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Implementing the Teaching Factory Approach: Curriculum Management at MAN 2 Bantul, Yogyakarta Indonesia

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Abstract

Purpose – This research aims to explore the implementation of curriculum management in skill-based subjects using the modified teaching factory approach at MAN 2 Bantul. The study examines the planning, development, and execution of curriculum management in the context of skill-based programs.

Design/methods/approach – Conducted as a qualitative study, this research utilizes a case study approach to delve into the intricacies of curriculum management. Data collection techniques include observation, in-depth interviews, and documentation. Analysis methods involve transcript analysis, coding/labeling, grouping, comparing and contrasting, and interpretation. Data validation employs triangulation, considering multiple sources, techniques, and periods.

Findings – The findings of this research indicate several vital points: 1) Curriculum management planning in the skills program is aligned with the institution's vision, mission, and objectives. 2) Curriculum development is tailored to students' needs and the educational institution's capabilities. 3) Implementing curriculum management in the skills program involves using the modified teaching factory method with block system learning strategies. 4) Evaluation stages include both learning and curriculum evaluations. 5) Challenges the institution faces in implementing skill programs include the novelty of the learning model, aligning existing skill programs with community needs, a shortage of educators in skill programs, marketing products, and addressing student issues.

Research implications/limitations – The impact of this research extends to educational policymakers and practitioners, providing insights into effective curriculum management for skill-based programs. Rules include the specific context of MAN 2 Bantul and the challenges faced by the institution.

Practical implications – The study offers valuable insights for educational institutions implementing skill-based programs using the modified teaching factory approach. The findings highlight effective strategies and potential challenges institutions may encounter during implementation.

Originality/value – This research contributes to the literature by examining curriculum management in skill-based programs, explicitly using the modified teaching factory method. The study's originality lies in its comprehensive analysis of the planning, development, and implementation phases, providing valuable lessons for institutions seeking innovative approaches to curriculum management in skills education.

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Introduction

Curriculum management is essential in schools because optimal management, structuring, and organization of various activities in educational institutions are required to realize educational ideals. The curriculum has basic principles so that the learning process can run well. The benchmarks used are student achievement of goals and encourage teachers to develop and continue to perfect learning strategies. Educational institutions have the authority to create existing curricula according to the conditions and culture of each school. As in Government Regulation Number 19 of 2005 concerning National Education Standards in article 17 paragraphs 1 & 2. Article 17, paragraph 1, states that the educational unit-level curriculum is developed according to the local community and student's academic unit, regional potential, and social culture. Furthermore, paragraph 2 emphasizes that madrasas and madrasa committees develop educational unit-level curricula and syllabi based on the primary curriculum framework and graduate competency standards,

As time passes, competition gets more rigid, and job demands become more complex; educational institutions must be dynamic and equip their students with specific skills so that the resulting graduates can play a role amid this intense competition. The 2013 curriculum is designed to build quality and dignified Indonesian human resources. The emphasis of the 2013 curriculum is improving thinking patterns, perfecting the curriculum, deepening and developing material, improving the quality of learning methods, and adapting material to produce the expected outcomes (Prasetya, 2020).

There needs to be innovation in learning models in schools. Learning should not only be limited to the process of transferring theoretical knowledge but also in the form of education by doing, namely learning that provides students with the opportunity to practice directly what they have learned. One learning model suitable for educational institutions (especially those implementing vocational programs) is a teaching factory / modified teaching factory-based learning model. Teaching Factory is a curriculum that follows the government curriculum, namely the 2013 curriculum, which emphasizes character. The teaching factory is a learning concept that bridges the competency gap between the knowledge provided by schools and industry needs. Teaching factories allow students to practice their knowledge directly in the field. The teaching factory aims to increase graduates' competency and entrepreneurial spirit, produce products in the form of goods or services that have added value, increase sources of school income, and increase collaboration with industry or relevant business entities (Yunanto, 2016).

Initially, teaching factory-based learning was implemented in Vocational High Schools (SMK) and rarely applied in madrasas. Research conducted by (Alfan Makmur, 2020) believes that madrasas are often considered second class, at the bottom of general education institutions regarding achievements and others. Madrasas are considered institutions that only teach religion without paying attention to the currents of globalization. Therefore, improving the quality of education is necessary, especially in madrasas. Optimizing learning and support from the government is also required to achieve educational progress. The Directorate of Curriculum, Facilities, Institutions and Student Affairs (KSKK) has begun making learning innovations by implementing skills programs in madrasas. Skills programs are implemented to improve the quality, competitiveness, and relevance of madrasa education in line with the practical needs of the business and industrial world by national education standards.

