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Development of Vocational Education Based on Independent Curriculum at BIM Jombang Center of Excellence Vocational School

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Abstract

The independent curriculum is structured and organized as a refinement of the previous curriculum with a more dynamic and adaptive learning approach. It frees educators and students to carry out a learning process that continues to develop based on religious values, community culture, and Pancasila. The Government authorizes each SMK PK to plan and implement an independent curriculum focusing on students. The focus of this research is (1) How is the independent curriculum planning in the development of vocational education at SMK PK BIM Jombang, (2) How is the implementation of the independent curriculum in the development of vocational education at SMK PK BIM Jombang? This research method uses descriptive qualitative techniques in data collection triangulation, data reduction, data presentation, and drawing conclusions and verification. The results of this study are (1) Planning for vocational education curriculum for SMK PK in the independent curriculum by participating in training through IHT, compiling curriculum content, curriculum organization, curriculum content organization preparing methods and strategies in learning carried out by the curriculum development team and all teaching Staff, (2) The implementation of the PK vocational education curriculum in the independent curriculum is still in the second stage of development.

Kata Kunci: Vocational Education Development, Curriculum Management, Independent Curriculum

Abstrak

Kurikulum mandiri dirancang dan diimplementasikan untuk meningkatkan kurikulum sebelumnya dengan pendekatan pembelajaran yang lebih dinamis dan adaptif. Ini membebaskan tenaga pendidik dan siswa dalam melaksanakan proses pembelajaran yang terus berkembang berdasarkan nilai-nilai agama, budaya masyarakat, dan Pancasila. Dalam hal ini, Pemerintah memberikan kewenangan kepada setiap SMK PK untuk merencanakan dan menerapkan kurikulum mandiri yang berfokus pada siswa. Fokus penelitian ini adalah (1) Bagaimana perencanaan kurikulum merdeka dalam mengembangkan pendidikan vokasi di SMK PK BIM Jombang, (2) Bagaimana implementasi kurikulum merdeka dalam mengembangkan pendidikan vokasi di SMK PK BIM Jombang. Metode penelitian ini menggunakan teknik deskriptif kualitatif dalam pengumpulan data triangulasi, reduksi data, penyajian data, serta penarikan kesimpulan dan verifikasi. Hasil penelitian ini (1) Perencanaan kurikulum pendidikan vokasi SMK PK dalam kurikulum merdeka dengan mengikuti pelatihan melalui IHT, menyusun isi kurikulum, penyusunan kurikulum, menyusun metode dan strategi dalam pembelajaran yang dilakukan oleh Tim Pengembangan Kurikulum dan seluruh tenaga kependidikan, (2) Implementasi kurikulum pendidikan vokasi SMK PK dalam kurikulum merdeka masih dalam tahap pengembangan kedua.

INTRODUCTION

Post-COVID-19 pandemic, Indonesia is facing dynamics and tough competition, especially in the world of education, which is experiencing a decline in literacy and numeracy skills due to learning loss. This concept shows the suboptimal learning process.(Noviantari & Faridhoh, 2021; Sa'diyah & Yunizul, 2023). This learning loss significantly impacts student learning outcomes, which are crucial for national development.(Hakim & Sari, 2022; Suryana et al., 2023). National development is characterized by increasingly tight labor competition and the need for quality human resources in various sectors.(Hakim & Fitrayansyah, 2024; Iskandar et al., 2022), including education and industry(Daoed et al., 2020; Hakim, 2016). To face this challenge, vocational education plays a strategic role in preparing graduates who are competent and adaptive to changes in industry and the world of work to increase national productivity and competitiveness.(Sudarmaji et al., 2021).

The current reality shows that vocational education in vocational high schools is critical in preparing the workforce, but it must still be considered inadequate.(Setiawan et al., 2023). The Central Statistics Agency (BPS) reported that the Open Unemployment Rate (TPT) for vocational high schools as of February 2022 was the highest unemployment rate based on the education level category, reaching 10.38 per cent. (BPS, 2022, p. 17). The high unemployment rate is due to the low quality of vocational school management, and the competencies that students learn do not match the community's needs.(Djunaidi & Alfitri, 2022). Therefore, the problems that occur require education experts and the government to formulate an appropriate curriculum as a benchmark for the success of national education to create a link and match between the world of education and the world of life.(Hermawan et al., 2024; Lamijan et al., 2024).

