

Management of dynamic curriculum in revitalizing vocational high school graduates

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ABSTRACT

This study aims to describe the management of dynamic curriculum implemented by Vocational High School (VHS) Mitra Industri MM2100 in revitalizing its graduates. It was conducted using the qualitative descriptive method at VHS Mitra Industri MM2100 and the object was how VHS Mitra Industri MM2100 implemented a dynamic curriculum. The data were obtained by using a questionnaire, through document studies and observation, and by interviewing principals, deputy principals, heads of departments, and productive teachers. The findings show that VHS Mitra Industri MM2100 implements a dynamic curriculum that always changes according to the development of science, technology, and the needs of graduate users so that the output is in accordance with the expectations and competencies required. The stages of implementing the dynamic curriculum include (1) establishing a learning flow in accordance with the school's vision and mission, (2) involving the industrial sector in curriculum preparation, (3) creating an industrial world ecosystem in the school, (4) adapting the curriculum to changes in the industrial sector and government policies, (5) involving parents in the teaching-learning process maximally, and (6) monitoring and evaluating the implementation of the curriculum on a regular basis by involving all relevant stakeholders. The implementation of a dynamic curriculum at VHS Mitra Industri MM2100 shows the results that match the expectations and competencies needed by the industrial sector, as evidenced by the 100% absorption of graduates for work specialization.



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INTRODUCTION

Curriculum management as the core of education plays a very important role in determining the success of education. The curriculum developed in vocational high schools should adapt to the needs of the industry as users of Vocational High School (VHS) graduates. A dynamic curriculum is a curriculum that is able to adapt to current industrial developments by involving industry in the preparation of the curriculum. Revisions or changes to the curriculum are carried out periodically following the current technological and industrial developments. According to the explanation of Law of the Republic of Indonesia Number 20 the Year 2003, Article 15, vocational education is secondary education that prepares students especially to work in certain fields. Vocational education is directed at preparing students to enter the workforce.

This increase in human resources is more oriented to the learning experience of students, by providing knowledge and skills that can be applied to the world of work so that they are able to

compete competitively in the world of work. However, the current reality is that quite many VHS graduates are unemployed because they do not have competencies that match the needs of the world of work. This shows that the competence of job seekers does not yet link and match with the industry. The National Bureau of Statistics recorded unemployment in Indonesia in February 2021 as many as 8.75 million people. This number increased compared to that in February 2020, which was 6.93 million. The highest number of job seekers are vocational high school graduates, among the other schools' leavers, which is 11.45% (CNN Indonesia, 2020).

One of the reasons for the high unemployment rate of VHS graduates is the management of VHS curriculum, which is not in accordance with the needs of the industry, as the graduates produced are not fully in accordance with the needs of the industry. This is in accordance with the results of Baiti and Munadi's (2014) research which reveals that the gap between the industrial sector and the world of education occurs because of differences in determining the quality. The world of education views high-quality graduates as graduates that have high grades and complete their study in a short time. Meanwhile, industry requires graduates with good technical skills and positive attitudes. Technical ability is better known as hard skills related to the scientific background and skills learned. Meanwhile, a positive attitude is better known as soft skills, namely abilities related to communication, creativity, critical thinking, collaboration, and agility in being adapted to changes.

In addition to these differences in perspective, the gap between the industrial sector and the world of education is at least caused by several factors, among others: (1) VHS graduates are not quite able to adapt to technological developments and to developing themselves in the workplace; (2) VHS graduates lack mental readiness to work; and (3) VHS graduates lack fighting power (Baiti & Munadi, 2014). Regarding these conditions, the President of the Republic of Indonesia instructed to revamp the education system and vocational training, through Presidential Instruction No. 9 of 2016. The President emphasized the need for the revitalization of vocational high schools to improve the quality of human resources. The instruction was assigned to the Ministry of Education and Culture.

The President of the Republic of Indonesia, through Presidential Instruction No. 9 of 2016 concerning the revitalization of vocational high schools, instructed ministers, governors, head of the Bureau of National Education Standard to take the necessary steps according to their respective duties, functions, and powers to revitalize vocational schools in order to improve the quality and competitiveness of Indonesian human resources. The President also instructed that a map of the workforce needs for VHS graduates be drawn up according to their respective duties, functions, and authorities based on the VHS development roadmap.

Especially to the Minister of Education and Culture, six instructions were given. The six instructions are: (1) creating a roadmap for VHS; (2) completing and aligning the VHS curriculum with competencies according to the needs of graduate users (link and match); (3) increasing the number and competence of vocational educators and education staff; (4) increasing collaboration with the ministry, institutions, local governments, business and industrial sectors; (5) improving access and certification of VHS graduates and VHS accreditation; and (6) forming a vocational development working group (The Minister of Education and Culture, 2020).

In particular, the revitalization of VHS is described in the revitalization master plan (RMP) guideline at the school level. In the guide, it is explained that the concept of the revitalization of VHS is a process of improving the performance of VHS which is carried out through: (1) refocusing the competency program; (2) redesigning the education component in VHS as a whole completely and thoroughly, so as to produce graduates who really have competence, good character, and work readiness and are competitive both at national and international levels (Directorate of Vocational Development, 2019).

The substance of vocational education must display the characteristics of vocational education which are reflected in the aspects that are closely related to curriculum planning, namely that the vocational education curriculum has been oriented to processes and results or graduates. However, the main success of the vocational education curriculum is measured not only by the educational success of students at school but also by their work performance in the world of work. Finch and Crunkilton (1979) suggest that the vocational education curriculum is oriented towards

processes (experiences and activities in the school environment) and outcomes (the effect of these experiences and activities on students) (Jatmoko, 2013).

