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A CREATIVE MODEL OF ENTREPRENEURSHIP LEARNING TO IMPROVE SELF-EFFICACY, ENTREPRENEURIAL INTENTION, AND STUDENT ACHIEVEMENT

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Abstract. This study aims to produce a valid, practical and effective model of entrepreneurial learning to achieve human resources with high level of knowledge and entrepreneurial spirit, and it uses Albert Bandura's social cognitive theory and self-efficacy. Self-efficacy is someone's belief or confidence to implement a variety of activities based on the knowledge, experience and skills possessed. The study was conducted at State University of Medan, Indonesia and some small companies. The population was the whole 2016 classes studying entrepreneurship at State University of Medan and all the small businesses in Medan, North Sumatra, Indonesia. Four classes in the Faculty of Economics and four companies were selected by purposive random sampling. The development research method used: 1) initial investigation, 2) design, 3) realization (construction), and 4) testing, evaluation, revision. The sample was used for the application and experimentation of the learning model, and the companies were for students' internship/observation. The quality of the models was assessed using the indicators of validity, practicality, and effectiveness. The validity was tested by experts of instructional model. The effectiveness was measured by comparing 1) self-efficacy, 2) entrepreneurial intention, and 3) the improvement of learning achievement by Student's *t*-test. The research findings proved that the application of business-based entrepreneurial learning model can positively and significantly improve students' entrepreneurial intention, but it cannot improve the academic achievement of students.

Keywords: academic achievement, entrepreneurial intention, entrepreneurship learning, learning model, self-efficacy.

Introduction

Educational institutions have not been able to produce ready-made workers, in terms of knowledge and skills, and such workers very rarely are willing and able to create jobs. This condition worsens the high unemployment rate in Indonesia. Entrepreneurship education,

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which is expected to cultivate entrepreneurial intention, is still failing to perform its duties. This is because learning is more theoretical, just touching on the level of recognition of norms and values, and not getting to the level of internalization and real action in everyday life. Entrepreneurship learning basically involves learning about the values, abilities and attitudes involved in setting up and running a business as well as facing financial risks for the opportunity to make profit.

College, as an institution that teaches entrepreneurship, must be able to design entrepreneurship education that is capable of producing knowledgeable, skilled, creative, innovative, dare-to-take-risks, and tough entrepreneurs, who strive to open a business and provide employment in addition to filling a need that exist professionally. Entrepreneurship learning should be able to instill attitudes, intentions and entrepreneurial character in the learners, and they should be able to apply it in the form of establishment and development of business later.

The contribution of entrepreneurial knowledge becomes more important, because according to Hisrich et al. (2012), individuals who have a strong intention to have a business when they feel capable of running the business and their desire to carry out the business activities. The level of knowledge that individuals owned will determine the intention of someone to entrepreneurship. According to West III and Noel (2009), there are three types of knowledge that are considered important for new business: (1) about business positions where competing, (2) on the type of business approach being pursued, and (3) about creating, building and harvesting new ventures. Then according to Hindle (2007), student's entrepreneurial knowledge can be measured by indicators such as; knowledge of marketing, sales, behavior, strategy, business development, opportunity analysis, accounting and finance, creativity, and business planning. All of the indicators above are the knowledge that an entrepreneur needs. Business-based entrepreneurial learning plays an important role in promoting the development of entrepreneurial intention. Because business-based entrepreneurial learning will provide entrepreneurial knowledge about how to plan, execute and develop the business and character required by an entrepreneur. This study aims to produce a valid, practical and effective model of entrepreneurial learning to achieve human resources with high level of knowledge and entrepreneurial spirit.

1. Review of literature

The foundation used to design the development of entrepreneurial learning models in this study is Bandura's cognitive social theory. The power of Bandura's theory lies in the ability to form self-efficacy. According to Bandura,

> "efficacy is a major basis of action. People guide their lives by their beliefs of personal efficacy. Self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (1997, p. 3).

