The Problems and Alternative Solutions for the Implementation of Entrepreneurship Education in the Higher Education: A Literature Review

Gunawan Adnan1*, Lailatussaadah2-3, Asyraf Isyraqi Bin Jamil4, Misbahul Jannah5, Buhori Muslim1, Erfiati6,7
1Department of Arabic Education, Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia
2Doctoral Program of Islamic Education, University of Malaya, Malaysia
3Department of Islamic Education Management, Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia
4Department of Islamic Education, University of Malaya, Malaysia
5Department of Physics Education, Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia
6Doctoral Program of Islamic Education, Universitas Islam Negeri Ar-Raniry Banda Aceh, Indonesia
7State Islamic Senior High School 1 Banda Aceh, Indonesia

Abstract: This study aimed to find some problems in implementing entrepreneurship education at higher education (university). The method used in this study was the literature review by searching articles on electronics journal database. The databases used in this study were Jstor, Sage, Proquest, Elsevier, Emerald, Insight, Springer Plus, and Google Scholars from 2003 to October 2019. Fifteen articles were found using five keywords: entrepreneurship education, entrepreneurial, unemployment, job seeker, and job creator. The data were analyzed by collecting the related articles, reducing them based on the topic discussion, displaying the data, and concluding. It was found that there were some problems faced during the implementation of entrepreneurship education. Thus, it can be concluded that the bigger the problem in the implementation of entrepreneurship education, the more extensive necessitate for the alternative formula. It is urged that further studies be conducted to expose more detailed comparisons between the problems found within the country and abroad. This action is considered as the foundation of a better service.

INTRODUCTION
The concern regarding the low entrepreneurship interest among students and youth have been felt by various parties, especially the universities (Arumdani & Purwanto, 2017; Dzulfikri & Kusworo, 2019; Patricia & Silangen, 2016). This concern made the government fail to achieve four million new entrepreneurs in Indonesia.

Fulfilling the entrepreneur quota has become a big problem that must be settled strategically. Therefore, the higher education institutions continue to improve to implement the education that can realize the government's aspirations in producing young intellectual entrepreneurs. The institutions also strive to dismiss the notion that universities are producers of intellectual unemployment (Lailatussaadah, 2016; Mahdi, 2016; Mujia, 2018; Nur, 2018).
entrepreneurship education that a creative-oriented curriculum and entrepreneurial formation need to be developed in education. The curriculum needs to be oriented towards (1) forming competencies so that graduates become individual visionaries, (2) facilitating and intensifying the skills and creativity, and (3) containing a balanced program between arts and social sciences. To realize this idea, universities should initiate entrepreneurial knowledge of business and industry into the academic community (Supriyanta, 2014). Meanwhile, Pratikto (2011) argues that the education sector has a strategic role in increasing entrepreneurial competence.

This study complemented the previously done research. Previous researchers have described entrepreneurship education carried out in tertiary level institutions as a whole, including the implementation of objectives, methods, constraints, and ideas (N. Hidayah, 2016; Milla, 2013; Sentoso, 2012). However, all previous research did not describe the problem in detail and comprehensive. Zubaedi (2015) argued that entrepreneurship education should be implemented in Islamic universities because they need to reverse their mindset from employee-oriented to employer-oriented. The same thing was stated by Hidayah (2015) that universities need to direct their graduates to become job creators, not job seekers.

In line with Zubaedi and Hidayah, entrepreneurship-based curricula at private Islamic colleges need to be implemented to build competent students who can develop soft skills and hard skills. Thus, they can be young entrepreneurs who create jobs and will ultimately reduce unemployment and poverty gradually and sustainably (Subandi, 2015).

Furthermore, Prastyaningtias & Arifin (2019) state that implementing entrepreneurship education is to utilize digital technology to form students' entrepreneur character building in the industrial revolution era. Mujati (2018) states that universities are expected to play a role in encouraging students to recognize and want to become job creators.

The job seeker-oriented mindset and behavior will be changed to be entrepreneur-oriented. Entrepreneurship education can change students' mindset to realize that entrepreneurship is more profitable than being an employee.