The curriculum is a set of plans and arrangements regarding the objectives, content and teaching materials, and the methods used to achieve educational goals (President of the Republic of Indonesia, 2003). The curriculum is a process in teaching-learning activities that involve teachers, students, teaching materials, and learning media. The curriculum can also be interpreted as the maximum effort of the school to achieve the desired results inside and outside school (Guru Pendidikan, 2019). Viewed from the objectives of VHS as described above, the VHS curriculum is a set of systematic teaching-learning plans and arrangements to prepare students to become a character, skilled, creative workforce that is compiled through a process of alignment with the business and industrial sectors.

The curriculum is one of the components in the education system, where the curriculum will provide direction and be a guide in the implementation of the educational process, especially in formal educational institutions. Without a curriculum, the educational process will not run well. Even if we look at it from an extreme point of view, we can say that if there is no curriculum, there will be no educational process in schools. What determines the activities of the educational process in the form of teaching-learning activities is all determined in the curriculum, of course with a number of adaptations and variations.

Thus, we can understand and it is not an exaggeration if Beauchamp (1998) mentions that curriculum is the heart of education. The curriculum is the heart of education. The curriculum is the heart of education, so in its implementation it must be dynamic, meaning that it must follow changes according to the times, science and technology, the level of intelligence of students, culture, value systems, and community needs. Masykur (2019) writes the resulting curriculum can be dynamic, meaning that the curriculum must be able to answer any demands that arise needs according to a certain period of time. Thus curriculum changes do not have to wait a year or several years, but are very flexible according to changing conditions that require a change (Masykur, 2019).

Historically, the educational curriculum in Indonesia often changes every time there is a change in the Minister of Education, so the quality of Indonesian education has not yet met clear and steady quality standards. In the course of history since 1945, the national educational curriculum underwent changes in many periods, namely in 1947, 1952, 1968, 1975, 1984, 1994, 2004, 2006, 2013, and in 2021 the government introduced a prototype curriculum. These changes are a logical consequence of changes in the political, social, cultural, economic, and scientific systems in society (Wikipedia, 2022).

The current nationally available curriculum is the Revised Curriculum 2013. The competencies taught in this curriculum still do not meet the industry's needs optimally. This happens because the content of the existing curriculum tends to be static, while the needs in the industrial sector are always developing dynamically. Therefore, it requires the ability in dynamic curriculum management so as to be able to meet the changing needs of the industry.

Curriculum management is a system of managing curriculum, which is comprehensive and systematic aiming at realizing the achievement of curriculum objectives and how the curriculum is designed, implemented, and controlled by whom, when, and where. Curriculum management is also related to the policy of who is given the task, authority, and responsibility in designing, implementing, and controlling the curriculum (Syafaruddin & Amiruddin, 2017). From the explanation above, curriculum management can be concluded as a process of utilizing all curriculum resources, including planning, organizing, and supervising in order to achieve curriculum goals.

RESEARCH METHOD

This research was conducted at VHS Mitra Industri MM2100 Cikarang Barat, Bekasi Regency. The method used in this research is the descriptive qualitative method. The qualitative descriptive research is research that utilizes qualitative data that are described descriptively. This type of research is often used to analyze events, phenomena, or social conditions. The qualitative descriptive research aims to describe existing phenomena, both natural and human-engineered, which pay more attention to the characteristics, quality, and interrelationships among activities.

Qualitative descriptive research is a combination of descriptive and qualitative research. Descriptive research is research whose purpose is to present a complete picture of a social setting, or is intended to explore and clarify a phenomenon or social reality. It is conducted by describing a number of variables with respect to the problem and unit under study. Qualitative research is research that produces descriptive data in the form of written or spoken words from people or observed behavior (Sendari, 2019).

In this research, the data collection was carried out through interviews, a data collection technique by conducting direct dialogue with data sources, and carried out in an unstructured manner, where respondents had the freedom and opportunity to express their thoughts, views, and feelings naturally (Nugrahani, 2014). Interviews were conducted with stakeholders at VHS Mitra Industri MM2100. The stakeholders in question are (1) principals, (2) vice principals for curriculum, (3) representatives of productive teachers, and (4) representatives of normative teachers. To obtain a more comprehensive picture, the researchers carried out a documentation study through e-mail, school profiles, curriculum documents, and presentation of school program reports. The processed data were then described clearly in the preparation of the report.

RESULT AND DISCUSSION

Vocational high schools as educational institutions that develop vocational fields in Indonesia play an important role in improving human resources (HR). Employment opportunities for vocational school graduates are actually quite many. There are many opportunities that can be utilized if the school is able to accommodate the competencies needed in the world of work. Many VHSs still do not link and match with the world of work in providing learning experiences to students in terms of the selection of teaching materials, learning resources, activities, and practicum equipment used.

This phenomenon shows that VHS as an educational unit has not been optimal in preparing students and graduates to have competencies according to the demands of the world of work, especially in the business and industrial sectors, which will become users of graduates. This phenomenon can be illustrated in the Figure 1.

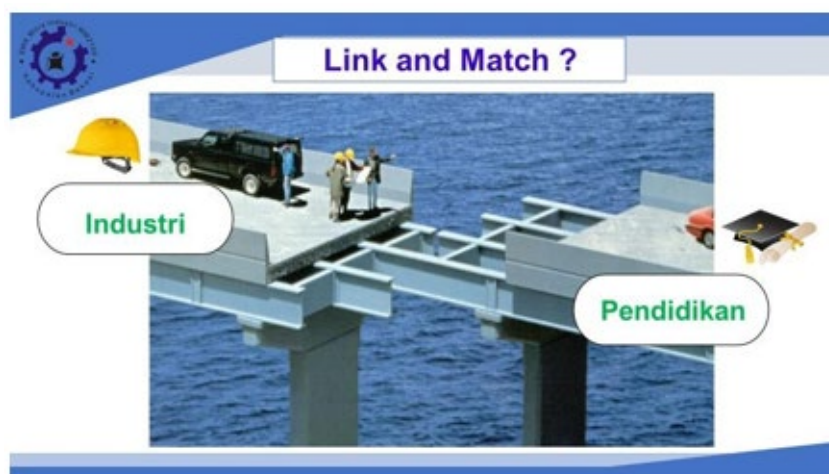


Figure 1. Illustration of the Missing Link and Match Between the Educational Sector and Industrial Sector

