Competency-Based Education at a Madrasah Aliyah in Sumedang: Eliciting the Organized Programs

Rifqi Syauqi Hubby¹, Diding Nurdin², Asep Suryana³

¹ Universitas Pendidikan Indonesia, Bandung, Indonesia; rifqialgazali@gmail.com
² Universitas Pendidikan Indonesia, Bandung, Indonesia; didingnurdin@upi.edu
³ Universitas Pendidikan Indonesia, Bandung, Indonesia; doef@upi.edu

ARTICLE INFO

Keywords:
Competency-based; Program; Graduate Quality

ABSTRACT

The competency-based education program is a flagship program launched by a Madrasah Aliyah (or, MA; Islamic based senior high school) in Sumedang to produce graduates who are competent and skillful, especially in the automotive, culinary, fashion, and technology. Students are expected to be able to compete in the professional fields. In this article, the implementation of the program is discussed, which is seriously trying to increase the competence of graduates. The method used in this present study is a mixed method with the techniques of documentation, observation studies and questionnaires to determine the students’ number of inputs, their interest in the competency program in that school, and the existing programs. The results show that 100% of the students chose and followed the competency program according to their desires and talents, and because of willingness to get better opportunities after graduating. Moreover, it was found that the four competences offered have increased students’

This is an open access article under the CC BY-NC-SA license.

Corresponding Author:
Rifqi Syauqi Hubby
Universitas Pendidikan Indonesia, Bandung, Indonesia; rifqialgazali@gmail.com

1. INTRODUCTION

MA is an institution that plays a role in building morality for the civilization of the nation. At present, the Madrasahs do not have a good rating and are still classified as “second class” educational institutions (Faizin, 2017). It is not without reason that the rating of madrasa education is still facing several quite big problems such as the problem of low administration and quality of education. Islamic based education is widespread in Indonesia as a religion based. Most of the Indonesian population is a manifestation of the ideals of Islamic life to preserve, transmit, instill, and transform Islamic values for individuals to future generations (Alawiyah, 2014). Madrasah Aliyah is an Islamic formal educational institution of the highest standard under the auspices of the Ministry of Religion. The advantages of madrasahs over schools are the dense Islamic atmosphere and influencing teaching, ranging from subjects of aqidah morality to the science of kalam and the science of hadith, which is basically a science

http://journal.staihubbulwathan.id/index.php/alishlah
that takes Islam to its depths. Moreover, MA is also a means of producing Islamic cadres who are strong and intellectually broad, as well as a means of producing a generation of people who are highly nationalistic. However, with the passage of time and increasingly advanced technology, as well as increasingly fierce competition in the world of work, Islamic education institutions must continue to improve the competence of their graduates (Snape & Fox-Turnbull, 2011). Therefore, there must be an innovation presented by Madrasas as institutions that cover not only religious views but also professional purposes.

The very rapid changes in the workforce show that the curriculum needs to be constantly reviewed to see if what is being taught in schools is still relevant to the demands of the professional world. This relevance becomes a very important concept when it comes to achieving the goals of vocational education itself. The vocational education curriculum must be designed according to the needs of the world of work (Bowers, 2006). The vocational education curriculum and the needs of the world of work must go hand in hand according to the principle (Melvin Miller, 1984). Therefore, although Madrasah Aliyah is a religious-based school, it is very important to improve the skills possessed not only in the religious field, but also in other fields. Increasing the competence of graduates that leads to competition in the world of work will attract students and the public to attend Madrasah Aliyah schools. Increasing the competence of graduates leading to competition in the world of work will encourage students and the public to attend Madrasah Aliyah schools. The quality of human life is actually determined by the degree of fulfillment of the most important needs of the people themselves, which are called basic needs. In a very simple sense, basic needs are various things that people need for their survival, both as individuals and as members of their society (Efferi, 2017).