Therefore, a more detailed discussion is needed regarding implementing entrepreneurship education in tertiary institutions and alternative solutions from the various articles that have been provided so that it can contribute to reducing real problems.

METHOD

The articles were searched electronically using a database, namely Sage, Science Direct, Proquest, Elsevier, Emerald Insight, Springer Plus, and Google Scholar from 2003 to 2019. The time duration was selected was due to the rapid discussion of entrepreneurship education in various journals. Search for articles is carried out using the keywords entrepreneurship education, entrepreneurial, unemployment, job seekers, and job creators.

There were fifteen journal articles selected based on the topic of discussion. The articles had been reviewed and sorted according to this study's purposes, which were to find problems in implementing entrepreneurship education in tertiary institutions and alternative solutions. The articles were used as the sample to be further identified. The articles that corresponded to the objectives of this study are presented in the table.

The reviewed articles consisted of 15 articles regarding implementing entrepreneurship education in public, private, Islamic, domestic, and overseas universities. Six articles came from Scopus indexed journals, and nine others
were not indexed by Scopus and the Web of Science. The articles were then reviewed to identify the problems in implementing entrepreneurship education in tertiary institutions and alternative solutions. The research procedure is presented in Figure 1.

**Figure 1.** Research Procedure

**RESULT AND DISCUSSION**

The literature review found fifteen journal articles with nine general problems in implementing entrepreneurship education in tertiary institutions. The problems are that the entrepreneurship education has not been integrated into the curriculum, the students' poor entrepreneurial mindset, the low competence of human resources (teachers of entrepreneurship courses), lack of funding to support the implementation of entrepreneurship education, program failure, and limited creation of entrepreneurship education-based programs, lack of facilities and infrastructure, lack of leadership commitment, lack of partners and limited ability to create networks, lack of government financial support or programs, the and the constrained mastery of general competencies (foreign language skills). The problems can be described in Table 1.

**Table 1.** Presentation of Articles Related to the Problems of the Implementation of Entrepreneurship Education in Higher Education