Based on this phenomenon, VHS Mitra Industri MM2100 runs a flow process of teaching and learning that focuses on a dynamic curriculum in order to carry out its vision and mission, so that it can revitalize its graduates according to the needs and competencies of the industrial sector. The vision and mission of VHS Mitra Industri MM2100 are as follows: Vision, VHS Mitra Industri MM2100 is an education and development center that produces students according to industry needs and entrepreneurial spirit, and Mission, (1) Building the character of students to behave positively;

(2) Equipping students with knowledge and skills according to the needs of industries; and (3) Building a strong entrepreneurial spirit.

To strengthen the achievement of its vision and mission, VHS Mitra Industri MM2100 imposes five values (honesty, responsibility, discipline, cooperation, caring) and 6-S: *senyum* (smile), *sapa* (greeting), *salam* (salaam), *sopan* (politeness), *santun* (courtesy), *semangat* (enthusiasm) that must be carried out by all teachers and students and supported by parents in a committed and consistent manner. This is made possible by the availability of an industrial ecosystem and adequate facilities and infrastructure.

The Steps to Implement Dynamic Curriculum Management

Establishing the Teaching-Learning Flow in Accordance with the School's Vision and Mission

In carrying out the teaching-learning process, VHS Mitra Industri MM2100 refers to the school's vision and mission and is adjusted to the developments and changes in education policy and the industrial sector. Vision and mission are a strong guideline in determining school targets, and thus the process flow always undergoes appropriate and necessary changes. Figure 2 is the flow of the teaching and learning process at VHS Mitra Industri MM2100 before the pandemic (in normal situations).



Figure 2. Process of Teaching Before Covid-19 Pandemic – Normal Situation

The flow of the teaching-learning process in normal situations is as follows, (1) Admission of new students involves the industrial sector and military personnel in the selection process. The selection process consists of written, physical, and health tests and an interview, and the process is adjusted to the recruitment process in the industry; (2) New student orientation is focused on building industrial character by means of workshops with the five values (honesty, responsibility, discipline, cooperation, and caring) and 6-S (smile, greeting, salaam, politeness, courtesy, enthusiasm), strengthening students' ideals, major programs, school culture, business and industrial sectors, hypnotherapy, and socialization of the triangle of success;

(3) Process of new students' basic leadership training involves the military personnel in its implementation, focusing on training in basic military and marching rules, physical mental and discipline, guidance, and parenting; and (4) The teaching-learning process of class X focuses on strengthening the character of preparedness for entering the industrial sector (fieldwork) so that the theoretical content (40%) and the major practical work (60%), carry out the teaching process in class using a competency pyramid where 20% is theory, 30% is skill, and 50% is character building in the division of teaching hours in each subject.

The competency pyramid is a learning concept at VHS Mitra Industri MM2100, which consists of the dimensions of knowledge, skills, and attitude. In teaching and learning activities, each of these dimensions is applied in different percentages. The carrying out of the competency pyramid can be explained as follows. To develop knowledge, the teacher spends 20% of the allocated time in the teaching-learning process on giving explanations of the theory in general. As much as 30% of the allocated time for the teaching-learning process is spent on providing students with practice according to each department, group work, presentations, and self-confidence training. For the attitude, 50% of the allocated time of the teaching-learning process is spent by the teacher to observe students following the teaching and learning process whether they carry out the five school values according to predetermined rules or not, for example being proactive in groups, being on time in carrying out assignments, and working together in completing group assignments.

The subjects are adapted to the needs of the industrial sector by referring to the national curriculum. The introduction to industrial culture is taught in class X by inviting industry experts or silver experts. The point is that the subject matter taught is in accordance with the required and expected competencies. In the first semester of class X, an evaluation is carried out using a parent questionnaire to ensure that the school has implemented a quality teaching-learning process.

(5) Class XI learning process, class XI must choose the path of specialization. Every student must choose one of the alternatives: to work, to continue their study to college, or to be an entrepreneur and plus an internship to Japan or Germany. Class XI is prepared for field work practicum with different periods according to the chosen interests. The fieldwork period is a minimum of six months and a maximum of one year or more, depending on the company's request. The curriculum is tailored to each specialization; (6) Class XII teaching-learning process, class XII teaching-learning process is in accordance with the specialization that has been chosen in class XI. The students who are interested in working start to be promoted to companies that have MoUs with the school with a bonded system. The students who are to continue their studies are prepared with a deepening of material to enter college. The students who are interested in internships in Japan and Germany are prepared to strengthen their language according to the requirements of the country of destination for the internship. Meanwhile, the interest in entrepreneurship has not been maximally carried out because it is not in accordance with the quota, but is carried out in their respective production units; and (7) Alumni. The alumni who have worked in the industry have a share and care program to strengthen their soft skills on how to be the best employees.