Relevance establishes a link between the potential of existing jobs and the ability of graduates to meet the requirements of the job. If the graduates of a vocational training program cannot meet the requirements and needs of the occupational field, then the vocational training program is considered a failure (Snape & Fox-Turnbull, 2011). If we refer to that journal, vocational education is considered inferior in quality because it cannot apply its knowledge to the world of work. Therefore, if it is applied at a state Madrasah Aliyah in Sumedang, a religious institution, it will have more value if a competency-based education program is implemented and can compete with the world of work. According to Steckel (2009), these basic needs are not static but dynamic and evolve according to the level of civilization and human welfare. The less basic needs can be satisfied by people, the worse the quality of life. On the other hand, the more basic needs people can satisfy, the better the quality of life. This means that the higher the degree of a human’s quality of life, the better the quality of human’s life, the better the place where human’s environment is. high school under the auspices of the Ministry of Religion.

Previous research by Nurmala (2012) shows that the interest of the students of class IX of Junior High School in Tanah Bumbu Regency to continue their education to SMKN2 Simpang Empat was high. Moreover, there is a positive and significant direct influence between the variables of knowledge of career opportunities, family culture, self-concept and economic background on the interest of students of class IX of junior high school to continue their education to SMKN2 Simpang Empat competency skills of health nurses. Further research by Widiyati (2013) reports that regarding the relevance of the creative industry-based vocational school curriculum with the extrapolation method and the econometric approach. In her future study, it was concluded that the relevance of the vocational school curriculum for the fashion skills program developed should refer to the business world and industry (Widiaty, 2017). Therefore, it is proven that competency-based education programs have taken attention in the current learning curriculum.

The common thread that can be drawn from the above research is the factors that influence students’ interest in choosing and continuing their schooling at the next level. The state of affairs in this study are 1) The research was conducted at Madrasah Aliyah, 2) The program was conducted with a competency and practice approach, and 3) The school has promising graduate competencies that are competitive in the world of work. Based on the above research, in the discussion of this study, we will reveal the extent to which the MA in Sumedang collaborates with existing stakeholders to guarantee...
graduates in specific business sectors. The novelty of this research compared to previous research is that Madrasah Aliyah, as an Islamic school, seeks to develop the skills of its graduates so that they can compete with vocational school graduates who are intended for the professional world. Then, this study is important because the school as a place for students' self-development must be able to improve their competencies so that they can compete in the world of work. Furthermore, it is important that educational institutions continue to innovate to attract students and the public to study at these institutions. The researcher hopes to find out what steps have been taken to increase the public's interest in Madrasah Aliyah and improve the quality of competitive graduates so that they are ready to enter the workforce in the formal employment sector and the independent entrepreneurial sector.

2. METHODS

A research plan and procedure that include steps ranging from general assumptions to detailed methods of data collection, analysis, and interpretation are presented in this section (Creswell, 2017). The current method used in this study is a mixed method which combines quantitative research methods and qualitative methods used together in a research activity (Sugiyono, 2016). The research design used in the descriptive qualitative approach, namely the study of the documentation of the admission of new students in 2020 and 2021 and the direct observation of the socialization process at the parents' meeting on August 5, 2021. Meanwhile, a quantitative approach applied was the distribution of questionnaires on the interest of new students in the competency-based education programs at an MA in Sumedang. This questionnaire is used to find out the extent to which students are interested in the automotive, cooking, fashion, and computer literacy programs by creating a percentage scale that describes students' interest in specific programs.

Data collection was done by collecting observation documents and students' opinions related to the qualification program, such as documents showing the process of registration of new students before taking automotive and fashion skills and the period after taking automotive and fashion skills. Questionnaire is a data collection technique by providing a set of questions to be answered by respondents (Sugiyono, 2016). The questionnaire used has 5 items, two types of answers, namely in the form of statements with answer choices strongly agree (SS), agree (S), disagree (TS), strongly disagree (STS). The respondents were 40 students of class X as new students at the MA. Direct observation of the process of socialization of computer, cooking, fashion, and automobile skills for the parents of the students of class X at the parents meeting on August 5, 2021, and observation of the activities of the program of automobile, cooking, fashion, and computer skills conducted every day. Saturday, and distributing questionnaires to 40 students of Class X with information about students' interest in the competency-based program at the MA.

3. RESEARCH AND DISCUSSION

3.1. Competency-based education programs in Madrasah Aliyah

The existence of non-formal education as a response to dissatisfaction with the results of formal education, which does not meet the requirements for entry into the world of work. In addition, formal education takes a lot of time and has quite high costs. To overcome this, non-formal education units, whose results are noticeable in a relatively short time and whose costs are low compared to formal education, should be a solution. With the principle of "lifelong education", formal education in schools can no longer meet the needs of a growing community. Non-formal education with its various units must take a more important place in the management of education (Hidayat, 2017). As a response, a Madrasah Aliyah in Sumedang organized such programs in this institution.