<table>
<thead>
<tr>
<th>No</th>
<th>Researcher, Year, and Journal</th>
<th>Title</th>
<th>Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Katz, 2003), Journal of Business Venturing</td>
<td>The chronology and intellectual trajectory of American entrepreneurship education 1876-1999</td>
<td>The main problems in the implementation of entrepreneurship education in America are the abundant availability of journals, a narrow focus of top publications, potential stagnation, lack of scholarship, and lack of Ph.D programs.</td>
</tr>
<tr>
<td>2</td>
<td>(Siswoyo, 2009), Faculty of Economics, Universitas Negeri Malang</td>
<td>Development of entrepreneurial spirit among lecturers and students</td>
<td>Someone with a high degree of education has a lower entrepreneurial spirit. Most college graduates are better prepared as job seekers than job creators. Some programs cannot run due to a lack of human resources and funding. The internship program is constrained by funding and commitment from the head of the study program. Inadequate human resources and facilities do not support the Incubator program. The lecturers need strengthening in the form of education, training, and apprenticeship. The training is carried</td>
</tr>
<tr>
<td>No</td>
<td>Researcher, Year, and Journal</td>
<td>Title</td>
<td>Problems</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>3</td>
<td>(Pratama, 2010), Binus Business Review</td>
<td>Looking for entrepreneurship teaching model in higher education</td>
<td>The obstacle in implementing entrepreneurship education is the students' mindsets, who believe it is costly and takes a long time.</td>
</tr>
<tr>
<td>4</td>
<td>(Rae et al., 2012), Education and Training</td>
<td>International entrepreneurship education: Postgraduate business student experiences of entrepreneurship education</td>
<td>The challenges are related to students' expectations, the university's supports, and the broader economic and political context.</td>
</tr>
<tr>
<td>5</td>
<td>(Wiratno, 2012), Journal of Education and Culture</td>
<td>The implementation of entrepreneurship education in higher education institutions</td>
<td>Preparation and implementation of entrepreneurship programs and the role of new units that function and serve as managers of entrepreneurial programs are not optimal. Limited facilities and infrastructure, working partners, funds, and competent lecturers are needed to foster entrepreneurial skills.</td>
</tr>
<tr>
<td>6</td>
<td>(Sipitanou &amp; Papagiannis, 2013), International Journal of Arts &amp; Sciences (Küttim et al., 2014), Procedia Sozial and Behavioral Sciences</td>
<td>Education, entrepreneurship and entrepreneurial activation: A challenge for all</td>
<td>The implementation of entrepreneurship education is constrained by not being fully integrated into the curriculum.</td>
</tr>
<tr>
<td>7</td>
<td>(Küttim et al., 2014), Procedia Sozial and Behavioral Sciences</td>
<td>Entrepreneurship education at university level and students</td>
<td>Limited resources and learning methods since the lecturers use lecturing and seminar methods.</td>
</tr>
<tr>
<td>8</td>
<td>(Solesvik et al., 2014), Education and Training</td>
<td>Cultural factors and entrepreneurial intention: The role of entrepreneurship education</td>
<td>Students' poor entrepreneurship mindset is caused by the trust in local culture factor. Thus, they were given the Entrepreneurship Specific Education (ESE)</td>
</tr>
<tr>
<td>9</td>
<td>(Lubis, 2015), International Journal of Arts &amp; Sciences</td>
<td>The “TRIPLE-I” learning model of entrepreneurship education in Indonesia: Where do we go from here?</td>
<td>Funding from the government, the mastery of foreign languages, and human resources' commitment are lacking.</td>
</tr>
<tr>
<td>10</td>
<td>(N. Hidayah, 2016), Islamicomic: Journal of Islamic Economics and Business</td>
<td>Initiates entrepreneurship-based education in Islamic higher education: Case study of the faculty of sharia and Islamic economics IAIN &quot;SMH&quot; Banten 2014-2015</td>
<td>The curriculum is not fully entrepreneurial. Students are equipped with competencies and skills to fill professions such as managers, lecturers, researchers, and sharia supervisory board. However, they are not prepared to have an entrepreneur profession.</td>
</tr>
<tr>
<td>11</td>
<td>(Eriawati &amp; Fitrilanti, 2016), Profit Journal</td>
<td>The role of entrepreneurship subjects in fostering the entrepreneurial spirit of economic education students</td>
<td>The obstacle to implementing entrepreneurship education is that there are students who do not dare to face risks.</td>
</tr>
<tr>
<td>12</td>
<td>(Indrayani, 2017), BISMA (Business Researcher, Year, and Journal</td>
<td>The influence of entrepreneurship education on the students of private universities in Surabaya are having trouble</td>
<td></td>
</tr>
</tbody>
</table>

352 | Tadris: Jurnal Keguruan dan Ilmu Tarbiyah 5 (2): 349-361 (2020)
<table>
<thead>
<tr>
<th>No</th>
<th>Researcher, Year, and Journal</th>
<th>Title</th>
<th>Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>(Suprapto, 2018), Didaktis: Journal of Education and Science</td>
<td>Technology-based entrepreneurship learning strategies</td>
<td>The obstacle faced by lecturers in learning entrepreneurship is the students’ lack of understanding regarding entrepreneurship. They do not yet have entrepreneurial material and procedures for building a business network.</td>
</tr>
<tr>
<td>14</td>
<td>(Parhana, 2019), Journal of Islamic Education Andragogy</td>
<td>Entrepreneurship for students: Between business and living needs (Case study at STIT Al-Amin Kreo, Tangerang)</td>
<td>The obstacles in implementing entrepreneurship education are limited capital, limited time, and chaotic initial business management.</td>
</tr>
<tr>
<td>15</td>
<td>(Varblane &amp; Mets, 2010), Journal of Enterprising Communities: People and Places in the Global Economy</td>
<td>Entrepreneurship education in the higher education institutions (HEIs) of post-communist European countries</td>
<td>The problems of entrepreneurship education in eastern and northern European countries consist of limited entrepreneurship education, limited research-oriented entrepreneurial education models, and being held by new and private universities. A further obstacle is the lack of courses related to entrepreneurship and the lack of text and content presented for comparison with other core management subjects. Furthermore, the implementation of entrepreneurship education is also constrained by foreign language mastery. The national language of the country dominates several leading business schools. There is a gap between technical and management skills, and there is a lack of collaboration between the two entities. Several colleges focus on necessary skills and conventional education models. These institutions cannot include a curriculum that focuses on attitudes and behaviors development as a substitute for entrepreneurship. Furthermore, rapid changes force business schools to respond.</td>
</tr>
</tbody>
</table>