Vocational high school education is organised based on the provisions of the 2013 curriculum, revised in 2018, which consists of 30% theory and 70% practice.(Fiolentin et al., 2021). Since 2020, due to learning loss mitigation, educational institutions have been given two options in using the curriculum, namely the full 2013 curriculum and the emergency curriculum, namely the simplified 2013 curriculum.(Syarifah et al., 2022). During the 1 year 2020-2021, it turned out that implementing the emergency curriculum achieved better learning outcomes than the full use of the 2013 curriculum. (Ministry of Education and Culture, 2021; Lestariyanti & Listyono, 2024). Undeniably, the education curriculum occasionally changes, although it only sometimes experiences a total revision.(Judge & Sari, 2022).

The development of a more flexible and market-oriented curriculum is increasingly prominent; on February 1, 2021, the Minister of Education, Culture, Research, and Technology of Indonesia, Nadiem Makarim, again introduced a new curriculum called "Independent Curriculum" as an alternative to emergency curriculum recovery during the pandemic. This curriculum is part of the "Independent Learning" program, which aims to improve the quality of learning in educational institutions by paying attention to the needs and characteristics of each student.(Baharun et al., 2024; Yuhastina et al., 2020). This curriculum is being developed so that it can be applied in all academic units, with adjustments based on the readiness and conditions of each school—for example, one of the vocational education in Jombang located at Jl. Kemuning No. 57a, Candi Mulyo, Jombang District, has implemented an independent curriculum, SMK PK Bakti Indonesia Medika (SMK PK BIM), established in 2010 and accredited A. This vocational school is the first and best Health Vocational School in Jombang, which is under the auspices of the Samudra Ilmu Cendekia Foundation and one of four health vocational schools in East Java

as a Center of Excellence Vocational School since the 2021/2022 academic year based on the Decree of the Ministry of Education and Culture of the Republic of Indonesia(Mamduh, 2021; Determination of Vocational High Schools Implementing the 2021 Center of Excellence Vocational High School Program Phase I, 2021). With this, SMK BIM Jombang became a pilot project for implementing the independent curriculum, hoping to implement every element well.

His research(Yanti, 2023)explained that "SMK PK is a development of vocational education with a specific expertise program to improve the quality and performance of SMK graduates, which is strengthened by the alignment and partnership with iduka and universities as partners or companions." Similarly, SMK PK BIM Jombang is committed to developing vocational education based on the independent curriculum by conducting various links and matches with multiple duka parties, such as PT. Takumi Koba, Viva Generik, RYND Education, ILKI, ITC Center and UNAIR educational institutions as companions to align the curriculum and provide internship opportunities for students and teachers, bring in guest teachers from industry and distribute graduates. This is proven through the MoU between the school and Iduka according to the stated cooperation limitations.

Designing a relevant curriculum for vocational education at vocational schools is a challenge that must be carried out continuously in line with existing developments.(Maulina & Yoenanto, 2022). The relevance of the curriculum will be a strength or even a weakness in the success of planning the implementation of vocational education programs in Indonesia.(Ead et al., 2022; Indadihayati & Hariyanto, 2023; Yulyana et al., 2024). Learning in vocational schools is oriented towards graduate results and focuses on the learning process to improve students' employability skills. SMK PK BIM Jombang also provides supporting skills in foreign language learning, namely Mandarin and Japanese. In its implementation, it is also carried out by planning a benchmarking program and evaluation form, which is stated in the form of a report card. In other words, schools must compile and prepare the curriculum with the educational parties according to their respective fields. Thus, from this process, it is hoped that experience from the industrial world will be internalised into learning in vocational schools. As mentioned above, this study emphasises the management of planning and implementing the development of vocational education based on the independent curriculum at SMK PK BIM Jombang.

RESEARCH METHODS

This study uses a case study method with a qualitative descriptive approach, focusing on curriculum planning and implementation in developing vocational education at SMK PK BIM Jombang (Rahmadi, 2011; Suharyat, 2022). The research was conducted in natural conditions, without limitations in interpreting phenomena related to the planning and implementation of vocational education curricula. This research was conducted at SMK PK BIM Jombang, East Java. It was chosen because of its status as a Center of Excellence Vocational School since 2021/2022 and its commitment to developing a vocational curriculum. (Sudaryono, 2016).