From 1998, this Madrasah Aliyah has initiated programs that support the graduates with survival skills so that they can compete in the professional world. This is supported by the decree of the Directorate General of Islamic Education No. 1023 on the implementation of skill-based education
Rifqi Syauqi Hubby, Diding Nurdin, Asep Suryana / Competency-Based Education at a Madrasah Aliyah in Sumedang: Eliciting the Organized Programs

programs, namely, according to the Director General of Education No. 1023 YEAR 20161. It is mentioned that the Madrasah Aliyah plays a role as the organizer of the programs. Even though Madrasah Aliyah as a venue for the implementation of this program uses a curriculum structure like Madrasah Aliyah in general, students are taught additional learning skills according to each student’s talents and interests (Directorate General of Islamic Education, nd 2016). This competency-based program is one of the flagship programs in the place of research. This is because the program is an effort to produce graduates who are competitive and ready to enter the workforce. The competency-based programs which are currently offered are automotive, fashion, catering and computer programs. Each program has a special laboratory that is used for learning and hands-on activities that are held every Saturday. As for the procedure for this activity, the former students were asked in advance by the Head of Student Affairs about the students’ further plans after graduating. If students decide to continue studying, they will receive a program that focuses on theory, and if students plan to work, they will receive practical training as a priority. This qualification program is also conducted in collaboration with the Employment Agency (BLK), whose mission is to place students who have graduated from the school with companies in various sectors, depending on the students' skills and abilities.

| The programs  | Course Description                                                                                                                                 |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Automotive    | Giving students knowledge and skills in the construction of a two-wheeled engine frame, electricity, combustion system, exhaust system, engine lubrication system, cooling system, clutch mechanism, transmission, steering, and more. |
| Catering      | The students are not only taught to learn how to cook, but also how to sort and select food by considering the feasibility and the nutrients it contains |
| Fashion       | Equipping students with arts and skills in analyzing the ongoing trend movements in the fashion world that have artistic value and are in accordance with the times. |
| Computer      | Understanding of computer networks, the use of online media such as social media, online advertising, electrical installation, audio, video and computer cooling techniques. Also provides programs that specifically study this technology at a more advanced level, namely the computer skills program. |

Automotive Program

In the professional world of electronics and mechanical engineering, automotive skills still have greater opportunities for students than other skills. These skills allow students to compete in the workforce on a level playing field with vocational high school graduates who are specifically targeted for the future in this field. Since it does not exclude the possible consequences of the implementation of the ASEAN free market, the competition in the working world automatically becomes tougher. Therefore, it is very important for students to have skills in many fields so that the chance of getting a job is open to them.

In competency-based learning, it is important to manage the teaching materials and practices seriously. According to Hanafiah and Suhana (2009), discovery-based learning models are learning models that the learning process maximally involves all the students’ abilities to seek and find things (objects, people, or events) systematically, critically, logically, and analytically so that they can formulate their own insights (Siahaan et al., 2021). At this school, students who choose the Automotive program will receive materials and training in mechanical engineering, including: the construction of a two-wheeled engine frame, electricity, combustion system, exhaust system, engine lubrication system,
cooling system, clutch mechanism, transmission, steering, and more. It is expected that with these skills, the students will be able to compete in the automotive world along with the graduates of vocational high schools.

Catering skills program

According to Ulfa (2013), culinary management is knowledge in the field of cuisine (the art of processing food) that covers the entire range of food, from preparation to processing to serving food, both traditional and international. Catering is not just a cooking activity, but a comprehensive understanding of the whole concept of cooking, including nutrition, cleanliness, benefits of cooking ingredients and so on. The implementation of the culinary skills program has been underway since 2016, this program was started in conjunction with a computer program. The students who participate in this activity are usually female students, currently almost half of the students of Madrasah Aliyah in Sumedang participate in this program. Students not only learn how to cook, but also how to sort and select food by considering the feasibility and the nutrients it contains. In addition, students are taught the art of serving good food, especially in restaurant classes. This is to give the students a first experience when they want to compete in the culinary world.