Self-efficacy is a belief that encourages individuals to do and achieve something. Self-efficacy builds the extent to which a person believes he has the knowledge, skills and abilities to deal with adversity. Bandura's social cognitive theory assumes that everyone can be an

agency in motivating oneself to perform various jobs or actions. "Efficacy is a self-assessment, whether it can do good or bad, right or wrong, can or can not do as required" (Alwisol, 2011, p. 289). Confidence in self-efficacy affects choice, aspiration, mobilization, perseverance, cognitive ability, and challenge level (Bandura & Locke, 2003).

Bandura's cognitive social theory was used to design the development of entrepreneurial learning models in this study. The power of Bandura's theory lies in its ability to develop self-efficacy. Self-efficacy is a belief that encourages individuals to do things and achieve their goals. Self-efficacy refers to the extent to which a person believes he has the knowledge, skills and abilities to deal with adversity. Bandura's social cognitive theory assumes that everyone can be an agency in motivating himself to perform various jobs or actions.

According to Myers (2012), self-efficacy directs us to a bunch of challenging targets and not giving up on them. Wahyu Handaru et al. (2014) stated that self-efficacy has a positive and significant impact towards entrepreneurial intention. Self-efficacy is only one small part of the whole complex picture of human life, but it can provide a better understanding regarding life in terms of human ability (Hutasuhut, 2018).

There are four sources of information that make important contributions to the development of self-efficacy: (1) the experience of personal success (enactive mastery experiences) or previous experiences, (2) the experience of the success of others modeled (vicarious experiences), (3) social praise and awards (verbal persuasion and other related social recognitions), and (4) physiological and affective states or physiological feedback (Hendricks, 2016).

Looking to the future, it is important that entrepreneurship be given more priority at a political level so that teachers will include it in their skillsets. More funding for schools and teachers would be beneficial to encourage the uptake of entrepreneurial skills (Zinovyeva & Hayward, 2021). A team of teachers carried out some specific activities aimed to help students develop self-efficacy and self-esteem. In organising entrepreneurial initiatives it is fundamental to raise students' aspirations by making them realise that they "can open all doors" and by equipping them with needed life skills (Masgrau & Sutherland, 2016).

Segal et al. (2005) said that the determination to succeed (self-efficacy) is an important predictor of entrepreneurial performance. Furthermore, Olusola (2011) add self-efficacy is very important to improve business performance. In the field of education, self-efficacy also has a positive effect on learning outcomes. Hughes (2011) and Mahyuddin et al. (2006) prove the efficacy of self affect the academic performance. From the empirical evidence it can be concluded that the self-efficacy conclusively affect the business performance and learning outcomes.

Entrepreneurship learning should be able to improve self-efficacy. With higher self-efficacy (self-assurance), learners will increase their ability to bear risk. Business ideas will arise when the learning involves direct interaction with real-world business by being directly involved in management. Interaction with the business world will bring inspiration and intention because students have to know how exactly a business is run, the obstacles and challenges faced while running a business, and the business opportunities that exist. This is a personal experience that students need to have. Learning interactions can also be achieved by presenting successful entrepreneurs (models) in the classroom in order to inspire students. Personal experience (from the business world) and the success experiences of others

(models) are two of the four sources of information that make up self-efficacy. Self-efficacy increases the confidence to carry out various activities and overcome problems or challenges that arise, such as learning problems and the courage to take risks in dealing with challenges.

This research aims to produce a valid, practical and effective entrepreneurship learning model that produces excellent graduates and creates a creative, innovative, and brave mental attitude to bear the risk of managing one's potentials and environment, which is a requirement of becoming an entrepreneur. The results of this study are expected to enrich the model of entrepreneurial learning that is currently used. Also, the findings are expected to serve as a reference to economic and educational institutions in designing entrepreneurial learning that effectively creates entrepreneurs. In addition, this research produces entrepreneurship teaching materials.

2. Research methodology

This research uses development research method by adopting Plomp model in Susiari Tantri and Mas Dewantara (2018). The development research method consists of: 1) initial investigation, 2) design, 3) realization (construction), and 4) testing, evaluation, revision. The quality of the models was assessed using the indicators of validity, practicality, and effectiveness. The validity was tested by experts of instructional model. The effectiveness was measured by comparing 1) self-efficacy, 2) entrepreneurial intention, and 3) the improvement of learning achievement by Student's *t*-test.

