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# A study on the need of entrepreneurship local content curriculum in Bandung senior high school

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**Abstract.** This study discusses the needs of entrepreneurship local content curriculum in Senior High School (SHS) based on the assessment of potential local entrepreneurship resources and relevant competencies needed. There were 20 students and 20 teachers involved in the survey who were selected using purposive sampling method. The need assessment was administered in form of questionnaire and interview to explore the potential entrepreneurship resources and relevance competencies needed for each type of entrepreneurship. The data were further analyzed using percentage and cross tabulation (Chi-squares) statistical methods. There are common competencies needed for running each area of entrepreneurship such as marketing strategy, bookkeeping, financial management, and maximizing customer satisfaction. The above competencies are expected to meet United Nation's *The 2030 Agenda for Sustainable Development*, especially Goal 4 and Goal 8: (1) To ensure inclusive and equitable quality education and promote lifelong learning opportunities for all and; (2) Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. The implication of this study is that every school is expected to arrange the scheduling program and provide competent teachers capable of implementing proper teaching and learning processes and mode of delivery system to facilitate the students acquiring competencies needed in entrepreneurship.

## 1. INTRODUCTION

Theoretically, education improves students' competence and employability. It is believed that the increasing number of well-educated workforce contributes to the country's economy [1]. However, one of the major issues in Indonesia is a high rate of educated unemployment that influences the national development and the social and individual productivity. Ironically, among all the unemployment, there are many senior high school graduates and even university diploma holders.

It has been indicated that the numbers of workforces, employment and unemployment rate in 2010-2014 were increasing [2]. The educated unemployment rate reached 7,240,000 people in 2014. Along with the increase in population, the number of unemployment was also increasing. Unfortunately, this issue will continuously grow if the government does not handle this matter seriously. Moreover, educated unemployment will result in (1) increasing social problems; (2) unnecessary spending of educational resource; and (3) decreasing trust and appreciation towards education.

It is believed that inadequate education and employment development planning are some factors



responsible for the country's problem of educated unemployment. In addition, there are also such factors as the work preferences and the lack of qualified educated workforce in critical fields [3]. The alternative solution for this issue can be done by encouraging SHS students to develop entrepreneurship, which transforms them from job seekers into job creators. In relation to this, developing entrepreneurship education is expected to address this issue. This is feasible to be conducted since the Indonesian national high school curriculum gives an opportunity to schools in every region to include a local content curriculum. Thus, entrepreneurship education can be applied in all level of education in order to increase the number of entrepreneurs which, in turn, can boost the country's economic growth and stability. This is aligned that "The ideal ratio between the number of entrepreneurs and the population is at least 2%. When this number has been reached, the economic growth of a country is expected to higher and the unemployment rate will stay low. Currently, the ratio between entrepreneurs and the total population in Indonesia is less than 0.5%, which indicates insignificant contribution towards economic growth [1]."

Local entrepreneurship resources and relevant competencies should be taken into account in the development of entrepreneurship education for high school students, particularly Bandung senior high school students, in order to decrease the number of educated unemployment locally and nationally. This is expected to give a significant contribution to the decrease of well-educated unemployment in the region [4].

Extensification of entrepreneurship is considered as a reasonable effort in regard to increasing numbers of entrepreneurs not only in the region but also in the country. Entrepreneurship could give impact in strengthening the country's economic foundation, increasing its economic stability, giving a significant contribution to the country's economic growth, and increasing the country's GDP.

The research questions being addressed by this study are dealing with the potential resources for the SHS students and the competencies needed to be included in the schools' local content curriculum for running the entrepreneurship endeavor. SHS was chosen since entrepreneurship local content has not been implemented like in vocational school. Students and teachers of SHS were involved in this study, because they know their needs of entrepreneurship skills that they want to possess and develop based on the needs in their surroundings.

This study aims at exploring and identifying the local entrepreneurship resources and relevant competencies to be implemented in local content curriculum in SHS in Bandung. This study is also expected to give a contribution to Bandung's Education Board in providing local entrepreneurship content to increase the number of entrepreneurs. Another significance of the study is to encourage other researchers in the other cities or provinces to conduct studies in this field. In addition, the results of research and development are not only expected to be academically valuable, but also contribute to the national economic independency.

## **2. LITERATURE REVIEW**

### ***2.1 Entrepreneurship local content curriculum***

An entrepreneur can be perceived as someone who actually searches for change, responds to it, exploits change as an opportunity and shares certain personal attributes such as creativity, dedication, determination, flexibility, leadership, passion, self-confidence and smart [3]. Entrepreneurship gives big impacts towards economic growth [5]. It is an alternative solution that can be made to overcome the unemployment problem by bringing back the power of real economic sector. The empirical evidence clearly shows that the firm-size distribution in developed countries began to shift away from larger corporations towards entrepreneurial activity.