This study collected primary and secondary data. Primary data were obtained from interviews with the principal as the primary informant. This curriculum vice principal understood, and one curriculum development team of SMK PK BIM Jombang provided direct information about the planning and implementation process of the vocational education curriculum. (Creswell, 2015). Secondary data includes documentation related to curriculum planning, implementation, and evaluation, whether in the form of curriculum

training/socialisation/training documents, curriculum administration, and report card documents. Data analysis using the Miles and Huberman method includes data reduction, presentation, and verification. (Fadli, 2021). Data reduction helps filter important information, data presentation facilitates understanding, and verification ensures that conclusions drawn are accurate and relevant. To ensure the validity of the data, this study uses triangulation of sources and techniques. (Lincoln, 2021).

RESULTS

Independent Curriculum Planning in the Development of Vocational Education

The Merdeka Curriculum is a government initiative to accelerate education transformation, particularly in vocational education at vocational high schools (SMK). Research conducted at SMK PK BIM Jombang reveals that this school, which focuses on health, has implemented the 2013 Curriculum for grade 12 and the Merdeka Curriculum for grades 10 and 11. Since 2021, SMK PK BIM Jombang has been applying the second stage of the Merdeka Curriculum after being designated as a Center of Excellence through its health service expertise program for migrant workers.

When SMK BIM became a centre of excellence, the Principal began planning a new paradigm learning process, namely the independent curriculum, which became a new reference for schools that had implemented it. The planning was, of course, carried out before the new school year began. This can be revealed by the results of the researcher's interview with Mr Widiyanto Rhamandani, the Principal of SMK PK BIM Jombang: *"School curriculum planning before the new school year. When our school was selected as a PK in 2021, according to Kepmen 17/M/2021, the curriculum changed to independent."*

The statement above shows that internal and external stakeholders meet every time the new school year approaches to determine the direction of institutional goals to develop vocational education at SMK through the IHT (In-House Training) process. Researchers can demonstrate this through the documentation results in Figure 4.3 below.

Figure 1. In House Training

Source: Data 2024

The meeting held before the new academic year through the In-House Training (IHT) discussed the preparation of the Operational Curriculum (KOSP), Lesson Plans (ATP), and teaching modules at SMK PK BIM Jombang following an evaluation of last year's work program. Before drafting the curriculum, the Principal established a Curriculum Development Team (TPK) of 20 members, including the Principal and various vice principals. This team is responsible for designing the implementation stages of the curriculum according to the Ministry of Education's mandate. The team members were selected through meetings involving all school staff to ensure competence in curriculum development.

Therefore, anyone selected as a committee member of the curriculum development team through a decree issued by the Principal must be actively involved in advancing and developing the existing curriculum. For example, the head of the curriculum development team who was selected was from somewhere other than the school's curriculum vice principal. Those chosen as the curriculum development team must be able to carry out their duties and obligations according to their respective responsibilities. After the curriculum development team was determined, the team began to draft the curriculum and then published it. However, before it was published, SMK PK BIM Jombang first formulated the targets or objectives in the curriculum development planning to maintain the vision and mission of SMK PK BIM Jombang.

In formulating institutional goals, referring to the school's vision and mission, which align with contemporary developments, is essential. The Merdeka Curriculum at SMK BIM Jombang is designed based on the job market's needs, with teaching methods that reflect actual work conditions. The school also plans students' careers from grade 10, enabling them to understand their future career paths. As expressed by the Head of the Curriculum Development Team:

> *"We do student career planning at the beginning of the semester so that students know what the future will be like. Regarding the curriculum structure that we plan, we align it with the needs of the industry/market and the characteristics that exist in the school, starting from the students, teachers, the environment, and the industry. To support the achievement of school goals/programs, a cooperative relationship is needed that is mutually beneficial between SMK and the industry."*

Based on the statement above, with this independent curriculum, schools have the right to freedom of thought and creativity in determining educational goal planning, especially in setting their curriculum. The priority in planning the curriculum at SMK PK BIM Jombang is to carry out various 8+i links and matches with IDUKA, which is engaged in the health sector. The link and match lead to the improvement and development of the learning process for students in the development of vocational education, both in schools and in industry, which can be followed by students and their educators. Then, regarding the contents of the curriculum at SMK PK BIM Jombang, it is compiled by Kepmendikbudristek No. 262/M/2022, which includes project-based learning. The Head of the Curriculum Development Team also stated that:

> *"The contents of the independent curriculum at SMK BIM are arranged in phases so that students can learn according to their respective levels of achievement, needs, speed, and learning styles. Thus, this curriculum is flexible in learning at school. Students have adequate time to master the competencies that the school has previously targeted.*

The interview above shows that the curriculum content in SMK is project-based, with a percentage of 70% real projects from the IDUKA culture. In addition, researchers have observed during research on the independent curriculum in the development of vocational

education in SMK that in organising SMK learning based on the independent curriculum, there are intracurricular activities which contain the curriculum structure, learning outcomes, and concentration of expertise. Then, there are co-curricular activities in the form of P5BK carried out at the end of the semester, PKL, and extracurricular activities. The Head of the School Curriculum Development Team added a statement regarding P5BK planning that: *"The government provides several themes. However, in choosing them, schools must adjust to the characteristics of the school and the issues that are happening in the school. So, schools must choose two themes with one mandatory theme in each phase."*

The meeting held before the new academic year via IHT covered the planning of KOSP (Operational School Curriculum), lesson plans (ATPs), and educational module preparations at SMK PK BIM Jombang following last year's work program evaluation. It should be noted that before starting the draft curriculum formulation process, the school management led by the Headmaster formed a dedicated Curriculum Development Team (TPK) comprising 20 individuals, including the Headmaster himself, four Vice Principals (curriculum, student affairs, communications, and facilities), administrative personnel, four Program Expert Chairs, Committee Members, and nine representatives from each Vocational Skill Association (IDUKA) appointed to plan how the school could effectively execute tasks according to the mandates given by the Ministry of Education. The documentation of the operational curriculum draft of SMK PK BIM Jombang in the documentation results in Figure.

Figure 2. Draft of SMK PK BIM Jombang KOS

Source: Data 2024

The results of the curriculum development documented by the SMK PK BIM Jombang development team will be finalised and approved by the relevant education department before being socialised to all school members. This curriculum draft will serve as a new reference for implementing programs at the school. Before planning the Merdeka Curriculum, the Principal annually reviewed the school's vision, mission, and objectives through meetings with internal and external parties. Following this, a curriculum development team was formed to draft the curriculum by defining goals, content, and the organisation of learning that includes intramural, co-curricular, practical work experience (PKL), and extracurricular activities. This process continues until the final curriculum document is completed.

Implementation of the Independent Curriculum in the Development of Vocational Education at SMK PK BIM Jombang

The core stages of the learning process implemented at SMK PK BIM Jombang heavily rely on the roles of the principal, curriculum vice principal, and educators. The successful implementation of the Merdeka Curriculum is supported by training that teachers have undergone through In-House Training (IHT) and project-based learning methods. The school can execute the curriculum with thorough planning based on the previously formulated outcomes. The new paradigm of the Merdeka Curriculum at SMK PK BIM Jombang includes support from Universitas Airlangga Surabaya to assist in achieving educational outputs. Documentation indicates that the University Hospital of Universitas Airlangga guided the health service and pharmaceutical technology programs during the pre-practical training (PKL) at SMK PK BIM Jombang.

Figure 4. Pre-Education PKL Mentoring by UNAIR

Source: Data 2024

Pre-Education PKL conducted by UNAIR is one of the forms of higher education assistance designed to help SMK PK BIM Jombang achieve output. This was confirmed by the researcher's interview with the Principal, who said:

> *"This assistance is carried out to achieve the desired output, outcome, and impact targets according to the target. The target for school principals is to develop school management and development planning and assist in the scope of cooperation with DUDI. For teachers themselves, they can assist in implementing the independent curriculum in schools, facilitating learning in IHT. Then, the program's target is also to become an extension of the Ministry of Education and Culture in carrying out the oversight program. So, reviewing and providing approval for equipment procurement, teacher training, principal training, and monitoring learning achievements and link and match aspects."*

Implementing the Merdeka Curriculum at SMK PK BIM Jombang includes direct support from higher education institutions that meet specific criteria, such as Universitas Airlangga (UNAIR) and BPPMPV. Additionally, SMK PK BIM Jombang collaborates with industry partners (IDUKA) through a Memorandum of Understanding (MoU) for curriculum development and synchronisation, where the school adjusts learning materials to meet industry needs. IDUKA also validates the curriculum devices provided by the school. Furthermore, student training involves teachers or instructors from IDUKA, such as guest instructors from cupping and acupressure practitioners for the health service skills program.