MAN 2 Bantul implements a skills program to improve the quality of its graduates. Implementing the skills program at MAN 2 Bantul was motivated by the fact that many MAN 2 Bantul graduates only immediately began their education at the tertiary level. Recently, MAN 2 Bantul started launching a modified teaching factory as one of its learning models. This program can develop students' potential and allow them to enter the community environment. Increasing student competency must be a significant concern for educational institutions. Several studies say that teaching factories in vocational schools are a learning model that can produce skilled and ready students to enter the world of work. Therefore, this research will observe how the modified teaching factory can improve students' competency at MAN 2

Bantul. What are the challenges faced? Madrasas in implementing the modified teaching factory learning model?

Methods

This research was conducted at MAN 2 Bantul Yogyakarta using a qualitative case study approach. In determining research subjects, researchers used purposive and snowball sampling techniques. There are three types of informants. First, there are vital informants (people who have comprehensive information). The research subject who was the key informant was the Head of Madrasah Aliyah Negeri 2 Bantul. Second, the main informant (a person who knows technical and detailed information about the research problem). The primary informants include the Deputy Head of Madsarah for curriculum and teachers who teach in skills programs. Third, supporting informants. The subjects who became supporting informants were the Deputy Head of Public Relations and madrasah administration staff.

The data collection methods used in this research are observation, *in-depth interviews,* and documentation. Observations are carried out to observe conditions in the field directly, while in-depth interviews *are* carried out to obtain in-depth information directly from respondents regarding the observed problems. Respondents in this research were selected based on respondents who knew, understood, and experienced the research problem. Interviews are carried out by asking respondents several questions regarding matters related to the thing or object being studied according to the interview guide that has been prepared previously. The results of the interviews were recorded and summarized according to the respondents' answers. Documentation is complementary as evidence of research in the form of photos, data, archival notes, and so on.

Data analysis techniques include several stages, including *transcripts. The transcript* is an overall record of the data obtained from respondents during research. Second, *Coding* (Identifying differences in data by labeling each source's answer according to a predetermined theme). Third, *Grouping* (grouping respondents' answers according to pieces determined in the *coding process).* Fourth, Compare and contrast (analyze differences and similarities in respondents' responses). Fifth, *Interpreting,* namely interpreting data into narrative paragraphs (Zain, 2020)

Data validity techniques use source triangulation, technical triangulation, and time triangulation. First is source triangulation. Researchers checked data from various sources, including books, school websites, and one of the teachers at MAN 2 Bantul. The second is technical triangulation. Researchers studied the data using several techniques: documentation analysis (reading from several data sources), interviews with several respondents, and direct observation of the places/buildings students use to practice skills third, time triangulation. Time triangulation is done by checking the data against the same sources and techniques but with different times and situations. Time adjusts to the willingness of the respondent. For example, an interview with the deputy head of curriculum researchers checks data over 2 periods with different times and dates.

Results

1. Skills Program Curriculum Management

The curriculum has a critical position in an educational institution because it contains a set of plans and arrangements regarding objectives, content, and learning materials, as well as guidelines used in organizing learning activities to achieve specific educational goals (Nasbi, 2017). To improve student competency, MAN 2 Bantul began implementing a skills program as one of the subjects.

Skills or vocational programs are educational innovations providing space for students to practice directly related to their learning. Apart from that, the skills program also equips students with the skills needed when entering the world of work/industry. Two influential figures in skills-based education are Charles Allen Posser and John Dewey. Charles Allen Posser believes schools should be able to help students get jobs, keep jobs, and continue to

advance in their careers. Posser stated that vocational education requires a learning environment that resembles the world of work and adequate equipment according to the needs of the world of work (Sr, 2020). Posser's opinion regarding the benefits of developing vocational education is often referred to as Posser's 16 postulates. Meanwhile, John Dewey initiated the learning method in vocational education: learning *by doing.* He believes that a person can study less to learn something. When a person does what he wants to know, he will naturally master the correct movements or actions to obtain perfect understanding.

Madrasah Aliyah Negeri 2 Bantul is one of the madrasas in Yogyakarta that implements skills programs to support improving the quality of graduates as stated in the Decree of the Director General of Islamic Education No. 4924 of 2016 concerning the Determination of Madrasah Aliyah Organizing Skills Programs. To optimize the learning process in skills programs, there is a need for good management from educational institutions. Management in educational institutions is carried out so that the teaching and learning process can run systematically and be evaluated entirely and accurately to be effective and productive. (Jannana & Suryono, 2017) Curriculum management involves planning, development, implementation, and evaluation.

a. Planning Stage

The planning stage has a vital role in curriculum management because this stage can influence the success or failure of implementing curriculum management. Good planning will produce good results, too. According to Waterson and Sudjana, planning is a conscious, organized, and continuous effort to select the best alternative from several existing alternative actions to achieve specific goals (Syafaruddin & Amiruddin, 2017). At this stage, the educational institution will formulate what kind of curriculum design will be implemented. The curriculum development team must understand the philosophical objectives of the curriculum that have been determined and the organizational method used during implementation.