The research population in this study are all entrepreneurship classes in State University of Medan in 2016 and all small-scale businesses in Medan City during the period of 14 December, 2018 – 28 December, 2018. The class sample comprises four classes (109 students) in the Faculty of Economics, and the company sample also comprises four small companies in Medan; the four classes and four companies were determined by purposive random sampling.

According to Etikan et al. (2016), data gathering is crucial in research, as the data is meant to contribute to a better understanding of a theoretical framework. It then becomes important that selecting the manner of obtaining data and from whom the data will be acquired be done with sound judgment, especially since no amount of analysis can make up for improperly collected data.

Two of the selected classes were used as experimental class, while the other two classes were used as control. The class sample was used for applying and testing the learning model, while the company sample was used as a place of apprenticeship or student observation and employer origin. They serve as a model for teaching in the class, with as many as five meetings with different entrepreneurs.

3. Model quality indicator

To assess the quality of the learning model, the curriculum quality criteria proposed by Nieveen and Folmer (2013) were used, namely (a) validity, (b) practicality, and (c) effectiveness.

Table 1. Model quality testing (source: created by authors)

Rated aspect	Instrument	Evaluator	It is rated	Criteria
Model validity, devices and instruments	The validation sheet	Model expert	Leason plan, teaching materials, student worksheet, and measurement instrument of entrepreneur interest and learning achievement	Theoretically, the model can be done well
Model practicality	Observation sheet	Observer	Implementation in class	Works well in class
Model effectiveness	Test	Subject of research	Entrepreneurial intent and learning achievement	Increased intention of entrepreneur and student achievement
	Observation sheet	Observer	–	–
	Questionnaire respondents	Subject of research	–	–

The conduct of model quality testing is presented in Table 1 above; it consists of "rated aspect", "instrument", "evaluator", "it is rated" and "criteria".

4. Data analysis

1. Validity

Business-based entrepreneurial learning model (BBELM) is said to be valid if it meets the following criteria:

a. More than half (50%) of the validators stated that learning was based on strong theories;
b. Over half (50%) of the validators stated that the components of the learning model are consistently interrelated;
c. The results of the experiment show that the components of the learning model are interrelated (see Ratumanan, 2004; Sarwedy, 2018).

2. Practicality

BBELM is said to be practical if it meets the following criteria:

a. More than half (50%) of the validators are of the opinion that the learning model can be applied in the classroom;
b. Lecturers claim to be able to apply the model of learning in the classroom;
c. The level of implementation of the learning model should be high;

The criteria for the implementation of the model are as follows:

$KM \geq 90\%$ = very high;
$80\% \leq KM < 90\%$ = high;
$70\% \leq KM < 80\%$ = medium;

60% ≤ KM < 70% = low;
KM < 60% = very low.

Note: KM = model implementation (see Ratumanan, 2004; Sarwedy, 2018).

3. Effectiveness

The effectiveness of the model is seen in the student entrepreneurial intent and the learning outcomes of entrepreneurship courses. To determine whether there is an increase in self-efficacy, entrepreneurial intent and student learning achievement, the variance of the experimental class values was compared with that of the control class values. The data analysis involved Student's *t*-test and previously tested normality and homogeneity of data.

5. Results

5.1. Model needs analysis

Institutions of higher education in Indonesia have not been effective in producing graduates that are capable and ready to become entrepreneurs. Searches on various sources about entrepreneurial learning indicates that entrepreneurial learning is still limited to cognitive delivery, and the learning process only takes place in the classroom. Therefore, we need to create an entrepreneurial learning model that can improve self-efficacy, entrepreneurial intention and entrepreneurship knowledge of students.

The materials taught in entrepreneurial learning are presented in Table 2 below.