Fashion skills program

Clothing is a textile material or other material that has been sewn or not that can be used which usually serves to cover a person’s body (Arifah and Riyanto, 2003). Changes in fashion style are strongly influenced by the dynamics of technological developments and trends, especially fashion trends from the west. A fashion designer is required to have art and skills in analyzing the ongoing trend movements in the fashion world. This ability is needed so that the clothes produced have artistic value and are in accordance with the times so that many people like them. The fashion program at this school teaches the things above. Just like the catering program, generally this program is loved by female students who have a passion in the field of fashion and aspire to contribute to the development of world fashion. Learning fashion at this Madrasah Aliyah includes a basic understanding of clothing, cloth cutting techniques, sewing, introduction to human body measurements, so that students are equipped with understanding to determine the appropriate design according to the current fashion trends.

Computer Skills Program

Doyle (2005) mentions, computer literacy is defined as a person’s assessment of his or her ability to use a computer. Computer literacy can also be interpreted as a person’s ability to understand and operate computer machines equipped with adequate intellectual skills so that they can produce good digital products from the results of their operations. The technology and information sector is now developing faster than people expect, data transmission is becoming faster worldwide, and the use of digital information has permeated all sectors, from business to politics to education, which must inevitably embrace technology (Ganesan, 2009). Not only that, but the career opportunities are also vast for people who have these kinds of skills. Therefore, this school, in addition to providing a basic understanding of computer technology to all students, also provides programs that specifically study this technology at a more advanced level, namely the computer skills program. Here, students will be given advanced knowledge related to understanding information technology, and the use of digital media which will someday be useful in the workforce. The understandings that will be given to students in this skills program include understanding of computer networks, the use of online media, such as social media, online advertising, electrical installation, audio, video and computer cooling techniques. also provides programs that specifically study this technology at a more advanced level, namely the computer skills program.
3.2. Impacts on Competency-Based Implementation

Increased Numbers of Inputs

After the implementation of the competency-based programs in this Madrasah Aliyah, it is found that more students registered to this school. This improvement happened not without reason. The stakeholders put more trust in the school since the skills offered as the learning outcomes are demanded by the professionals in the work fields. As a result, more students enrolled in the school. This fact was revealed by the obtained data from the document of new students’ admission.

![Figure 1. The number of students’ enrollment in 2020 and 2021](image)

From Figure 1 it can be concluded that the number of students who registered at this Madrasah Aliyah in 2020 was 168 people with an estimation of 45 males and 123 females. Meanwhile, in 2020, 250 students enrolled at that school with an estimated 100 males and 150 females. From the data above, the increase in the number of students enrolling at the Madrasah Aliyah in Sumedang is a difference of 50 students between 2020 and 2021. The state of students in 2020 is dominated by female students, which is a difference of 78 people from the total. This is because in 2020 there are only two skills, namely computer skills and culinary or cooking skills so that female students tend to choose cooking over computers, while male students are less interested in computers. As for 2021, two additional skills have been added, namely automotive skills and fashion, this also affects student acceptance in 2021 and there is an increase from before. But still, the data informs that in both years, female students dominated the trend of students’ enrollment to the Madrasah Aliyah.

This trend depicts the situation that the programs have given a positive view on the stakeholders, especially parents who are willing to get the best education for their children. The issue of shifting education from traditional to competency-based has become a prominent issue today (see Burnette, 2016; Sullivan & Downey, 2015). This is because the demands in the work fields that require the fresh graduates to have specific skills that can support their corporation needs. This need is manifested in the school program as an alternative program, therefore, some district administration piloted competency-based education programs in search of innovative educational opportunities (Sullivan & Downey, 2015). As a result, some non-vocational schools applied the program as a basic capital for students to be able to compete in the world of work.