Entrepreneurship is an integrated concept that permeates an individual business in an innovative manner [6]. Individual factors such as innovation plays an essential role in entrepreneurship. Therefore, one approach to fostering entrepreneurship is to strengthen the entrepreneurial traits of an individual. Theoretically, entrepreneurship consists of the competitive behaviors driving the market process [7]. Thus, entrepreneurship is manifested not only by market entry of new firms, but also by innovative

and initiative entries into new markets by established firms. From this perspective, technological innovation is a form of entrepreneurship.

At the microeconomic level, only certain activities and functions of entrepreneurs may stimulate economic growth [7]. The development economists distinguish three major stages of development [8]. In the first stage, the economy specializes in the production of agricultural products and small-scale manufacturing. In the second stage, the economy shifts from small-scale production towards manufacturing. In the last stage, with increasing wealth, the economy shifts away from manufacturing towards services.

For developing countries like Indonesia, micro, small and medium enterprises run by entrepreneurs take parts in creating jobs, growing income, and reducing poverty. In addition, it is proven by the way it survived during the monetary crisis. Therefore, this country needs millions of successful entrepreneurs combined with the force of established corporations to boost the economy. However, the condition and quality of the entrepreneurial environment for major established firms including the rule of law, labor market flexibility, infrastructure, financial market efficiency and management skills, need to be improved to attract investment which, in return, will provide employment, export, and tax revenues.

There are three of the most frequently mentioned functional roles of entrepreneurs are associated with major sets of entrepreneurship (*Risk seeking*, *Innovativeness*, *Opportunity seeking*) [9]. First, the *risk seeking* deals with the willingness to take risks associated with uncertainty. Second, *innovativeness* is related with the acceleration and application of innovative ideas. Last, *opportunity seeking* deals with the way entrepreneur perceives and seizes new profit opportunities.

In creating new entrepreneurs, education should not only consider the quantity of entrepreneurs produced, but also their quality such as creativity, innovativeness, awareness on science and technology, and the spirit of entrepreneurship including that of creative industry [8] [10]. To bring this into action, the individual factor has to be taken into account. This is related since entrepreneurial decision is traceable to a single person and one approach to fostering entrepreneurship is by strengthening the entrepreneurial traits of an individual. McClelland's studies indicate that one of the most important factors that contribute to the success of entrepreneurship activity is motivation [9]. As a developing country, the number of entrepreneurs in Indonesia has not reached an ideal number since there is inadequate support to the development of entrepreneurship. Therefore, by expecting the SHS graduates to have the ability and courage to start running their own business and opening new job opportunities for people, there is an urgency to educate and develop the students' competence in seeing business opportunity, managing the business, and becoming entrepreneurs.

The purpose of implementation local content implementation in curriculum is: “. . . to equip the students with the attitudes knowledge and skills necessary to: (a) know and love the natural, social, cultural, and spiritual environment in the region, and (b) preserve and develop excellence and knowledge areas in order to support national development”<sup>11</sup>. This concept is in line with “A crucial dimension of quality education is that of the relevance of curricula content in the form of: diversity of local (sub-national), cultural and socio-economic realities. The promotion of local curricula is a strategy to ensure such relevance and is an essential component of decentralization of education, governance, and management” [12]. Furthermore, it has been stated that *The entrepreneurship and pre-vocational are the local content including education, and focus on the development of the potential of business spirit and skills* [11]. Based on the aforementioned discussion, developing senior high school entrepreneurship curriculum is one of the efforts to improve the education quality in Bandung.

To support this, education curricula should be comprehensive, emphasizing the importance of creativity, innovativeness, awareness on science and technology, and fostering the soul and spirit of entrepreneurship. In other words, education is expected to be the basic ingredient and tool for the improvement of living standards and, in macro perspectives, to increase of economic growth.

Therefore, formal education curricula can be directed towards identifying, understanding and preparing a person to become an entrepreneur. The strength of real sector can be made as an indicator

of how strong the roles of entrepreneurs are towards the economy. If our real sector has not shown its well-being, the roles of entrepreneurs in the national economy will not be significant. This is due to the fact that the real sector is directly related to the people's economy, unlike the financial sector that is easy to increase, but does not grow in number.

The entrepreneurship curriculum in SHS is expected foster the spirit of entrepreneurship among the students and teaching staffs and projected to be a means of mastery of science and technology integration with entrepreneurship spirit. In addition, the results of this study are not only expected to be academically valuable, but also contribute to the national economic self-reliance.