Table 2. Entrepreneurship competencies and materials (created by authors)

No.	Basic competencies	Material
1	Describing the concept of entrepreneurship	The concept of entrepreneurship; understanding entrepreneurship, understanding entrepreneurs, why you should have the character of an entrepreneur, whether you can become an entrepreneur, how to learn entrepreneurship.
2	Describing entrepreneurship competencies	Entrepreneurship competencies; the concept of entrepreneurial competence, the type of entrepreneurial competence.
3	Identify entrepreneurial character	Entrepreneurial character; attitudes and entrepreneurial profile, entrepreneurial traits, some of the weaknesses of Indonesian entrepreneurs.
4	Finding opportunities, developing creativity and SWOT (strengths, weaknesses, opportunities, threats) analysis	Opportunities, creativity and SWOT analysis; understanding ideas, creativity, managing creativity, creativity development and SWOT analysis.
5	Making business planning	Business planning; preparing business planning, engineering and business management, start-up measures.

5.2. Learning design

Regarding the assessment of model experts on the syntax of the learning model, three experts gave a positive opinion and stated that it can be used to test the quality of the learning model developed.

Students' response to the tool and learning implementation of BBELM is very good: 88% were happy, and only 12% expressed displeasure. All students (100%) expect or are interested in further learning using the same tools and learning execution.

Furthermore, regarding students' responses to the use of language in the module, student worksheet and learning outcome test, 95% stated that it was clear. Also, with respect to students' responses to the intent of each problem presented in the module, student worksheet and learning outcome test, 87% stated that they understand it. This means that the three learning devices used in the research activities of entrepreneurial learning model are very good because the language used can be understood well.

The reaction principle of the model is seen from a) the implementation of learning in the classroom and b) the practitioner/lecturer's response to the learning tool. Based on observation, the ability of the entrepreneur to function as a lecturer in teaching students in the classroom is in the "good category". Also, the core activities, closing, and management of the learning time is also in the "good category". It is interesting that the use of entrepreneurs as lecturers in the class category is "very good" because it can create a conducive class atmosphere. Although entrepreneurs do not have the knowledge of teachers, they can create a conducive atmosphere. This is because they are able to share their experiences about the joys and sorrows and their struggles in running the business to success.

Furthermore, the response of entrepreneurs to the learning model developed is that the assessment of instructional tools and category test instruments are excellent; the learning tools and assessment instruments are also excellent. According to the entrepreneurs, the advantages of the developed learning model are that it can motivate the students to become more creative and it can increase students' confidence that they would later become entrepreneurs. The instruments used to test the validity of the model are systems, applications, and products in data processing (SAP), student worksheet, and measurement instruments of entrepreneurial intent and learning achievement. The results are shown in Table 3.

Table 3. The results of the validator's assessment of the business-based entrepreneurial learning model (source: created by authors)

Rated aspect	Conclusion of validator			Information
	1	2	3	
Systems, applications, and products in data processing	Good	Good	Good	Valid
Microfinance institutions	Good	Good	Good	Valid
Achievement test	Good	Good	Good	Valid
Interest in entrepreneurship test	Good	Good	Good	Valid

5.3. Model practicality

The practicality of using BBELM in the classroom can be seen from the learning scenario in the classroom. The results of observations indicates that, generally, entrepreneurs do not use the student worksheet as a means of learning. This is because employers use lecture methods and methods of discussion more than other interactive methods, such as the method of assignment. The level of implementation of 80% for BBELM is in the high category. This is more clearly presented in Table 4.

Table 4. Results of observers' assessment of the model's practicality (source: created by authors)

Rated aspect	Observer			Conclusion
	1	2	3	
Implementation in class	Can be implemented	Can be implemented	Can be implemented	Can be implemented in class
Level of implementation in class	85%	80%	85%	High

5.4. Model effectiveness

The instrument used to measure entrepreneurial learning achievement is a matter of choice. Prior to serving as an evaluation tool, instrument validity and reliability tests were done. Regarding the result of 30 tested questions, there were 25 validly stated questions. The result of the instrument reliability test of entrepreneurship learning achievement is 0.737 (> 0.60), which means that the prepared questionnaire meets the reliability requirement.

Furthermore, self-efficacy and entrepreneurial intention were determined as a means of collecting data. The results are presented in Table 5.