The data in the Table 1 can be categorized as problems in implementing entrepreneurship education. There are nine obstacles found, namely the entrepreneurship education has not been integrated into the curriculum, the students' poor entrepreneurial mindset, the low competence of human resources (teachers of entrepreneurship courses), lack of funding to support the implementation of entrepreneurship education, program failure and limited creation of entrepreneurship education-based programs, lack of facilities and infrastructure, lack of leadership commitment, lack of partners and limited ability to create networks, lack government is from government financial support or programs, the and the constrained mastery of general...
competencies (foreign language skills). The problems found in journal articles are presented in Figure 2.

![Diagram showing the problems of entrepreneurship education implementation in higher education found in articles since 2009-2017](image)

**Figure 2.** The Problems in Implementing Entrepreneurship Education in Higher Education Fund in Articles between 2003-2019

Figure 2 shows the constrain frequency based on the analyzed articles. Curriculum constraints were found seven times, students' mindsets were found five times, inadequate lecturer competences were found seven times, limited funding was found four times, lack of entrepreneurship-based programs was found four times, lack of leadership commitment to the implementation of entrepreneurship education was found twice, lack of facilities and infrastructure were found twice, limited partners and general competence of students, especially in mastering foreign languages were found once. Based on figure 2, nine problems are further discussed.

**Curriculum**

Entrepreneurship material is not fully integrated into the curriculum of existing study programs in tertiary institutions (Sipitanou & Papagiannis, 2013). The curriculum of the Islamic Economics Faculty (FSEI) Study Program is not entirely based on entrepreneurial insight (N. Hidayah, 2016). Students cannot complete the assignments given regarding the entrepreneurship courses properly and correctly (Wahyudiono, 2017). However, the findings are not in line with the findings of Putri et al (2018). Putri et al. (2018) on the implementation of PPA-LS collaborative learning in the Economics Education Study Program, Universitas Negeri Malang. She states that the Economics Education Study Program has succeeded in improving entrepreneurial work practices in entrepreneurship courses and has increased students' enthusiasm.

The problems emerge in the integration of the curriculum with other aspects. The curriculum is not yet entrepreneurial, and the students cannot complete assignments in entrepreneurship courses. Conversely, the successful implementation of entrepreneurship
education will have different results when direct implementation is carried out in learning using contextual models and direct practices.

**Students’ Wrong Mindset**

The problem emerges because of students’ mindset in implementing entrepreneurship education. They believe entrepreneurship cannot ensure their wellbeing. Research by Eriawati & Fitriyanti, (2016) found that students do not dare to face risks.

Furthermore, (Pratama, 2010) states that the obstacle in implementing entrepreneurship education is the mindset that assumes entrepreneurship is expensive and time-consuming. Meanwhile, (Indrayani, 2017) found that entrepreneurship education has been implemented but unable to develop entrepreneurial intentions. Students should have had a chance to have the entrepreneurship characteristics in self-confidence, creativity, innovation, risk-taking, leadership, and cooperation in the entrepreneurship subject.

**Limited Resources**

Another problem is the limited resources (Küttim et al., 2014). Furthermore, Siswoyo (2009) argues that the apprenticeship program is constrained by funding and commitment from the head of the study program. The problem with the incubator program is that adequate human resources and facilities do not support it. The lecturers lack the competence of advisor lecturer. The lecturers need strengthening in the form of education, training, and apprenticeship. The Directorate General of Higher Education, the Ministry of National Education, is cooperating with universities in the entrepreneurship center program to produce graduates ready to enter the workforce.

Lecturer competence is a massive obstacle in the implementation of entrepreneurship education. It is a significant factor in the failure to foster students' entrepreneurial interest. Thus, lecturers' competence should be considered as an essential alternative solution. The lecturers' low competence is also associated with the lack of training conducted by universities.

