
- Budy, D. A. (2017). Pengaruh Pendidikan Kewirausahaan dan Motivasi Kewirausahaan Terhadap Keterampilan Berwirausaha Mahasiswa Universitas 17 Agustus 1945 Jakarta. *Journal for Business and Entrepreneur*, 1(1), 7-22.
- Denizalp, H. (2007). *Social Entrepreneurship Guide for Social Transformation*. Ankara: Ofset Matbaacılık.
- Deveci, İ., & Çepni, S. (2015). Development of Entrepreneurship Scale Towards Student Teachers: A validity and reliability study Öğretmen Adaylarına Yönelik Girişimcilik Ölçeğinin geliştirilmesi: Geçerlik ve güvenirlik çalışması. *Journal of Human Sciences*, 12(2), 92-112.
- Dias, Á., Silva, G. M., Patuleia, M., & González-Rodríguez, M. R. (2020). Developing sustainable business models: local knowledge acquisition and tourism lifestyle entrepreneurship. *Journal of Sustainable Tourism*, 1-20.
- Dima, A. (2021). The Importance of Innovation in Entrepreneurship for Economic Growth and Development. A Bibliometric Analysis. *Revista de Management Comparat International*, 22(1), 120-131.
- Elliott, C., Mavriplis, C., & Anis, H. (2020). An entrepreneurship education and peer mentoring program for women in STEM: mentors' experiences and perceptions of entrepreneurial self-efficacy and intent. *International Entrepreneurship and Management Journal*, 16(1), 43-67.
- Ferreira, A. D. S. M., Loiola, E., & Gondim, S. M. G. (2017). Motivation, business planning and risk management: entrepreneurship among university students. *Revista de Administracao Inovacao*, 14(1), 140-150. doi:10.1016/j.rai.2017.03.003.
- Hutasuhut, S., Irwansyah, Rahmadsyah, A., & Aditia, R. (2020). Impact of business models canvas learning on improving learning achievement and entrepreneurial intention. *Cakrawala Pendidikan*, 39(1), 168-182. doi:10.21831/cp.v39i1.28308.
- Isrososiawan, S. (2013). Peran Kewirausahaan Dalam Pendidikan. *Society*, 4(1), 26-49. <https://doi.org/10.20414/society.v4i1.329>.
- Jones, C., & English, J. (2004). A contemporary approach to entrepreneurship education. *Education + Training*, 46(8/9), 416-423. doi:10.1108/00400910410569533.
- Karimi, S., Biemans, J. A., Lans, T., Chizari, M., & Mulder, M. (2016). The impact of entrepreneurship education: A study of Iranian students' entrepreneurial intentions and opportunity identification. *Journal of Small Business Management*, 5(3), 299-307. doi:10.1111/jsbm.12137.
- Kruzic, D., & Pavic, I. (2010). Students' entrepreneurial characteristics: empirical evidence from Croatia. *The Business Review, Cambridge*, 14(2), 216-221.
- Kuckertz, A., Kollmann, T., Krell, P., & Stockmann, C. (2017). Understanding, differentiating, and measuring opportunity recognition and opportunity exploitation. *International Journal of Entrepreneurial Behavior & Research*, 23(1), 78-97. doi:10.2139/ssrn.2099011.
- Lackeus, M. (2014). An emotion based approach to assessing entrepreneurial education. *International Journal of Management Education*, 12(3), 374-396. doi:10.1016/j.ijme.2014.06.005.
- Lubis, P. K. D. (2018). Pengaruh Pendidikan Kewirausahaan dan Keterampilan Berwirausaha Terhadap Motivasi Berwirausaha Mahasiswa Pendidikan Ekonomi Universitas Negeri Medan. *Niagawan*,

- 7(2), 95–101. <https://doi.org/10.24114/niaga.v7i2.10756>.
- Marques, L. A., & Albuquerque, C. (2012). Entrepreneurship Education and the Development of Young People Life. *ACRN Journal of Entrepreneurship Perspectives*, 1(2), 55–68.
- Mulyani, E. (2011). Model Pendidikan Kewirausahaan di Pendidikan Dasar dan Menengah. *Jurnal Ekonomi Dan Pendidikan*, 8(1), 1–18. <https://doi.org/10.21831/jep.v8i1.705>.
- Muttaqien, I. (2019). Pengembangan entrepreneurship pada program MA keterampilan melalui inovasi model pembelajaran teaching factory di MAN 2 Kulon Progo. *Jurnal Pendidikan Madrasah*, 4(2), 231-242.
- Newman, A., M. Obschonka, S. Schwarz, M. Cohen, and I. Nielsen. (2019). “Entrepreneurial Self-Efficacy: A Systematic Review of the Literature on its Theoretical Foundations, Measurement, Antecedents, and Outcomes, and an Agenda for Future Research.” *Journal of Vocational Behavior* 110: 403–19.
- Othman, N. H., Othman, N., & Juhdi, N. H. (2020). Entrepreneurship Education And Business Opportunity Exploitation: Positive Emotion As Mediator. *Jurnal Cakrawala Pendidikan*, 39(2), 370-381.
- Pratomo, R. P. K., Mulyadi, H., & Utama, D. H. (2018). Pengaruh Pembelajaran Kewirausahaan terhadap Kesiapan Berwirausaha Siswa Kelas XII Pastry Sekolah Menengah Kejuruan Negeri 9 Bandung. *Journal of Business Management Education (JBME)*, 3(2), 67-77.
- Savickas, M. L. 2010. “Career Studies as Self-Making and Life Designing.” *Career Research and Development: The NICEC Journal* 23: 15–17.
- Short, J. C., Ketchen, D. J., Shook, C. L., & Ireland, R. D. (2010). The concept of “opportunity” in entrepreneurship research: Past accomplishments and future challenges. *Journal of Management*, 36(1), 40-65. doi:10.1177/0149206309342746.
- Sugiarto, J., Wismanto, Y. B., & Utami, C. T. (2015). Efektivitas pelatihan entrepreneurship skill untuk meningkatkan minat menjadi entrepreneur. *Prediksi*, 4(1), 51.
- Sumarti, S.S. (2008). Peningkatan Jiwa Kewirausahaan Mahasiswa Calon Guru Kimia dengan Pembelajaran Praktikum Kimia Dasar Berorientasi Chemo-Entrepreneurship. *Jurnal Inovasi Pendidikan Kimia*, 2(2): 305-311.
- Verdin, P., & Tackx, K. (2015). Are You Creating or Capturing Value? A dynamic framework for sustainable strategy. M-RCBG Working Paper Series, 36, 1-19.