MA students’ interests on the implemented programs

To find out the response of students’ interest in the competency-based education program at the Madrasah Aliyah, the questionnaire was administered. The following are the results of the questionnaire on students’ interest in the programs.
Table 2. Students’ interest on the competency-based education programs

| Questionnaire Item | SS  | S      | TS  | STS |
|-------------------|-----|--------|-----|-----|
| 1                 | 16.7% | 83.3% | 0%  | 0%  |
| 2                 | 8.3% | 91.7%  | 0%  | 0%  |
| 3                 | 8.3% | 75%    | 16.7% | 0%  |
| 4                 | 8.3% | 83.3%  | 8.3% | 0%  |
| 5                 | 8.3% | 91.7%  | 0%  | 0%  |

Table 2 describes the results of the questionnaire on students’ interest in the Competency-based education programs. From the results of the questionnaire above, it is concluded that the interest of students to these programs is very high. Students who are happy with this program because of the opportunities offered to work in companies are 100% or categorized as excellent answer, 2) Around 83.3% of parents are interested in enrolling their children in this school is because of the existence of the program, and 3) 100% of students participate in the skills program they choose according to their wishes. The conclusion from this table is that the students are very positive in joining the programs because of the benefits they can take after graduating.

This condition illustrates the positive contribution of the students towards the school’s programs. This participation will eventually impact on the students’ learning performance. This participation involves two main factors, academic engagement, and social engagement (Finn, et al., 2003). According to research on college students, the amount of time and energy students devote to educationally beneficial activities is the best predictor of their learning performance (Astin, 1993). The students’ participation in the programs is a good sign that students have willingness to improve their competence by being actively engaged in the whole activities. Students who participate in the competency-based education program come from the different subject areas of religion, social studies, mathematics and science, and language and culture. Since the skills are subjective, the Madrasah Aliyah should offer more than one type of skills, depending on the availability of practice opportunities. Students are allowed to choose only one type of skill (Autoridad Nacional del Servicio Civil (JUKNIS), 2021). In conclusion, this program has given a lot of benefits towards the improvement of students’ additional skills and knowledge. Therefore, more Madrasah Aliyah are encouraged to implement similar programs.

Another Strategy: Increasing Public Trust through Parents’ Meeting

Achievements and excellence will be the main products for every educational institution that is willing to make itself at the forefront. Educational achievements and excellence that need to be put forward are related to student achievement in academic and non-academic fields with the hope that the public will be interested and give full trust to Islamic basic education institutions, then entrust the education of their children to these superior institutions (Sani, 2016). Madrasah Aliyah as an Islamic educational institution has been equated with other public schools based on Law no. 20 concerning the National Education System of the Republic of Indonesia in 2003. Although the position is equal, it does not necessarily change the perception of the Gorontalo community towards Madrasah Aliyah as the second choice. Perceptions like this affect people’s interest in sending their children to Madrasah Aliyah. Nevertheless, for Islamic educational institutions to survive and be able to respond to the needs of society at every age, it must have a quality improvement strategy and an effective measurement method.

The strategy basically rests on the ability to improve and formulate the vision of each era as outlined in the formulation of clear educational goals. If the current government has encouraged the establishment of competitive education institutions in each district, in the form of superior high schools, it is also necessary to think about establishing a superior Madrasah Aliyah. The more qualified schools in the area, of course, will benefit the community. To achieve quality Islamic educational institutions,
the development of infrastructure as well as services for Islamic educational institutions is a must (Sultan & Gorontalo, 2014). To see how the strategy of this MA in attracting the public’s interest to send their children to school, it can be seen in the observations made by the authors by looking directly at the process of socializing the competency-based education programs at the student guardian meeting held on August 5, 2021, intended to introduce skills programs that can support students to have qualified skills so that they can compete in the professional world of work. The conclusions that the writers can draw from the parents’ meeting are as follows.

Table 3. The Summary of Parents’ Meeting Observation

| Agenda                        | Speaker                  | Message                                                                 |
|-------------------------------|--------------------------|-------------------------------------------------------------------------|
| Introduction                  | The master of ceremony   | introducing automotive, culinary, fashion, and computer skills programs.|
| Speech                        | The MA Principal         | the urgency of Madrasah Aliyah as a nation’s generation printers who in addition to having knowledge, insight, and skills, but also have piety and morality so that they can maintain Islamic values wherever graduates are. |
| Collaboration with the job    | BLK representative        | Competency-based training aims to make students have skills so that they can compete and be distributed to the formal work sector, and community-based training aims to build student skills so that they are possible to become independent entrepreneurs. 2) There are three promising sectors in the world of work and business, namely the culinary sector, the automotive sector, and the fashion sector. 3) Competencies that must be possessed by students of in the automotive field are motorcycle mechanic skills which include the basics of injection, cars, and repair shop machine operators 4) Competencies that must be possessed by students in the field of fashion are skills to operate sewing machines and border machine. |