**Funding**

Some programs cannot be adequately implemented due to a lack of human resources and funding. The internship program is constrained by funding and commitment from the head of the study program. The incubator program's obstacle is that it does not get support from human resources and adequate facilities. Formal funding from the government seems "perfunctory" and does not reflect strong support for the process of creating a future generation of entrepreneurs (Lubis, 2015).

Human resources and funding support are problems faced by universities in implementing entrepreneurship programs. The availability of funds and the leadership's commitment will strengthen (capacity building) of the teaching staff and the provision of adequate infrastructure as a forum to support the successful implementation of entrepreneurship programs. They are the indicators of the success of entrepreneurship activities. The financing is expected to be a lesson for students in applying their business. To increase the spirit, entrepreneurial financing is needed to educate students to reduce unemployment by opening job opportunities.

**Entrepreneurship Education Program**

The apprenticeship program is constrained by funding and commitment from the head of the study program (Siswoyo, 2009). Wiratno (2012) argues that the preparation and implementation of entrepreneurship programs and the role of new units that function and are tasked with managing entrepreneurship programs...
are still not optimal. Entrepreneurship education programs should equip knowledge, form attitudes, and develop skills so that the students' potential can be developed through education and training in experiences, challenges, and courage to take and face risks in becoming job creators.

Some of the obstacles faced related to the entrepreneurship education implementation program are closely related to funding, the readiness of teaching staff, and the head of the study program head in preparing well-trained lecturers. Suppose the head of the study program as a funding policymaker is serious about allocating funds in empowering lecturers through qualified education and training. In that case, it will increase the lecturers’ competence in preparing effective and targeted entrepreneurship programs.

Facilities and Infrastructures
Universities’ facilities and infrastructure hinder the implementation of entrepreneurship education. Wiratno (2012) argues that the provision of facilities and infrastructure is limited. Siswoyo (2009) also conveyed the problem of facilities and infrastructure. The incubator program was not supported by adequate human resources and facilities (Siswoyo, 2009). In other countries, such as Singapore, the Startup Incubator Hosting program has become a means to support entrepreneurship education success (Zhang Lili, 2011).

Limited facilities and infrastructure is a different obstacle in implementing entrepreneurship education at the tertiary level institutions. Limited facilities and infrastructure are the factors causing the obstruction of the implementation of entrepreneurship education for students (Siswoyo, 2009; Wiratno, 2012). If the tertiary level institution is highly committed to providing supporting facilities and infrastructure, entrepreneurship education will achieve optimal results.

Leadership Commitment
The head of the study program’s low commitment to implementing the entrepreneurship education curriculum is also one problem (Lubis, 2015; Siswoyo, 2009). Insufficient human resources' commitment is responsible for implementing entrepreneurship education in tertiary level institutions. This problem as crucial in the implementation of entrepreneurship education in universities (Lubis, 2015; Siswoyo, 2009).

The head of the study program has a significant contribution to realizing the entrepreneurial education program's achievement. Leadership commitment related to funding provides excellent opportunities in achieving entrepreneurship programs in tertiary level institutions. The higher the leadership commitment in providing funding support and infrastructure for the smooth running of the entrepreneurship program, the easier the process of achieving entrepreneurship education targets will be.

Work Partners
Work partners in implementing entrepreneurship education are also considered very important (Wiratno, 2012). Work partners, funds, and competent lecturers in providing entrepreneurial skills are critical in implementing entrepreneurship education (Wiratno, 2012).

Leadership commitment is crucial in fostering external cooperation with work partners. This is important considering the existence of partners as a place to provide practical fields for applying theoretical knowledge obtained by students. Building a vast network will widen students' insight. They will increasingly believe that entrepreneur is much better than being a job seeker. Thus, the higher the commitment of higher
education leaders in establishing partnerships with work partners, the more opportunities will be created for students to get a suitable place for their entrepreneurial knowledge.