Guest teachers are learning programs conducted by instructors outside the school. These activities provide students with a refreshment and an in-depth understanding of up-to-date materials in theory and practice. Bringing instructors/teachers from outside the school is a form of cooperation between the school and IDUKA, which provides students with up-to-date material and practice. In addition, the collaboration at SMK PK BIM Jombang is increasing the competence of educators and education personnel by implementing teacher internships/OJT. This can be proven by researchers when conducting interviews with the Head of the school's Curriculum Development Team:

> *"Previously, the teachers had an internship in the industry. Yesterday, it was implemented for 2 months. Later, the results of the internship were brought here to be taught. Because the alignment is not only the curriculum but also the competence of teachers and the facilities and infrastructure. We adjust the infrastructure."*

In addition to cooperation in the form of teacher internships/OJT, there is also cooperation in the form of commitment to support the absorption of graduates. SMK PK BIM Jombang has collaborated with PT. Takumi Koba Indonesia to procure the recruitment of caregiver workers to Japan. The implementation of the recruitment began with the procurement of socialisation carried out by PT. Takumi Koba Indonesia, with permission from the school; after that, the recruitment of workers was carried out through several tests such as written and interview tests.

The documentation results above are the recruitment of PT—Takumi Koba to distribute caregiver workers to Japan. Based on the data sources above, it can be seen that the independent curriculum is not immediately implemented. However, there are stages that the school must carry out according to the readiness and conditions of each school. Government policies and strengthening cooperation with IDUKA are very effective in supporting performance at school. The cooperative relationship between SMK and IDUKA is stated in the cooperation agreement between the school and IDUKA. The following is one of the documents in Figure 4.11 regarding school cooperation with one of the parties, IDUKA.

Figure 5. MoU between SMK PK BIM Jombang and IDUKA

Source: Data 2024

The researcher found that the link and match at SMK PK BIM Jombang focuses on curriculum alignment and enhancing the competencies of educators and educational staff. To achieve this, In-House Training (IHT) for implementing the Merdeka Curriculum (IKM) is conducted to prepare educators. Before implementing the Merdeka Curriculum, teachers are provided with initial training in the form of IHT IKM. SMK PK BIM Jombang employs Independent Change IKM, allowing for curriculum development tailored to the school's characteristics. The learning process includes a Pancasila student profile project, highlighted by the Gebyar P5BK event involving all stakeholders, with the outcomes recorded in student reports.

Regarding the implementation of the independent curriculum organisation, it has also been regulated by the school as stated by the Head of the Curriculum Development Team: *"For the organisation of learning in SMK, there are intercurricular, extracurricular, PKL, and P5BK. For PKL, it is done in semester 5 because, in semester 6, many exams must be passed, such as school and competency skills exams."*

Based on the interview results above, it can be seen that everything regarding the learning organisation and its contents containing the curriculum structure in SMK has been regulated in Permen 262/M/2022 and developed independently according to the characteristics of the school and students. The researcher also studied the fact that SMK PK BIM Jombang has also carried out school benchmarking to identify, measure, and find ways to achieve good school performance. The following are the results of the documentation:

Figure 6. Benchmarking of SMK PK BIM Jombang with Senior Living D'Khayangan

Source: Data 2024

Based on the study results above, this benchmarking helps improve school performance by comparing school performance with the performance of the industry chosen as a place to conduct benchmarking by identifying products/services in the industry. Thus, it can be further seen that the implementation of the independent curriculum in the development of vocational education at SMK PK BIM Jombang based on the results of observations, interviews, and documentation studies obtained by researchers has been carried out by a series of activities that have been planned at the beginning supported by policies, programs, procedures, and resources in achieving the goals and objectives that have been set together.

The table below contains research findings on planning and implementing vocational education based on the independent curriculum at SMK PK BIM Jombang.