First, the parents’ meeting aims to introduce Madrasah RKAM, and at the same time introduce automotive, culinary, fashion, and computer skills programs. Second, in the speech delivered by the principal of the MA which explained the urgency of Madrasah Aliyah as a nation’s generation printers who in addition to having knowledge, insight, and skills, but also have piety and morality so that they can maintain Islamic values wherever graduates are. This speech was closed by introducing superior
programs, namely automotive skills programs, culinary arts, fashion, and computers. Third, the MA Sumedang collaborates with the Job Training Center (BLK) to optimize the achievement of the skills program objectives and serves as a means of distributing the students to every work sector. Fourth, in a speech delivered by a representative from the Sumedang Job Training Center (BLK), he explained that the competency-based training aims to make students have skills so that they can compete and be distributed to the formal work sector, and community-based training aims to build student skills so that they are possible to become independent entrepreneurs, 2) There are three promising sectors in the world of work and business, namely the culinary sector, the automotive sector, and the fashion sector. 3) Competencies that must be possessed by students in the automotive field are motorcycle mechanic skills which include the basics of injection, cars, and repair shop machine operators 4) Competencies that must be possessed by students in the field of fashion are skills to operate sewing machines and border machines. In conclusion the authors draw from observing this skill activity is that this program is divided into two categories, the first category is students who are focused on providing theory as a provision for students who will choose to continue to college, and students who focus on deepening practice. This effort was made as a trust building of the school to the parents in order to perform better services which eventually bring respect to them and make good relationships with parents (Bryk & Schneider, 2003; Scribner et al., 1999). After the meeting, it is expected that the programs’ objectives are fully conveyed and understood by the parents, and they will support to realize the academic purposes.

4. CONCLUSION

From the results and discussion above, the authors conclude that there is a very significant increase in new students between 2020 and 2021. This is due to the addition of competency-based education programs which become the flagship program in that school. Thus, it attracts the public to entrust their children to the MA. In addition, this program is also useful as an effort to improve graduates who have skills so that they can compete in the workforce. One of the strategies used by this MA is by marketing to the public. Gathering parents and guardians of students in meetings is a very strategic way, because in the meeting, the function and purpose of this program can be conveyed so that it can be understood by parents and thus increase parental trust. Moreover, to increase the competence of the desired graduates, the MA divides the competency-based program into two categories, namely the category of students focused on theory which is intended for students who choose to continue to college after graduation, and students who are focused more on practice, namely to students who choose to work after graduating. From the results of the questionnaire obtained, the authors conclude that the interest of students to take part in this program is very high, because this program is supported by collaboration between madrasas and local vocational training centers (BLK).

Based on the conclusions of the study, the authors recommend the following suggestions: Firstly, to further promote madrasas to the wider community, it is hoped that the MA in Sumedang will utilize various existing media such as special brochures, and newspapers containing competency-based programs along with photos of student activities in implement the skills program. Secondly, further studies are suggested to conduct to produce better quality of MA graduates. Development research is appropriate to create the curriculum, lesson plans, materials, or media of the programs.