### 3. RESEARCH METHOD

This study is a survey study conducted in Bandung. The main research instrument used needs assessment, which was developed in forms of questionnaire and interview. The questionnaires were purposely and randomly administered to 25 schools, but there were only 20 schools returned the instruments. Therefore, this study involved 20 students and 20 teachers from 20 Senior High Schools in Bandung.

The students were given the questionnaire to discover relevant competencies needed and data about the provided local contents in their schools. After that, some representatives of students were chosen for interview in order to obtain more in-depth data about the questionnaires. Meanwhile, the teacher was given questionnaires to explore the potential entrepreneurship resources and relevant competencies needed for each type of entrepreneurship, based on the situation in their school. The data were further analyzed using percentage and cross tabulation (Chi-squares) statistical methods.

### 4 RESULTS AND DISCUSSION

#### 4.1 Results

The findings show that the areas of entrepreneurship need to be included in Bandung senior high schools (SHS) are: 1) trade business, 2) creative home industry, 3) traditional home industry, and 4) service industry. These were based on the consideration that the above areas of entrepreneurship are the general competencies that must be possessed by SHS graduates, in order to be able to start running their business based on their interests.

Competencies needed in trade business are: 1) developing business strategic planning; 2) marketing strategy; 3) bookkeeping; 4) financial management; and 5) maximizing customer satisfaction. Based on the data analysis, the chi-square value ( $\chi^2$ ) of each competencies was not significant ( $\chi^2 < 0.05$ ). The chi-square statistic of this category (trade business) was lower than  $\chi^2$  of the distribution table ( $\chi^2$  statistic = 2.84 <  $\chi^2$  table = 7.879). Each chi-square statistic of the five competencies (developing strategic planning's  $\chi^2$  = 3.44, marketing strategy's  $\chi^2$  = 2.30, book keeping's  $\chi^2$  = 1.30, financial management's  $\chi^2$  = 2.20, and maximizing customer satisfaction's  $\chi^2$  = 2.46) were not significant. These indicate that the responses of teachers and students in this particular category and competencies were independence and the competencies should be included in the curriculum.

Creative home industry consists of five competencies, namely: 1) making innovation or creating new products; 2) marketing strategy; 3) bookkeeping; 4) financial management; and 5) maximizing customer satisfaction. The chi-square value ( $\chi^2$ ) of each competencies was not significant ( $\chi^2 < 0.05$ ). The chi-square statistic of this category (creative home industry) was lower than  $\chi^2$  of the distribution table ( $\chi^2$  statistic = 5.66 <  $\chi^2$  table = 7.879). Each statistic chi-square of the five competencies indicates (making innovation or creating new products'  $\chi^2$  = 6.46, marketing strategy  $\chi^2$  = 5.30, book keeping's  $\chi^2$  = 3.44, financial management's  $\chi^2$  = 4.44, and maximizing customer satisfaction's  $\chi^2$  = 3.46) were not significant since it was lower than the chi-square distribution table value. These indicate that the responses of teachers and students in this particular category and competencies were independence

and the competencies should be included in the curriculum.

Traditional home industry consists of five competencies, namely: 1) production management; 2) marketing strategy; 3) bookkeeping; 4) financial management; and 5) maximizing customer satisfaction. The chi-square value ( $\chi^2$ ) of the four competencies was not significant ( $\chi^2 < 0.05$ ) and only one of the five areas of competency was significant. The chi-square statistic of this category (traditional home industry) was lower than  $\chi^2$  of the distribution table ( $\chi^2$  statistic = 4.46 <  $\chi^2$  table = 7.879). The chi-square statistic of the four competencies (production management  $\chi^2$  = 4.62, marketing strategy's  $\chi^2$  = 6.66, financial management's  $\chi^2$  = 4.44, and maximizing customer satisfaction's  $\chi^2$  = 6.62) are not significant. Type of competency that indicates significant was bookkeeping ( $\chi^2$  statistic 23.44 >  $\chi^2$  table = 7.879). This means that there was a dependence of choice whether or not bookkeeping should be included in the curriculum. Looking into the percentage of teacher and students who chose this alternative, the percentage of teachers was much higher indicating that the teacher preferred including this particular competency in the curriculum.

Service Industry consists of six competencies, namely: 1) effective communication strategy; 2) digital skills; 3) marketing strategy; 4) bookkeeping; 5) financial management; and 6) maximizing customer satisfaction. The chi-square value ( $\chi^2$ ) of each competencies was not significant ( $\chi^2 < 0.05$ ). The chi-square statistic of this category (service industry) was lower than  $\chi^2$  of the distribution table ( $\chi^2$  statistic = 4.86 <  $\chi^2$  table = 7.879). The chi-square statistic of each six competencies (effective communication strategy's  $\chi^2$  = 4.24, digital skills'  $\chi^2$  = 3.48, marketing strategy's  $\chi^2$  = 4.84, book keeping's  $\chi^2$  = 4.64, financial management's  $\chi^2$  = 2.88, and maximizing customer satisfaction;  $\chi^2$  = 4.28) was not significant. These indicate that the responses of teachers and students in this particular category and competencies were independence and the competencies should be included in the curriculum.