The skills program was included in one of the MAN 2 Bantul curricula because, at that time, many graduates still needed to continue their education immediately to the tertiary level. Based on these conditions, implementing the skills program aims to prepare students to enter the world of work and equip them to participate in the community. Output and outcomes can explain further details regarding the objectives to be achieved. *Results* The skill program is the creation of skilled students who have reliable skills and are ready to use administratively (diploma). Meanwhile, the outcome is the formation of students who are independent and successful in society, in the sense that when they work, then skills can be accounted for. If they are entrepreneurs, they can become viable and successful entrepreneurs.

The planning stage of skills-based subject curriculum management, modified teaching factory at MAN 2 Bantul is not much different from curriculum planning in general; it is just that there are goals or targets for graduates that can become their characteristics. Students are educated to be soul entrepreneurs and have the readiness to enter the world of work. The process of preparing the school-level curriculum consists of the following:

Chart 1. Curriculum preparation process School Level

First, analyze the context. The curriculum development team will investigate the school regarding the madrasa's strengths (*strengths),* weaknesses (*weaknesses*), opportunities (*opportunities*), and threats (*threats*), better known as the SWOT analysis approach. The SWOT analysis used by MAN 2 Bantul was to determine the madrasah's strengths and weaknesses. The analysis results are used to determine the programs that will be implemented. The curriculum development team consists of the head of the madrasah, the deputy head of the madrasah, a committee, and several teacher representatives.

Second, examine the curriculum. In the curriculum review process, madrasas present the Regional Office of the Ministry of Religion and the Education Service, such as the LPMP (Education Quality Assurance Agency). The documents required are the first document, namely KTSP, and the second and third documents, namely Syllabus, RPP, and other tools. In this process, the party who is the resource person will provide input, and then it will be corrected by the madrasah.

Third, the Public test. Before the curriculum is agreed to be implemented in madrasas, it must be tested first. The public test was carried out to ensure that all interested parties genuinely understand all the arrangements for the education process at MAN 2 Bantul, as stated in the curriculum document. The public test finalizes the KTSP preparation process because the curriculum is validated. The curriculum approval process is carried out by the head of the madrasah and then verified by the supervisor. If the supervisor has agreed, approval can be requested from the Regional Office of the Ministry of Religion—development and Implementation Stage.

b. Development and Implementation Stage.

First, the Curriculum Development Model. The curriculum is developed based on the institution's capabilities and student needs. To improve the quality of students, MAN 2 Bantul implements a skills-based program, Modified Teaching Factory, with halal management (*launched* in 2020). *Modified teaching factory* is a learning model that adopts the learning model in vocational schools, namely the *teaching factory*. *Teaching Factory* is a learning model that combines competency-based learning with industry-based learning. *When teaching factories try to bring an industrial atmosphere into schools, the learning process focuses on understanding theory and* practice to produce products or services. The teaching factory aims to develop the character and work ethic (discipline, responsibility, honesty, leadership, etc.) needed by the world of business and industry (Kuat, 2017). Apart from that, educational institutions establish relationships with relevant industrial or business worlds to hone the knowledge and abilities of students (Yus'ad Afandi, 2019).

A modified teaching factory was implemented at MAN 2 Bantul to produce reliable human resources with *skills* needed in the industrial and business world. There is a different emphasis between skills education at SMK and skills at MAN 2 Bantul. The target for graduates at SMK is to be ready to work, but at MAN 2 Bantul, the target is for graduates to be entrepreneurial and honest in their attitude. In implementing learning-modified *teaching, factory* madrasas use a strategy with a block schedule.

The existing curriculum structure at MAN 2 Bantul refers to the central curriculum, and implementing the Madrasah Aliyah (MA) curriculum plus skills is based on Minister of Religion Decree Number 184 of 2019 concerning Guidelines for Curriculum Implementation in Madrasas. There are slight additions to the local content of the MAN 2 Bantul curriculum, namely with 2 hours of tahfidz subjects and one hour of Javanese subjects.