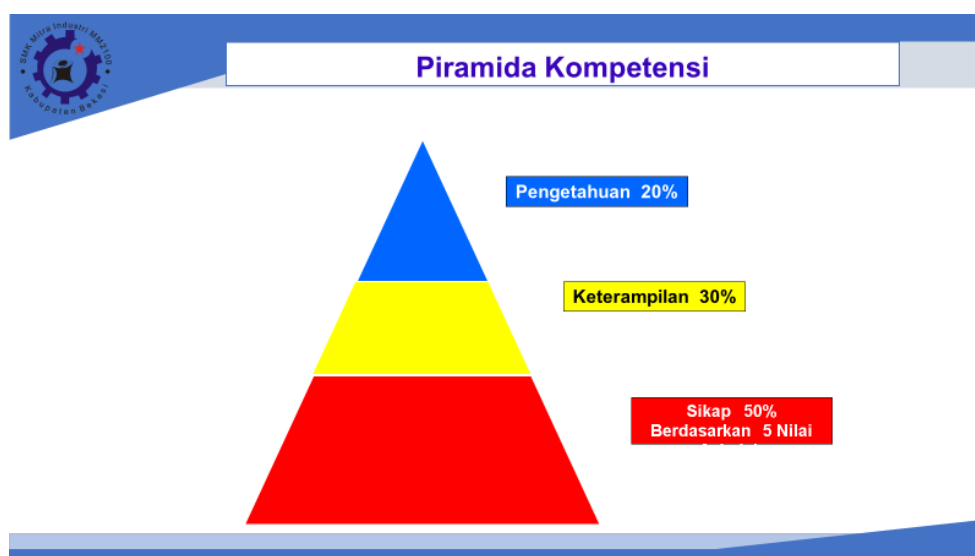


Figure 3. Competency Pyramid in Process of Teaching at VHS Mitra Industri MM2100

In general, all flows of the teaching-learning process during new normal and normal situations are still running, but there are changes in their implementation. The basic difference is in the implementation system. All processes are adapted to the existing conditions. For example, in the

process of accepting new students, orientation, LDKS, and other learning processes are carried out in a hybrid way. From the description of the flow of the learning process at VHS Mitra Industri MM2100 above, it is clear that curriculum management is applied dynamically and always adapts to the situation, policies, and current conditions.

Involving the industrial sector in Curriculum Preparation

In preparing its curriculum, VHS Mitra Industri MM2100 always involves the industrial sector to ensure the teaching and learning process is in accordance with industrial needs. The involvement of industries in curriculum preparation is carried out through forum group discussions (FGD) and curriculum validation which is carried out every year. Figure 4 is the concept of the curriculum as a result of the FGD with industries in general. While the implementation is adjusted to each department, especially for the content related to the product.

| Kompetensi Industri (KSA) | | |
|--|--|----------------|
| KOMPETENSI | MATERI | SUMBER |
| (K) | I Know | |
| KNOWLEDGE | Teori produktif sesuai jurusan | Sekolah |
| | Matematika (Matematika matrikulasi & Terapan) | Sekolah |
| | Basic Industry (K3, Kaizen & Hubungan Industrial) | DuDi |
| | 6 Bahasa (Bahasa Indonesia, Bahasa Inggris, Bahasa Jepang, Bahasa Mandarin, Bahasa Arab, Bahasa Jerman) | Sekolah |
| | Fisika (Fisika matrikulasi & Fisika terapan) | Sekolah |
| | Kimia | Sekolah |
| | Management System (ISO) | DuDi |
| | 4C (Communication, Collaborative, Critical Thinking, Creativity) | Sekolah & DuDi |
| | Productivity | DuDi |
| | Horensa | DuDi |
| ICT (Information communication & technology) | Sekolah & DuDi | |
| Safety riding | Sekolah & DuDi | |
| Normatif & Adaptif | Sekolah | |
| (S) | I Can | |
| SKILL | Skill Produktif sesuai jurusan | Sekolah & DuDi |
| | Computer Skill (Microsoft office & Internet connection skill) | Sekolah & DuDi |
| | Praktek Basic Industry (K3, Kaizen, Hubungan Industrial) | Sekolah & DuDi |
| | Aplikasi 6 Bahasa (Bahasa Indonesia, Bahasa Inggris, Bahasa Jepang, Bahasa Mandarin, Bahasa Arab, Bahasa Jerman) | Sekolah |
| | Berlatih Entrepreneurship (Unit produksi & Tefa) | Tenaga Ahli |
| | Customize skill yang dibutuhkan DU/DI | DuDi |
| Menjalankan Safety riding | Sekolah & DuDi | |
| (A) | I Do | |
| ATTITUDE | Penerapan Basic mentality | Sekolah & TNI |
| | Karakter 5 nilai (Jujur, Tanggung jawab, Disiplin, Kerjasama, Peduli) & 6 S (Senyum, salam, sapa, sopan, santun, semangat) | Sekolah |

Figure 4. Competencies Needed by Industries Based on KSA

The curriculum that is run at VHS Mitra Industri MM2100 is in accordance with the curriculum expected by the Directorate of Vocational Training. The Director of Vocational Training on his official website explains that there are five conditions for creating a link and match between vocation and the industrial sector.

The requirements for creating a link and match between vocation and the industrial sector are as follows: (1) joint curriculum development must be synchronized and approved annually, (2) the industrial sector is required to provide guest teachers to teach for at least 50 hours per semester, (3) student internships are designed for at least one semester jointly between the school and the industrial sector, (4) competency certification is carried out by industry, (5) the industrial sector is committed to absorbing graduates. In addition to these five conditions, the director also states the development of teaching factories is included in the VHS curriculum (Director General of Primary and Secondary Education Ministry, 2018).

The dynamic curriculum implemented at VHS Mitra Industri MM2100 is in line with the government's policy regarding center-of-excellence schools which are currently being run by selected vocational schools and receive assistance from centers of excellence. The characteristics of this new paradigm curriculum are as follows: (1) The world of work can be involved in improving teaching and learning; (2) The curriculum structure is simpler, with two groups of subjects, namely general and vocational, with the percentage of the vocational group being 70% of the total lesson hours; (3) The implementation of project-based learning is by integrating related subjects; (4) Field-work practicum is at least 6 months; (5) Students can choose the subjects outside their expertise program; and (6) There is a specific time allocation for strengthening projects of Pancasila student profile (Sakarinto, 2021).