Phase	Discussion Points	Research Results
Planning	Goals and Priorities	1. Internal and external stakeholders determine the direction of institutional goals through meetings. 2. The school schedules workshops and training on compiling curriculum documents at the beginning of the school year. 3. Formation of the Curriculum Development Team (TPK) carried out by the Principal. 4. Internal stakeholders identify and review the expertise program's goals and objectives based on the needs analysis through a tracer study. 5. Internal stakeholders work together to map out students' careers from when they are in grade X. 6. Freedom in thought and expression. 7. Strengthening the character and competence of students through the Pancasila student profile. 8. The school prepares supporting skills for students. 9. *Link and match between* the school and the parents.
	Curriculum Content	1. The composition of the curriculum content is 30%

		theory and 70% practice. 2. The study load arrangement for each subject is regulated in teaching hours (JP) per year. 3. School institutions' freedom to arrange learning with weekly time allocations sometimes differs in one school year. 4. The additional content is arranged according to the conditions of each school, the needs of the students, or the needs of the family. 5. The vocational school curriculum includes general group content, vocational group content, and Pancasila and work culture student profile strengthening projects (P5BK). 6. Concentration of expertise held in a 3-year or 4-year program.
	Types of Learning	1. Curriculum design that is tailored to the needs of the students. 2. Project-based learning. 3. The school selects the Independent Curriculum Implementation (IKM) path according to school conditions.
	Learning Organization	1. Internal and external stakeholders jointly compile and determine indicators of student learning completion at each phase according to student qualifications. 2. The school develops its expertise concentration based on students' needs, education, and regional potential. 3. Preparation of teaching materials starting from textbooks, teaching modules, and Pancasila and Work Culture Student Profile Strengthening Project (P5BK) modules. 4. The government and school institutions determine and compile subject outcomes.
	Presentation and Response Model	1. Stakeholders develop learning using the Project Based Learning method. 2. Prepare a block system for internal stakeholders to learn that combines instruction and construction. 3. Stakeholders develop a curriculum development model that focuses on the formation of attitudes, skills, and knowledge of students by the demands of educational needs.
	Types of Evaluation	1. Each teacher conducts initial assessment planning, an assessment during the learning process, and a final evaluation to assess students' competency and talent development. 2. Teacher development and school performance through benchmarking.
Implementation	Implementation	1. Teachers and students should be involved in implementing link and match 8+i vocational education at vocational schools. 2. Direct assistance from universities and colleges. 3. Implementation of real project-based learning from iduka. 4. Implementation of IKM according to the implementation path chosen by the school institution.
	Evaluation	1. Internal assessment by the school and external assessment by the Ministry of Vocational Education

regarding supervision of development implementation.

DISCUSSION

Independent Curriculum Planning in the Development of Vocational Education

The new school year is always critical for schools to ensure their conditions are optimal in preparing for the learning process. In welcoming the new school year, schools need to evaluate the existing curriculum and make updates that are adjusted to the school's vision and mission to maintain the relevance of its curriculum to the demands of the times. The same is true for the developments in vocational education at SMK, which have resulted in a paradigm shift in learning. Based on Dedi Lazwardi's theory, researchers have found that curriculum planning must pay attention to several indicator elements, namely objectives and priorities, curriculum content, learning organisation, presentation and response models, and types of evaluation.(Dedi Lazwardi, 2017). Then, after conducting research, the researcher found that the findings were by Dedi Lazwardi's theory as follows:

Goals and Priorities

Theoretically, the main objective of vocational education at SMK is to develop more relevant vocational competencies and improve skills by IDUKA. The goal is to produce graduates who are ready to work, independent, and able to face the challenges of IDUKA, which continue to develop communication skills, critical thinking, collaboration, and creativity. The priority must also be a link and match between the school and IDUKA (Hermawan et al., 2024; Lamijan et al., 2024). One example is SMK BIM Jombang, which operates in the health sector. The SMK has objectives adjusted to its expertise programs, such as health services, medical laboratory technology, pharmaceutical technology, and analytical chemistry. For example, one of its superior programs, namely in health service expertise (caregiver), aims to produce expert personnel in nursing assistants who are skilled and competent in essential nursing services. Graduates of the expertise program are expected to be able to facilitate individual, family, and community care in maintaining and restoring optimal health conditions and excellent quality of life. Thus, it can be seen that the priority planning of SMK BIM Jombang education in the scope of the caregiver expertise program is to align the curriculum with applicable health service standards, establish links and matches with hospitals, clinics, pharmacies, and universities if students want to continue their education further in the medical field. That way, students get direct experience.

There are challenges to realising these goals. Many vocational education schools have difficulty meeting IDUKA standards because the school does not yet have a strong relationship with IDUKA, which has an impact on the priority of developing students' practical skills, such as limited internship opportunities, practice facilities, and adjustments to skills needed by IDUKA (Faturohman & Suherman, 2022; Islamiah et al., 2022; Lamijan et al., 2024; Rojaki, 2023). However, this limited access can be overcome by SMK BIM Jombang through the design of the MoU. Thus, students can gain work experience even though not all of these limitations can be overcome directly but gradually.