**Students’ General Competencies**

General competencies will make it easier for students to become entrepreneurs. The general competence, especially in mastering foreign languages, has become an obstacle to entrepreneurship education success (Lubis, 2015). Mastering a foreign language will make it easier for students to communicate with work partners. Therefore, they need to master one of the competency items besides mastering technology and character. These three general competencies are the key to student success as entrepreneurs.

General competence is necessary for realizing the successful implementation of entrepreneurship education. Responding to the challenges of the world of work in the 4.0 era, foreign language skills are the primary key in winning competence in the world of work, especially entrepreneurship. If tertiary level institutions can produce graduates who have good foreign language skills, it will make it easier for college graduates to become young entrepreneurs in their fields.

**Alternative Solutions**

In the era of the industrial revolution 4.0, there are many opportunities for students to become job creators. The tremendous power of information technology will give birth to new and robust entrepreneurs and strengthen the Indonesian economy. Thus, universities must have the courage to make breakthroughs. New study programs need to be initiated to suit the skills needed in this era.

Hidayah (2016) initiated a solution to entrepreneurship education by building a political will from the university and the Ministry of Religious Affairs. Therefore, an Islamic entrepreneurship study program can start a business from scratch. A thorough feasibility study is needed to map the facility needs, qualified lecturers, and a good curriculum structure that will lead students to become job creators. A student recruitment system is needed to meet the criteria of talent and interest, cooperation with the business world, and the industrial world to become a job creator. It is a living laboratory and networking, facilitating students to build networks when doing business later (N. Hidayah, 2016).

Furthermore, there are five ways to implement entrepreneurship education in higher education, namely, building entrepreneurship laboratories, reorienting higher education curricula based on entrepreneurship, synergizing with the business world, Entrepreneurship competition, and developing entrepreneurship among lecturers (Rozi, 2019). Community service activities that could be carried out in the implementation of entrepreneurship education in higher education by providing training and mentoring to the community in the form of woven palm leaf stick plates, providing financial management training, and providing information technology training (Rozi, 2019).

Prastyaningtias & Arifin (2019) hopes that entrepreneurship education is carried out by utilizing digital technology so that students can be equipped with character-building by improving the 5C aspects to give birth to a digital entrepreneur generation. Also, Subandi (2015) offers strengthening entrepreneurship-based curricula integrated with Islamic teachings that will build generic life skills for students. Mujiati (2018) suggests strengthening the apprenticeship system, establishing a unique educational institution for entrepreneurship, planning a curriculum according to entrepreneurs’ needs, and doing business practices according to
spiritual-based business ethics. Competent lecturers can guide students to increase their confidence and eliminate their fear of starting a business (Mujiati, 2018).

In Malaysia, entrepreneurship education is supported by four ministries at once, namely the Ministry of Education, the Ministry of Business Development, the Ministry of Agriculture, the Ministry of Youth and Sports. They aim to increase the number of entrepreneurs with a strong character (Pihie et al., 2002).

Furthermore, Lailatussaadah et al. (2020) offers alternative solutions for successfully implementing entrepreneurship education in tertiary level institutions, which he calls a formula. The formula is presented in the Figure 3.

Based on the researchers’ alternative solutions, it can be concluded that there are some similarities in solutions, especially in terms of curriculum. All researchers agree that the curriculum has great power over the success of entrepreneurship education in universities. Next is strengthening the capacity of teaching lecturers that has a significant impact. The competence of lecturers must be taken into account to implement entrepreneurship education. Then, the availability of facilities and infrastructure will allow students to learn to become entrepreneurs. The availability of alternative solutions is believed to have a nurturing effect for students to accelerate Indonesia to have two percent of entrepreneurs.

CONCLUSION

Some of the solutions are still in discourse and have not yet been implemented. The already implemented methods of entrepreneurship education have not yet produced results that can show significant improvement. Thus, commitment and support from higher education and higher government leaders are needed so that the implementation can run according to the goal, namely, to produce new entrepreneurs in Indonesia beyond the predetermined target. This study does not sort out the problems that occur in domestic and foreign
universities. It is hoped that further research can be continued as a complement and can reveal the comparison between local and abroad so that it can be used as a basis for formulating better solutions.

REFERENCES


Patricia, & Silangen, C. (2016). The effect of entrepreneurship education on...