Creating an Industrial World Ecosystem in Schools

In carrying out the teaching-learning process, VHS Mitra Industri MM2100 creates an industrial nuanced ecosystem and builds industrial culture in schools. School infrastructure and facilities, green lanes for roads, and determination of uniforms are adapted to the industrial sector, for example, the students majoring in industry wear safety shoes are provided with safety driving training and other industrial cultures.

The availability of an industrial world ecosystem at this school is in line with the results of the research conducted by Christensen et al. (2016) on work culture. In his research report, it is stated that VHS is one of the suppliers of industrial workers so that VHS graduates can follow the existing work system. Kaizen as a gradual approach in a systematic, sustainable manner is in accordance with the achievement of goals. One of the tools for continuous improvement is the concept of 5 S: seiri (brief), seiton (tidy), seiso (dress), seiketsu (care), and seshitsuke (diligent) (Nusannas, 2018).

In essence, the creation of an ecosystem that supports the implementation of a dynamic curriculum must be provided optimally and have a strategy that is in accordance with industrial needs or apply industrial culture to schools. According to Ismara et al. (2020) in the strategy book for implementing industrial acculturation in vocational education, he explains the stages of cultivating work in the vocational education environment as follows: (1) analysis of industrial needs; (2) developing values that are in line with industrial needs, 3) the process of convincing and committing to the importance of industrial values; 4) compiling behavioral guidelines for students, teachers and parents; 5) compiling mechanisms for habituation of behavior and character; 6) devising regular monitoring and evaluation mechanisms; 7) devising mechanisms for continuous improvement of rules and regulations; 8) equipping infrastructure and supporting equipment; 9) repetition of the process of cultivating cyclically and continuously (Ismara et al., 2020).

Adjusting the Curriculum to Changes in Industrial Sectors and Government Policies

To ensure that the curriculum implemented at VHS Mitra Industri MM2100 is in accordance with the needs of the industry, every year it is always validated with the industry through focus group discussions. This is also in accordance with the government's policy for the center-of-excellence schools, known as the 8 plus 1 Program.

The 8 plus 1 Program is translated into the learning process carried out at VHS Mitra Industri MM2100. The 8 plus 1 Program is currently run by the government consisting of eight program activities plus one activity to improve the program. The 8 plus 1 Program is as follows. (1) The curriculum is prepared together with the business sector and industrial sector (BS&IS) standards (strengthening aspects of soft skills and work character); (2) Project-based learning (PJBL) from BS&IS from the start (ensuring hard skills will be accompanied by soft skills and work readiness characters); (3) The number and participation of teachers from the expert industry of BS&IS is significantly increased (up to a minimum of 50 hours/semester); (4) Internship/industrial work practice (prakerin) is a minimum of one semester;

(5) Certification of graduates' and teachers' competence is in accordance with BS&IS standards and needs; (6) Teachers regularly get updates and training from BS&IS; (7) Applied research starts from a case or real need from BS&IS and the community (as a basis for teaching industry/teaching factory, collaborating with BS&IS and stakeholders); (8) Commitment to graduate absorption by BS&IS; and (9) Making available scholarships and donations in the form of laboratory equipment or other equipment for vocational education (Sakarinto, 2021).

The 8 plus 1 Program carried out at VHS Mitra Industri MM2100 can be seen in Table 1. Recently the government also issued Curriculum 2022 known as the prototype curriculum and VHS Mitra Industri MM2100 started studying and running programs (Mulyana, 2022).

Table 1. Implementation of the 8 + I Program at VHS Mitra Industri MM2100 for the 2020-2021 Academic Year

| No. | Aspects of 8 + 1 | Implementation |
|-----|---|--|
| 1 | The curriculum is prepared together with the business sector and industrial sector (BS&IS) standards to strengthen aspects of soft skills and work characteristics.) | <ol style="list-style-type: none"> 1. Implementing industrial culture and strengthening industrial character by applying the Five Values and Six Ss 2. Curriculum validation for all majors 3. Vocational competence according to SKKNI |
| 2 | Project-Based Learning (PJBL) from BS&IS from the start, ensuring hard skills will be accompanied by soft skills and work readiness characters | <ol style="list-style-type: none"> 1. Collaborating with the industry to implement project-based learning (PJBL). Products made by each department include: (a) Elind : Electric sink; (b) Electricity: Electrical Installation; (c) TKR : Car repair; and (d) Machine: Backlift, Garbage bank. 2. Implementing industrial class with PT. Posmi. 3. Implementing teaching factory with PT. Asahi Base Best |
| 3 | The number and participation of teachers from the EXPERT industry of BS&IS is significantly increased (up to a minimum of 50 hours/semester) | Inviting guest teachers to teach 32 hours per semester per department. |
| 4 | Internship/industrial work practice (Prakerin) at a minimum of one semester | <ol style="list-style-type: none"> 1. Work interest: at least 1 year. 2. College and internship interest: 6 months |
| 5 | Competency certification according to BS&IS standards and needs for graduates and teachers | |
| 6 | Teachers regularly get updated and training from BS&IS | Routine job training for teachers in industries. |
| 7 | Applied research that starts from a case or real need from BS&IS and the community (as a basis for teaching). Industry/teaching factory collaborating with BS&IS and stakeholders | ODC (October Digital Creative) program regularly every year by involving the industry as mentors and judges |
| 8 | Commitment to graduate absorption by BS&IS | 100% graduate absorption for graduates interested in work |
| 9 | Scholarships or apprentice from BS&IS for students as well as donations in the form of laboratory equipment or other equipment for vocational education | <p>MoUs with 215 companies whose scopes include:</p> <ol style="list-style-type: none"> 1. Validation of fieldwork curriculum and syllabus 2. Guest teacher 3. On-the-job training 4. Industrial visit 5. Street vendors 6. Graduate recruitment 7. Internship program 8. Industrial class 9. Teaching factory 10. CRS program 11. <i>Ujjikom</i> 12. Scholarships 13. Support worksheets |

(Source: Directorate of VHS, 2019)

Involving Parents Maximally in the Teaching-Learning Process

To ensure success in carrying out the learning process at VHS Mitra Industri MM2100, parental involvement is very important so that from the initial process of starting teaching, parents must carry out their respective duties to the best in accordance with the rules that have been determined and agreed upon in the orientation and socialization process of the school program at the orientation stage of new students.