Curriculum Content

The content of the vocational education development curriculum for SMK includes skills and knowledge that are relevant to the field of work. In theory, the curriculum's content is designed to apply to the needs of IDUKA, basic needs, practical skills, and materials. The curriculum content development is significant in adapting to technological changes and dynamic

job market needs, including vocational modules that are adjusted to the latest IDUKA trends as done by SMK BIM Jombang in planning the content of its curriculum oriented towards projects by emphasising the development of the character of Pancasila student profiles by integrating related subjects without being tied to subject content so that there is relevance between the school context and the context of the workplace.

SMK BIM Jombang has planned and mapped the potential of local resources to implement affordable, practical projects. For example, in the health sector, they hold simple health-related projects according to the scope of expertise, concentrating on intracurricular, co-curricular, extracurricular activities, and school culture. SMK BIM Jombang cooperation with IDUKA to fill the need for practice. Even though the scale may be small, this can help students understand the basics of field practice (internship) according to the expertise program students are taking.

Types of Learning

The planning of learning types in the development of vocational education in SMK theoretically focuses on project-based student approaches, problem-based learning, and industrial simulations. These approaches are designed to develop practical skills, creativity, and critical thinking. Vocational education emphasises learning methods on practical skills and field experience. At SMK BIM Jombang, students are taught practical lessons in health laboratories to familiarise themselves with medical procedures and tools before facing real situations. Then, there is an internship or PKL plan at IDUKA and a clinical simulation plan to practice basic medical procedures. This planning certainly requires additional support in the form of teacher training, practical resources in the form of infrastructure, and practical tools from the government and related parties so that teachers can design learning types appropriate to field conditions.

Learning Organization

The organisation of vocational learning in theory must consider the relationship between theory and practice. This organisation includes practice schedules, additional or supporting facilities, and collaboration with IDUKA. At SMK BIM Jombang, a block system is used to organise learning because students focus on theory sessions in class and practice sessions in the laboratory/in the field. In the organisation of vocational learning, it is essential to involve teachers and instructors who are experienced in their fields to ensure that learning is applicable and by practice in the field. As planned by SMK BIM Jombang, they will bring in guest teachers to provide in-depth material and up-to-date student practices.

Presentation and Response Model

The presentation and response model of vocational learning is often in the form of a live demonstration by an instructor or teacher. In this model, the instructor shows how to complete a task using a specific tool; then, the students repeat the steps with direct supervision. That way, planning the presentation and response model provides students with a visual understanding of the skills being learned. SMK BIM Jombang also planned the presentation and response model by inviting guest teachers from IDUKA and universities. The instructor will later show how to do a skill or procedure; then, students will practice the situation in an actual situation with direct supervision and correction from the instructor. Moreover, they can also do it through video tutorials, computer simulations, or other interactive media to improve their understanding of the presentation and response model. So that students are better prepared when doing assignments.

Types of Evaluation

The types of evaluation planned in the design of the vocational education curriculum certainly include the types of curriculum evaluation of educational units and learning evaluations that are planned and carried out independently, periodically by educational units to measure the success of the head of the educational unit and educators in implementing all planned educational programs to understand the vision, mission and objectives of the educational unit that have been achieved. Evaluation planning at SMK BIM Jombang involves not only the principal, educators, and students but also parties from IDUKA, students' parents, and accompanying supervisors. The planned evaluation is focused on the end of the semester and everyday life by reviewing the achievement or improvement of student abilities, such as preparing daily task plans, UTS, and UAS (school exams). If students are not ready in the process or are less than the school's KKM, they will be given special assistance or learning by teachers, homeroom teachers, and even BK teachers. Thus, SMK BIM Jombang plans it by setting specific criteria for moving up a class/per phase and graduation criteria. This is by (Idrus, 2019)that the type of evaluation determines the assessment of something (activities, provisions, performance, decisions, processes, people, objects and others) based on specific criteria.

Implementation of the Independent Curriculum in the Development of Vocational Education at SMK PK

Viewed from the entire management process, curriculum implementation is a management function that emphasises activities directly related to curriculum activities. Researchers have found that curriculum implementation must pay attention to several indicator elements, namely the implementation of planning and assessment. (Wahyudin, 2014).