REFERENCES

Alawiyah, F. (2014). Madrasah Education in Indonesia: Islamic School Education in Indonesia. Journal of Aspirations, 5(1), 51–58. https://jurnal.dpr.go.id/index.php/aspiration/article/view/449
Astin, A. W. (1993). What matters in college? Four critical years revisited. San Francisco7 Jossey-Bass
Autoridad Nacional del Servicio Civil. (2021). Technical Guidelines for the Development of KTSP in MA (Plus Skills). Angewandte Chemie International Edition, 6(11), 951–952., 2013–2015.
Bowers, H. (2006). Curriculum design in vocational education. In Fully refereed paper for the Australian Association for Research in Education-2006 Conference (pp. 26-30).
Bryk, A. S., & Schneider, B. (2003). Trust in schools: A core resource for school reform. Educational leadership, 60(6), 40-45.
Burnette, D. M. (2016). The renewal of competency-based education: A review of the literature. The Journal of Continuing Higher Education, 64(2), 84-93.
Creswell, JW (2017). Research Design: Qualitative, Quantitative, and Mixed Methods Approach (4th ed.). Student Library.
Doyle, E. (2005). Computer Anxiety, Self-Efficacy, Computer Experience: An investigation throughout a Computer Science degree.
Efferi, A. (2017). Life Skill Development of Madrasah Students Through Gardening Extracurricular Activities. Education, 12(1), 189–212.
Faizin, I. (2017). Strategi pemasaran jasa pendidikan dalam meningkatkan nilai jual madrasah. Madaniyah, 7(2), 261-283.
Finn, J. D., Pannozzo, G. M., & Achilles, C. M. (2003). The bwhy’sQ of class size: Student’s behavior in small classes. Review of Educational Research, 73(3), 321 – 368.
Ganesan, N. (2009). Rapid development of multimedia instructional modules for information technology education. Journal of International Technology and Information Management, 18(1), 5.
Hidayat, D. (2017). Automotive Skills Training to Increase Job Opportunities at the Karawang Regency Job Training Center. Journal of Nonformal Education and Community Empowerment, 1(1), 55–63. https://doi.org/10.15294/pls.v1i1.15143
Indonesia, U.-UR (2003). Law of the Republic of Indonesia Number 20 of 2003 Law of the Republic of Indonesia Number 20 of 2003 Regarding Number 20 of 2003 Concerning the National Education System Regarding the National Education System (Vol. 41, Issue 3).
Melvin Miller. (1984). Principles and a Philosophy for Vocational Education. Special Publication Series No. 48. 53(9), 1689–1699.
Muhaimin. (2003). New Directions of Islamic Education. Bandung: Shades. 2003
Nurmala, S. (2012b). Factors Affecting Student Interest to Continue to Vocational High School. Journal of Education, 42. https://doi.org/https://doi.org/10.21831/jk.v42i2.1950
Riyanto, A., & Arifah. (2003). Fashion Theory (2nd ed.). Yapemdo.
Sani, M. (2016). Strategy of Building Community Trust in Islamic Basic Education. July, 1–23.
Scribner, J. D., Young, M. D., & Pedroza, A. (1999). Building collaborative relationships with parents. Lessons from high-performing Hispanic schools: Creating learning communities, 36-60.
Siahaan, RC, Lisyanto, & Yulanto, DM (2021). Differences in Learning Outcomes of Vocational High School Students Using Problem Based Learning Models with Discovery Learning. Wheel: Journal of Automotive Education and Technology, 1(1). https://jurnal.unimed.ac.id/2012/index.php/roda/article/view/23275
Snape, P., & Fox-Turnbull, W. (2011). Twenty-first century learning and technology education nexus. Scientia Educologica, 34 (Problems of Education in the 21st Century), 149–161.
Steckel, R. H. (2009). Heights and human welfare: Recent developments and new directions. Explorations in Economic History, 46(1), 1-23.
Sugiyono. (2016). Qualitative and Combination Quantitative Research Methods (Mixed Methods). Journal of Chemical Information and Modeling.
Sullivan, S. C., & Downey, J. A. (2015). Shifting educational paradigms: From traditional to competency-based education for diverse learners. American Secondary Education, 4-19.
Sultan, I., & Gorontalo, A. (2014). The Development of Public Interest in Madrasah Aliyah in Gorontalo City Buhari Luneto
Ulfah, N. (2013). Mastery of Knowledge of Oriental Food Culinary Tools 1 in 2011 Class of Catering Education Students. Universitas Pendidikan Indonesia.
Widiaty, I. (2013). The relevance of the creative industry-based SMK curriculum with the extrapolation method and the econometric approach. Innovation of Vocational Technology...
Education, 9(1), 29–42. https://doi.org/10.17509/invotec.v9i1.4882

Widiaty, I. (2017). The Relevance of the Creative Industry-Based Vocational High School Curriculum Using the Extrapolation Method and the Econometric Approach. Innovation of Vocational Technology Education, 9(1), 29–42. https://doi.org/10.17509/invotec.v9i1.4882
Rifqi Syauqi Hubby, Diding Nurdin, Asep Suryana / Competency-Based Education at a Madrasah Aliyah in Sumedang: Eliciting the Organized Programs