Table 5. The results of the instrument validity and reliability tests (source: created by authors)

SELF-EFFICACY (SE)			ENTREPRENEURIAL INTENTION (EI)		
Instrument	Corrected item-total correlation	Cronbach's alpha	Instrument	Corrected item-total correlation	Cronbach's alpha
SE1	.656	.880	EI1	.802	.912
SE2	.726		EI2	.783	
SE3	.801		EI3	.684	
SE4	.803		EI4	.769	
SE5	.746		EI5	.824	
SE6	.386		EI6	.681	
SE7	.702				
SE8	.501				

Furthermore, the data quality test was done by normality and homogeneity tests, and the results are presented in Table 6 below.

Table 6. Test results for normality and homogeneity of research data (source: created by authors.)

– Aspect	– Components tested	– Result – Kolmogorov–Smirnov test	– Conclusion
– Normality	– Self-efficacy of the experimental class	– Coefficient significance 0.200 > 0.05	– Data is normally distributed
	– Self-efficacy of the control class	– Coefficient significance 0.070 > 0.05	– Data is normally distributed
– Normality	– Entrepreneurial intention of the experimental class	– Coefficient significance 0.200 > 0.05	– Data is normally distributed
– Entrepreneurial intention of the control class		– Coefficient significance 0.200 > 0.05	– Data is normally distributed
– Learning achievement of entrepreneurship experimental class		– Coefficient asymptotic significance (2-tailed) 0.085 > 0.05	– Data is normally distributed
– Learning achievement of entrepreneurship control class		– Significance (2-tailed) 0.200 > 0.05	– Data is normally distributed
– Homogeneity	– Self-efficacy	– Coefficient significance 0.767 > 0.05	– Homogeneous data
	– Entrepreneurial intentions	– Coefficient significance 0.076 > 0.05	– Homogeneous data
	– Achievement of entrepreneurship learning	– Significance – 0.133 > α 0.05	– Homogeneous data

The data in Table 6 show that self-efficacy, entrepreneurial intent and learning achievement have normal distributed and homogeneous data. Then, the effectiveness of the learning model is seen in the improvement of self-efficacy, entrepreneurial intention and entrepreneurship learning achievement in the experimental class compared with the control class. The result is presented in Table 7, as follows.

Table 8 shows that there are significant differences in self-efficacy between the experimental class students applying business-driven entrepreneurial learning and the control class students, where significance (2-tailed) value is 0.005 < 0.05. Similarly, there is a significant difference in student entrepreneurial intention between the experimental and control classes. However, there is no difference in learning achievement between the experimental and control classes. The self-efficacy of the experimental class students was 5.91% higher than that of the control class students, and the entrepreneurial intention of the experimental class students was 6.91% higher than that of the control class students. However, for the learning achievement, there was no significant difference between the experimental and control classes, even though the entrepreneurial learning achievement of the experimental class was slightly higher than that of the control class.

The results of this research proves that the BBELM can produce graduates who are superior and have the confidence to become entrepreneurs someday.

The readiness of the students to become entrepreneurs based on the criteria set by Suryana and Bayu (2011) is presented in Table 9. In the experimental class, 3.22% of students fall within the "ready to become entrepreneur" category, while in the control class, a slightly

Table 7. Hypothesis testing results (source: created by authors)

INDEPENDENT SAMPLES *T*-TEST							
		Levene's test for equality of variances		*t*-test for equality of means			
		F-value	Significance	t-count	Significance (2-tailed)	Mean difference	Standard error difference
Self-efficacy	Equal variances assumed	.021	.885	2.833	.005*	1.84431	.65111
	Equal variances not assumed			2.835	.005	1.84431	.65066
Entreneurial intention	Equal variances assumed	2.801	.097	2.725	.007*	2.64226	.96954
	Equal variances not assumed			2.643	.010	2.64226	.99960
Learning achievement	Equal variances assumed	2.290	.133	1.352	.179	1.85518	1.37248
	Equal variances not assumed			1.315	.192	1.85518	1.41128

Note: *significance < 0.01.