Curriculum Implementation

Implementing the vocational education curriculum requires close collaboration between schools and IDUKA to ensure its relevance and effectiveness. Practical facilities, project-based learning methods, and comprehensive assessments are essential in creating competent and work-ready graduates. Monitoring and feedback from IDUKA help ensure that the implementation process always follows the latest developments in the world of work.

Implementing the curriculum at SMK PK BIM Jombang has been carried out in stages through the SMK PK program since 2021, based on the Minister of Research and Technology's Decree No. 262 of 2022. The principal develops programs according to the needs of SMK PK, aiming to produce graduates who are ready for work by aligning vocational education with industry (IDUKA). Link and match activities include curriculum alignment, project-based learning, guest teachers from IDUKA, and industrial work practices. Additionally, there are competency certifications for teachers and students according to IDUKA standards and a commitment from IDUKA for graduate absorption.

Likewise, what was said by(Rosina et al., 2021) explains that vocational schools are required to align the curriculum due to the development of information technology and the industrial world. If the school curriculum is aligned with the development of information technology and the industrial world, unemployment at the vocational school level can be minimised. The alignment of the curriculum can also be realised if the facilities and infrastructure are adequate, sufficient funds are available to carry out direct practice at IDUKA, and teachers are directly experienced at IDUKA.

The optimisation of the job market at SMK PK BIM Jombang accelerates the placement of graduates into the workforce, facilitates teacher internships in industry, and opens industrial classes. Competency testing activities for students through Professional Certification Institutions and benchmarking with other organisations support the connection between the school and industry (IDUKA) (link and match). The success of vocational education at SMK heavily relies on the alignment of the curriculum, teaching methods, practical facilities, and partnerships with IDUKA. The combination of project-based learning and involvement from IDUKA experts is critical to producing competent, job-ready graduates who can adapt to changes in the labour market.

Curriculum Implementation Assessment

Curriculum assessment or curriculum evaluation in its implementation, in theory, requires a process of mentoring and professional development according to needs as a follow-up to the results of observations. In the field, SMK BIM Jombang assesses the implementation of its curriculum, which is carried out in stages and periodically. The assessment carried out starts by determining the extent to which students have mastered technical skills according to the field of expertise relevant to IDUKA, which teachers and industry partners directly supervise, the importance of IDUKA's involvement in the learning process, and the extent of the quality and skills of teachers in implementing the independent curriculum including project-based learning models, formative evaluations, and development facilities for students.

The assessment carried out periodically by the Principal regarding the supervision of vocational education development activities based on the independent curriculum is in the form of supervision of the implementation of the link and match program, the suitability of program planning with its implementation in the field by coordinating with the head of the program implementation and the head of each expertise program. Supervision carried out by external parties themselves is related to the implementation and suitability of the budget with planning so that the target given by the ministry determines the percentage of program implementation from time to time. External assessments at SMK BIM Jombang are not only from IDUKA but also carried out by the Ministry of Education, Culture, Research and Technology in the vocational sector referred to as BBPPMPV (Center for the Development of Vocational Education Quality Assurance.

It should be noted that monitoring and feedback from IDUKA and accompanying supervisors help ensure that the implementation process always follows the latest developments in the IDUKA world. High flexibility in practice-based assessment, collaboration with IDUKA, and teacher competency development are essential for vocational education development, especially in vocational schools.

CONCLUSION

This study shows that developing vocational education through an independent curriculum requires special attention to several important aspects. First, there is a need to design a comprehensive curriculum strategy, which includes determining objectives and priorities that align with the institution's vision, mission, and goals. The curriculum content development must also be adjusted to government policies and the application of project-based learning methods that involve integration between intracurricular learning, co-curricular, Field Work Practices, and extracurricular activities. Restructuring the curriculum structure, developing presentation methods by educators, and adjusting the types of evaluations used are critical steps in ensuring

the effectiveness of curriculum planning. In addition, the implementation of the link-and-match program has shown the relevance of vocational education to the needs of the industrial world. However, the monitoring and evaluation process needs to be improved to maintain the sustainability of the relevance and effectiveness of the curriculum to the needs of the labour market.

This study recommends further research to explore methods for increasing teacher capacity in implementing project-based learning and developing evaluation models more appropriate to vocational needs. In addition, future research needs to examine the long-term effectiveness of link and match, especially in bridging the gap between education and industry.

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