Communication is the most important factor to realize the success of students so that at VHS Mitra Industri Mm2100 it strengthens the golden triangle of communication. This means that parents and students must carry out the tasks that are their best responsibilities, and must not beat each other. They must support each other and find the best way if there are things that are obstacles to success and they should not complain, but provide input and solutions.

Running the communication triangle among parents, schools, and students itself is a form of implementation of [Law No. 20 of 2003](#) concerning the National Education System, Article 7 paragraphs 1 and 2 of the law reads: (1) parents have the right to participate in choosing schools and obtain information about their children’s educational development, and (2) parents of children of compulsory school age are obliged to provide their children with basic education.

This is also supported by research by [Nurtanto and Sofyan \(2015\)](#), which cites several opinions about the effect and involvement of parents on student achievement. In his research, Yulianto found that parental involvement is all forms of parental attention and activities aimed at the success of their children's education. Teachers and parents have the same desire for the success of their children. These desires include: (1) being open to teachers, (2) cooperating in disciplining children, (3) helping monitor children's homework, and (4) attending parent meetings. In this study, it was stated that parental support in learning was quite influential on student achievement.

Monitoring and Evaluating Curriculum Implementation Periodically by Involving All Relevant Stakeholders

To ensure the graduates are qualified, competent, and in line with the expectations of the industrial sector, the monitoring and evaluation process is carried out regularly. Monitoring is a data collection process that is carried out routinely ([Novitasari, 2022](#)). In principle, monitoring is carried out during ongoing activities to ensure whether or not the suitability of processes and achievements is planned. If deviations or delays are found, they are immediately addressed so that activities can run according to plans and targets. The results of monitoring become input for the benefit of the next process ([Ministry of Health Human Resources Development and Empowerment Agency, 2017](#)).

To ensure the curriculum management can run well, VHS Mitra Industri MM2100 periodically carry out evaluation. The evaluation is done in several ways. The monitoring and evaluation process at VHS Mitra Industri MM2100 is illustrated in [Table 2](#).

Table 2. Forms of Evaluation and Monitoring of Curriculum Implementation at VHS Mitra Industri MM2100

| No. | Evaluation Form | Duration |
|-----|----------------------------------|---|
| 1 | FGD on curriculum and industries | Annually |
| 2 | Questionnaire to parents | Biannually |
| 3 | Student e-Suggestion | Monthly |
| 4 | Input from industries | Setiap monitoring PKL |
| 5 | Other inputs | Every time there is a visitor to the school |

Evaluation is a process that determines to what extent the goals that have been set can be achieved. In general, evaluation can be defined as a systematic process of gathering information in the forms of number, verbal description, analysis, and interpretation of information to make decisions on the quality of a product or outcom ([Masykur, 2019](#)).

The evaluation process of VHS Mitra Industri MM2100 with the graduate users to see whether the output of its graduates is in line with their expectations is conducted through interviews during visits to companies to monitor students doing field work by asking the following questions: (1) What is the quality of graduates of VHS Mitra Industri MM2100 like when they are working in your company?; and (2) What is your advice to VHS Mitar Industri MM2100 in order that it can maintain the quality of its graduates and even improve according to expectations?

In the evaluation process, it is also seen demands from companies that use graduate output. From the results of the search for graduates of Class 7, who passed the 2020-2021 academic year, the data on the employability of graduates is as can be seen in [Table 3](#).

Table 3. Employability of Batch 7 Graduates of VHS Mitra Industri MM2100 Academic Year 2020-2021