Table 8. Self-efficacy, entrepreneurial intent and entrepreneurship learning achievement (source: created by authors)

Aspect	Experimental class	Mean	Control class	Mean	Differences (%)
Self-efficacy	31.65	4.30	29.89	4.27	5.91
Entrepreneurial intention	34.21	4.89	32.00	4.52	6.91
Average achievement of entrepreneurial learning	69.39	–	67.53	–	2.75

Table 9. Description of self-efficacy and entrepreneurial intention data (source: created by authors)

	Number	Mean	Standard deviation	Minimum	Maximum
Self-efficacy of the experimental class	73	31.6712	3.59419	21.00	39.00
Self-efficacy of the control	52	29.8269	3.57947	22.00	37.00
Entrepreneurial intention of the experimental class	73	34.2192	4.91383	23.00	42.00
Entrepreneurial intention of the control	52	31.5769	5.89565	19.00	42.00

higher value of 4.26% is recorded. However, the category of "ready to become entrepreneur plus education" of the experimental class (BBELM) is much higher compared with the control class, 46.77% and 25.53% respectively. In contrast, the experimental class category of "fits into a good worker" is 50% lower than that of the control class, 70.21%.

Discussion

Entrepreneurship learning has been prioritizing cognitive achievement, but it has not been directed to instil entrepreneurial intention in students. Entrepreneurship is viewed as a science that should be studied and has not yet been directed to understanding the details of business both in terms of soft and hard skills, so students have not been able to take advantage of opportunities that exist in the vicinity in creating their own business after graduation or while still in college.

The contribution of entrepreneurial knowledge becomes more important, because according to Hisrich et al. (2012), individuals who have a strong intention to have a business when they feel capable of running the business and their desire to carry out the business activities. The level of knowledge that individuals owned will determine the intention of someone to entrepreneurship. According to Roxas (2014), entrepreneurship education is significantly increased. Entrepreneurial knowledge needs to be developed to keep students confident and willing to engage in entrepreneurship. Entrepreneurship education has played an important role in promoting the development of entrepreneurial intention. Because entrepreneurship education will provide entrepreneurial knowledge about how to plan, execute and develop the business and character required by an entrepreneur (Hutasuhut, 2018).

From the perspective of teachers, they generally still organize classroom-based learning. It is rare for teachers to link learning between the campus and business world, so students have no practical experience about the business world. The situation will be different if students have direct knowledge and practical experience from the business world. Such practical experience will build student confidence that they would be capable of running a business. The learning process is also generally still centered on lecturers, and students tend to be passive. Learning is generally class-based, and the real world has not been used as a learning resource. To develop creative and innovative students and provide practical experience of business management, entrepreneurial learning should be designed to make students more active (based on learners), and the business world and entrepreneurs should be used as sources of learning.

Students' responses to the tools and implementation of the BBELM were very good: 88% expressed their delight; 89% stated that the development model implemented was new, and 100% of the students suggested that a similar learning approach should be applied to subsequent learning. The student's responses to the module, student worksheet and learning outcome test were also very good, with the view that they can help in the learning process.

Based on observation, the ability of entrepreneurs to manage learning in the classroom during opening lessons, core activities, and closing as well as their ability to manage learning time is good, so the selection of five entrepreneurs as lecturers is very appropriate.

Regarding the BBELM, the validity analysis of three model experts given in data analysis and Table 3 indicates that SAP, instructional materials/modules, student worksheets, and the measurement instruments of entrepreneurship, and learning achievement are generally good and can be used. Only the student worksheet requires revision. The student worksheets presented are still too simple, yet they demand the students to be more creative. Regarding the analysis of the practicality of using the BBELM in the classroom based on the existing learning scenario, all entrepreneurs were able to carry it out according to the scenario, and the level of implementation reached 80%. The aspect that is outstanding is the use of student worksheets as a medium of learning; entrepreneurs are more likely to use lecture and discussion than assignment.

The BBELM effectively increases the entrepreneurial intention by 4.78%. As explained earlier, apprenticeship can enrich previous experiences or personal successes (enactive mastery experiences) of students. It can also enrich their experiences of the success of others who are modeled (vicarious experiences), in this case entrepreneurs as lecturers. Both experiences can shape students' self-efficacy, according to Bandura.