#### 4.2 Discussion and Implication

Entrepreneurship education for the (SHS students is considered as an essential effort to solve unemployment problem and boost the economic growth locally and nationally by increasing the number of entrepreneurs. Based on the data analysis, there are four areas of entrepreneurship in which senior high school (SHS) students in Bandung can choose for their future career, namely: 1) trade business; 2) creative home industry; 3) traditional home industry; and 4) service industry).

Senior high school provides the students with competencies (knowledge, skills, and attitude) mainly for their preparation entering the community life or entering higher education, college or university. Those who are capable to continue to higher education system will pursue their higher degree. However, for those who cannot continue to higher education system need harder efforts to get employed by job markets. In regards to this, entrepreneurship is considered a reasonable solution to overcome this particular issue.

For trade business entrepreneurship, SHS should provide the students with local content curriculum aimed at developing competencies related to: 1) marketing strategy; 2) bookkeeping; 3) financial management; and 4) maximizing customer satisfaction. To prepare the students in creative home industry entrepreneurship, SHS should provide the students with local content curriculum aimed at developing competencies related to: 1) making innovation or creating new products; 2) marketing strategy; 3) bookkeeping; 4) financial management; and 5) maximizing customer satisfaction. For traditional home industry entrepreneurship, SHS should provide the students with local content curriculum aimed at developing competencies related to: 1) production management; 2) marketing strategy; 3) bookkeeping; 4) financial management; and 5) maximizing customer satisfaction. To prepare the students in service industry entrepreneurship, SHS should provide the students with local content curriculum aimed at developing competencies related to: 1) digital skills; 2) marketing strategy; 3) bookkeeping; 4) financial management; and 5) maximizing customer satisfaction. In addition, there are specific competencies needed by those who are preparing specific type of entrepreneurship to be realized such as creativity, innovativeness and digital skill for creative home industry entrepreneurship, and production management skill for traditional home industry

entrepreneurship.

From the perspective of sustainable development goals (SDGs) issued by UNESCO, this can be considered as one of the solutions to solve poverty and economic growth. There are 17 goals to achieve during the global action program in 2015-2024, namely: 1) no poverty, 2) zero hunger, 3) good health and well-being, 4) quality education, 5) gender inequality, 6) clean water and sanitation, 7) affordable and clean energy, 8) decent work and economic growth, 9) industry innovation and infrastructure, 10) reduced inequality, 11) sustainability and communities, 12) responsible consumption and production, 13) climate action, 14) life below water, 15) life on land, 16) peace, justice, and strong institution, and 17) for the goals [13]. Concerning the above goals, entrepreneurship education is considered promising to achieving goals 1 and 8.

There are some implications that this study can propose: (1) Every school is expected to arrange entrepreneurship local content and in to what level this will be implemented; (2) Every school should provide competent teachers who are capable of implementing proper teaching and learning processes in order to facilitate the students acquiring competencies needed to run a particular type of entrepreneurship they choose; and (3) Every teacher who is assigned to implement the entrepreneurship local content curriculum should decide a particular mode of the delivery system, which is considered effective for preparing the students who are interested in becoming entrepreneurs.

## 5. CONCLUSIONS

The areas of entrepreneurship to be included in the local content curriculum of Bandung SHS are: 1) trade business; 2) creative home industry; 3) traditional home industry; and 4) service industry. There are common and specific competencies needed by the students to be entrepreneurs. The common competencies are those needed for running each of the four areas of entrepreneurship, i.e., marketing strategy, bookkeeping, financial management, and maximizing customer satisfaction. In addition, there are also specific competencies such as creativity, innovativeness and digital skill for creative home industry entrepreneurship, and production management skill for traditional home industry entrepreneurship, which are the specific skills that can be gained after the SHS schools master the general entrepreneurship skills. In order to develop the students' competencies in any areas of entrepreneurship, the SHS teacher needs to choose an effective mode of delivery system for preparing the students to be entrepreneurs.

The above competencies are expected to meet United Nation's *The 2030 Agenda for Sustainable Development* [14], especially addressing Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, in which point 4.4 specifically describes that "By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship". Moreover, to address Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all, which point 8.3 elaborates "Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial service"

The relevant further work that can be done to follow up this study is developing local content-based entrepreneurship model. This model can be tested to schools in certain local area and be used by teachers as the guidance to establish entrepreneurship program in the curriculum. This developed model is expected to anticipate SHS graduates who cannot pursue higher education, but have the basic competencies to become job creators.

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