| No. | Company name | Department | | | | | | | Total |
|-----|------------------------------|------------|--------|------|------|---------|----|----|-------|
| | | TITL | ELIN D | TBSM | TKRO | Machine | AK | AP | |
| 1 | PT Roki Indonesia | 8 | 24 | 13 | 9 | 15 | 16 | 7 | 92 |
| 2 | PT Yamaha Music | | 4 | 2 | 2 | 3 | 3 | 1 | 15 |
| 3 | PT Denso Indonesia | 6 | 6 | 12 | 6 | 5 | 7 | 3 | 45 |
| 4 | PT Posmi Steel | | 4 | 4 | 2 | 9 | 2 | | 21 |
| 5 | PT Sugity Creatives | 9 | 8 | 20 | 15 | 11 | | | 63 |
| 6 | PT ADVANEX | | 1 | | | | | | 1 |
| 7 | PT TOKAI RIKA | | 4 | 1 | 4 | | 2 | | 11 |
| 8 | PT PANASONIC | 1 | 9 | 5 | 2 | 4 | 3 | | 24 |
| 9 | PT Autoplastic Indonesia | 4 | 5 | 17 | 7 | 12 | | | 45 |
| 10 | PT Hamaden Indonesia | | | | | | 3 | | 3 |
| 11 | PT ABBI | | | 2 | 3 | | 9 | | 14 |
| 12 | PT OAJ CARTON BOX | 2 | 1 | 2 | 2 | | | | 7 |
| 13 | PT TRINITAN | 2 | 4 | 9 | 2 | 6 | 2 | 5 | 30 |
| 14 | ASUKA HOTEL | | | | | | | 6 | 6 |
| 15 | PT AKS | 1 | | 1 | | 1 | 1 | | 4 |
| 16 | PT LG | 4 | 9 | 18 | 19 | 8 | 2 | | 60 |
| 17 | PT NUTRIFOOD | | | | 4 | | | | 4 |
| 18 | PT Indomatsumoto | 2 | 2 | 12 | 3 | 9 | | | 28 |
| 19 | PT JFE Galvanizing Indonesia | | | | | | 2 | | 2 |
| 20 | PT Jotun Indonesia | 3 | 2 | 2 | 3 | 6 | 1 | | 17 |
| 21 | PT IML Teknologi | | | 1 | 1 | | 1 | | 3 |
| 22 | PT Diamond Electric | | 4 | 1 | 2 | 3 | 3 | | 13 |
| 23 | PT SINSEI DENSI | 3 | 1 | | | | 1 | | 5 |
| 24 | PT JFE Logistic | | | 1 | | 2 | | | 3 |
| 25 | PT Sanden Indonesia | | 1 | 5 | 1 | | | | 7 |
| 26 | PT YUTAKA | | | 2 | | | | | 2 |
| 27 | PT KAYABA | | 1 | | | | | | 1 |
| 28 | PT Sari Roti | | 3 | 5 | 5 | 1 | | 1 | 15 |
| 29 | PT FUKUSUKE | | | | 1 | 1 | 1 | | 3 |
| 30 | PT Tri Centrum Fortuna | 1 | | 3 | 3 | 2 | | | 9 |
| 31 | PT AHM | | | | | 1 | | | 1 |
| | Total | 46 | 96 | 138 | 96 | 99 | 59 | 23 | 557 |

The Table 3 shows that the employability of the graduates that choose to work in the industrial sector is 100%. The key to the success of the management of the dynamic curriculum is the willingness and agility to change according to technological developments, policies, and the needs of the industrial sector quickly and accurately.

CONCLUSION

The dynamic curriculum management that is run at VHS Mitra Industri MM2100 is the management of the curriculum that follows the developments of industries as users of its graduates. The implementation of the dynamic curriculum from planning to evaluating always involves industries, parents, and all elements of education. The curriculum will be changed if the current curriculum does not meet the needs of industries. Changes in the curriculum, which do not change the whole system, can be executed immediately, such as adding materials to certain competencies. While the changes that are comprehensive in nature and affect the entire system are made at the beginning of the school year. This comprehensive curriculum change is carried out through a curriculum validation process with the industry. In carrying out the dynamic curriculum, VHS Mitra Industri MM2100 takes several activity steps. The steps for implementing a dynamic curriculum are: (1) establishing the learning flow in accordance with the school's vision and mission, (2) involving the industrial sector in curriculum preparation, (3) creating an industrial world ecosystem in schools, (4) adjusting the curriculum with changes that occur in industries and government policies, (5)

involving parents in the learning process to the fullest, and (6) monitoring and evaluating the implementation of the curriculum on a regular basis by involving all relevant stakeholders. Dynamic curriculum management that is run at VHS Mitra Industri Mm2100 can revitalize VHS graduates as evidenced by the employability of 100% of graduates. The management of the VHS curriculum must be carried out dynamically to produce graduates who are ready to work and are needed in the industrial sector. Sensitive and agile to changes that are so fast and willing to change to keep up with developments.

REFERENCES

- Badan Pengembangan dan Pemberdayaan Sumber Daya Manusia Kesehatan Kementerian Kesehatan. (2017). *Pedoman Monitoring dan Evaluasi Pembelajaran*. Badan Pengembangan dan Pemberdayaan SDM Kesehatan Pusat Pendidikan SDM Kesehatan Kementerian Kesehatan RI. http://202.70.136.161:8107/65/1/PEDOMAN-MONEV_-2017.1.pdf
- Baiti, A. A., & Munadi, S. (2014). Pengaruh pengalaman praktik, prestasi belajar dasar kejuruan dan dukungan orang tua terhadap kesiapan kerja siswa SMK. *Jurnal Pendidikan Vokasi*, 4(2), 164–180. <https://doi.org/10.21831/jpv.v4i2.2543>
- Beauchamp, G. (1998). The effect of group size on mean food intake rate in birds. *Biological Reviews of the Cambridge Philosophical Society*, 73(4), S0006323198005246. <https://doi.org/10.1017/S0006323198005246>
- Christensen, T., Danielsen, O. A., Laegreid, P., & Rykkja, L. H. (2016). Comparing coordination structures for crisis management in six countries. *Public Administration*, 94(2), 316–332. <https://doi.org/10.1111/padm.12186>
- CNN Indonesia. (2020, December 11). Menaker ungkap sebab lulusan SMK dominasi pengangguran di RI. *CNN Indonesia*. <https://www.cnnindonesia.com/ekonomi/20201211140123-92-580934/menaker-ungkap-sebab-lulusan-smk-dominasi-pengangguran-di-ri>
- Direktorat Pembinaan Sekolah Menengah Kejuruan. (2019). *Panduan penyusunan Rencana Induk Revitalisasi (RIR) SMK tingkat sekolah*. Kementerian Pendidikan dan Kebudayaan Direktorat Jendral Pendidikan Dasar dan Menengah Direktorat Pembinaan Sekolah Menengah Kejuruan.
- Direktur Jendral Pendidikan Dasar dan Menengah Kementerian. (2018). *Peraturan Direktur Jendral Pendidikan Dasar dan Menengah Kementerian Pendidikan dan Kebudayaan Nomor: 07/D.D5/KK/2018 tentang Struktur Kurikulum Sekolah Menengah Kejuruan (SMK)/Madrasah Aliyah Kejuruan (MAK)*. Direktur Jendral Pendidikan Dasar dan Menengah Kementerian. https://kurikulum.kemdikbud.go.id/wp-content/unduh/Struktur_SMK_2018.pdf
- Finch, C. R., & Crunkilton, J. R. (1979). *Curriculum development in vocational and technical education: Planning, content, and implementation* (5th ed.). Allyn and Bacon.
- Guru Pendidikan. (2019). *Pengertian kurikulum menurut para ahli*. Seputarilmu. <https://seputarilmu.com/2019/11/pengertian-kurikulum-menurut-para-ahli.html>
- Ismara, K. I., Pramono, H. S., Nugroho, N., Dwijonagoro, S., & Kuncoro, I. H. (2020). *Strategi penerapan budaya kerja industri di pendidikan vokasi dengan selamat dan sehat*. UNY Press. http://staffnew.uny.ac.id/upload/131873963/pendidikan/4_Buku_Strategi_Budaya_Kerja.pdf
- Jatmoko, D. (2013). Relevansi kurikulum SMK kompetensi keahlian teknik kendaraan ringan terhadap kebutuhan dunia industri di Kabupaten Sleman. *Jurnal Pendidikan Vokasi*, 3(1), 1–13. <https://doi.org/10.21831/jpv.v3i1.1572>