The differences in the ability of a person to read their minds and observe their environment influenced the level of self-efficacy possessed. A high self-efficacy gives more confidence to overcome problems; it makes one more confident and daring to take risks. In other words, self-efficacy acts as a human capacity-building machine. Therefore, if a person has high self-efficacy, he is highly motivated and even shows extreme views in the face of a difficult situation.

Based on Bandura's social cognitive theory, the students' experience of managing a business, through apprenticeship in companies and entrepreneurs who become lecturers or models that can be observed, will be a source of self-confidence (self-efficacy) that they will also become entrepreneurs later. If entrepreneurs are able, students also feel capable of success as entrepreneurs. This condition will improve students' self-efficacy. In turn, the self-efficacy that is formed will increase confidence in one being able to overcome the problems encountered, including problems in learning. Learning through a model can trigger a sense of self-efficacy if the model is considered the same as the student. The model used can be an expert, practitioner (entrepreneur), teacher, or even student.

Based on the above description, it can be concluded that business-based entrepreneurial learning can improve the self-efficacy and entrepreneurship intention of students. The results of this research support the research of Kaijun and Sholihah (2015), who stated that entrepreneurship education has a significant direct impact on the entrepreneurship intention of Chinese students while having no significant direct effect on students in Indonesia. A recent research by Nowiński et al. (2019) proves that entrepreneurship education has a positive and significant impact on the entrepreneurial intention of Polish students.

According to the results obtained on learning achievement of entrepreneurial learning, there is a difference of 2.75%. The experimental class taught by employers had a higher value than the control classes taught by lecturers. However, statistically, business-based entrepreneurial learning is not proven to be significantly different from entrepreneurship learning achievement. In the context of this study, there is no difference in the abilities of entrepreneurs and lecturers in delivering the material.

The analysis of student entrepreneurial intention based on the criteria made by Suryana and Bayu (2011) is presented in Table 8. It was known before the implementation of BBELM that no student was ready to become an entrepreneur. Even after the implementation of the BBELM, only three students changed their minds and were ready to become entrepreneurs with the necessary education. This condition illustrates that although BBELM proved to significantly increase entrepreneurial intention, it did not necessarily make students ready for entrepreneurship. Therefore, this research needs to be continued to find a valid and optimal model that would increase entrepreneurial intention and give birth to students who are ready to become independent entrepreneurs.

Conclusions

Based on the findings of this study, it can be concluded that business-based entrepreneurial learning is feasible based on theoretical studies, syntax, reaction principles, and instructional/accompanying impacts. The application of business-based entrepreneurial learning significantly increased students' self-efficacy and entrepreneurial intention; entrepreneurship educators can use business-based entrepreneurial learning as a way to improve self-efficacy and entrepreneurial intention. Also, the application of business-based entrepreneurial learning is not proven to significantly improve entrepreneurship learning achievement. It still needs to be improved by testing the classes in various fields of science.

Regarding the BBELM, the validity analysis of three model experts given in data analysis and Table 3 indicates that SAP, instructional materials/modules, student worksheets, and measurement instruments of entrepreneurship and learning achievement are generally good and can be used. Only student worksheet requires revision. The student worksheets presented are still too simple, yet they demand the students to be more creative. Regarding the analysis of the practicality of using BBELM in the classroom based on the existing learning scenario, all entrepreneurs were able to carry it out according to the scenario, and the level of implementation reached 80%. The aspect that is outstanding is the use of student worksheets as a medium of learning; entrepreneurs are more likely to use lecture and discussion than assignment.

The BBELM effectively increases the entrepreneurial intention by 4.78%. As explained earlier, apprenticeship can enrich the previous experiences or personal successes (enactive mastery experiences) of students. It can also enrich their experiences of the success of others who are modeled (vicarious experiences), in this case entrepreneurs as lecturers. Both experiences can shape students' self-efficacy, according to Bandura. Thus, this research needs to be continued to find a valid and optimal model that would increase entrepreneurial intention and give birth to students who are ready to become independent entrepreneurs.

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