- Kementerian Pendidikan dan Kebudayaan Republik Indonesia. (2020). *Penyesuaian Keputusan Bersama Empat Menteri tentang panduan pembelajaran di masa pandemi COVID-19*. Kementerian Pendidikan dan Kebudayaan Republik Indonesia. <https://www.kemdikbud.go.id/main/blog/2020/08/penyesuaian-keputusan-bersama-empat-menteri-tentang-panduan-pembelajaran-di-masa-pandemi-covid19>
- Masykur, R. (2019). *Teori dan telaah: Pengembangan kurikulum*. Aura Publisher. [http://repository.radenintan.ac.id/12468/1/TEORI DAN TELAAH PENGEMBANGAN KURIKULUM KIRIM.pdf](http://repository.radenintan.ac.id/12468/1/TEORI%20DAN%20TELAAH%20PENGEMBANGAN%20KURIKULUM%20KIRIM.pdf)
- Mulyana, M. (2022). *Mengenal kurikulum prototipe 2022 (Kurikulum Merdeka)*. Ainamulyana. <https://www.ainamulyana.com/2021/12/mengenal-kurikulum-prototipe-2022.html>
- Novitasari, C. (2022). *Monitoring: Pengertian, tujuan, contoh dan tahapan*. Pelajarindo. <https://pelajarindo.com/pengertian-monitoring>
- Nugrahani, F. (2014). *Metode penelitian kualitatif dalam penelitian pendidikan bahasa*. Cakra Books. https://library.stiba.ac.id/uploaded_files/temporary/DigitalCollection/ZTDNEpUTHQoQUJMHLrErGJyHg89uy71MyuHyOTYzZDg3YWUxYjdjNA==.pdf
- Nurtanto, M., & Sofyan, H. (2015). Implementasi problem-based learning untuk meningkatkan hasil belajar kognitif, psikomotor, dan afektif siswa di SMK. *Jurnal Pendidikan Vokasi*, 5(3), 352–364. <https://doi.org/10.21831/jpv.v5i3.6489>
- Nusannas, I. S. (2018). Implementasi konsep budaya 5R (Ringkas, Rapi, Resik, Rawat dan Rajin) sebagai upaya meningkatkan kinerja perusahaan dari sisi non keuangan. *Eqien: Jurnal Ekonomi Dan Bisnis*, 3(2), 93–106. <https://doi.org/10.34308/eqien.v3i2.31>
- Presiden Republik Indonesia. (2003). *Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional*. Presiden Republik Indonesia. <http://simkeu.kemdikbud.go.id/index.php/peraturan/1/8-uu-undang-undang/12-uu-no-20-tahun-2003-tentang-sistem-pendidikan-nasional>
- Presiden Republik Indonesia. (2016). *Instruksi Presiden Republik Indonesia Nomor 9 Tahun 2016 tentang Revitalisasi Sekolah Menengah Kejuruan dalam Rangka Peningkatan Kualitas dan Daya Saing Sumber Daya Manusia Indonesia*. Presiden Republik Indonesia. <https://www.kemdikbud.go.id/main/index.php/files/download/e451d9ec3a04121>
- Sakarinto, W. (2021). *Kebijakan revitalisasi SMK melalui program SMK Pusat Keunggulan tahun 2021*. Direktorat Jendral Pendidikan Vokasi Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. <https://docplayer.info/215664340-Kebijakan-revitalisasi-smk-melalui-program-smk-pusat-keunggulan-tahun-2021.html>
- Sendari, A. A. (2019, August 8). Mengenal jenis penelitian deskriptif kualitatif pada sebuah tulisan ilmiah. *Liputan6*. <https://hot.liputan6.com/read/4032771/mengenal-jenis-penelitian-deskriptif-kualitatif-pada-sebuah-tulisan-ilmiah>
- Syafaruddin, S., & Amiruddin, A. (2017). *Manajemen kurikulum*. Perdana Publishing. [http://repository.uinsu.ac.id/3492/1/MANAJ KURIKULUM.pdf](http://repository.uinsu.ac.id/3492/1/MANAJ%20KURIKULUM.pdf)
- Wikipedia. (2022). *Kurikulum di Indonesia*. Wikipedia. [https://id.wikipedia.org/wiki/Kurikulum_di_Indonesia#:~:text=Secara berurut%2C kurikulum Indonesia ditetapkan,yang berkembang di dalam masyarakat](https://id.wikipedia.org/wiki/Kurikulum_di_Indonesia#:~:text=Secara%20berurut%20kurikulum%20Indonesia%20ditetapkan,yang%20berkembang%20di%20dalam%20masyarakat)