Second, the Skills Program Implementation System. A curriculum is a set of plans and arrangements regarding objectives, content, learning materials, and methods used as guidelines for implementing learning activities to achieve specific educational goals. Based on Law No. 20 of 2003 concerning the National Education System in Article 35, paragraph 1, it is explained that national education standards consist of content standards, processes, graduate competencies, educational staff, facilities, infrastructure, management, financing, and educational assessment, which must be improved continuously and planned and regular. Content standards cover the scope of material and level of competence as outlined in the requirements regarding graduate competency, study material competency, subject competency, and learning syllabus that students must meet at certain levels and types of education.

Referring to the curriculum that the school has determined, the next step is implementing the curriculum in the learning process in the classroom. Three domains need to be developed during the teaching and learning process, namely the domains of attitudes, knowledge, and skills (Wiji Hidayati, 2016). Teachers must make lesson plans first to quickly achieve and improve target teaching and learning outcomes in the learning process. The

Learning Implementation Plan (RPP) is a plan that describes the procedures and organization of learning to acquire the essential competencies specified in the content standards and described in the syllabus. The preparation of the RPP at MAN 2 Bantul was carried out simultaneously at the event *workshops*. Each teacher will make a lesson plan and syllabus according to their subject. The syllabus includes competency standards, essential competencies, primary material, learning activities, competency achievement indicators for assessment, assessment, time allocation, and learning resources. The RPP and syllabus that teachers have in all subjects (both subjects in the skills program and other issues) must have elements of skills in it. There are no special provisions for the syllabus for the skills program from the government, so teachers prepare the syllabus by looking a little at the existing syllabus. It is in a vocational school.

Skills programs are included in the madrasah curriculum by adding one subject (precisely skills) for 8 lesson hours. Eight issues are used for 6 hours of skills and 2 hours of entrepreneurship. Students are free to choose one of the skills that interests them. The grouping of majors is like in madrasas in general, namely science and social studies, but when the skills hour starts, the students gather according to the significant/skills program they have chosen. The majors in the skills program are multimedia, TPHP (agricultural product processing techniques), fashion design, and automotive or craft welding. The primary material in each skills program department is described as follows:

Table 1. Skills Program Subject Content

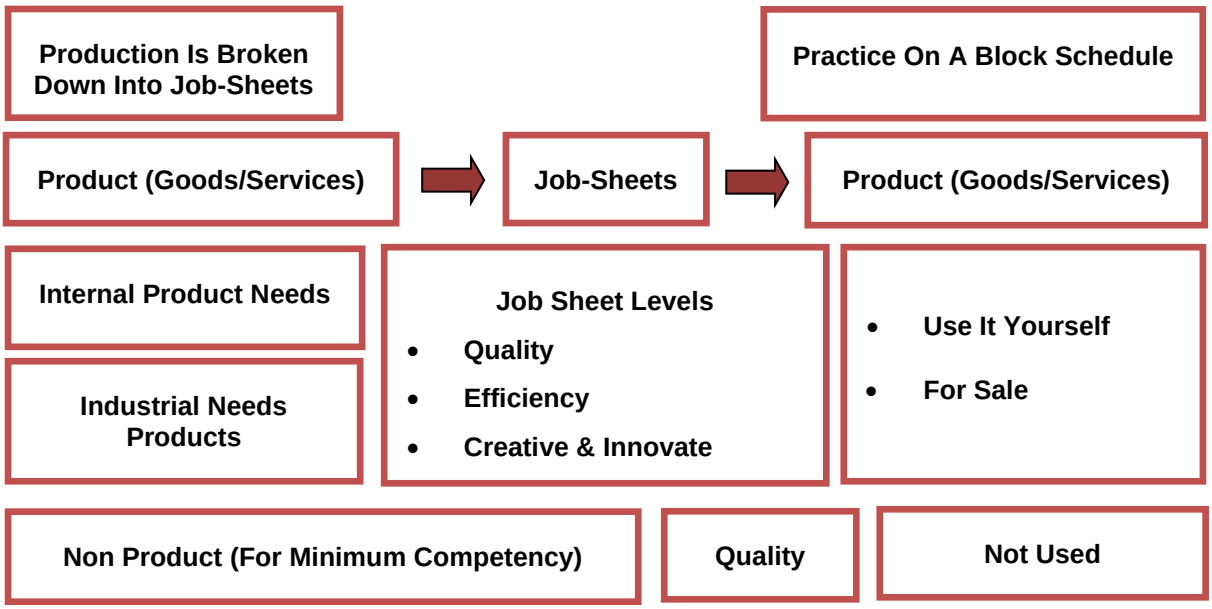
No.	Subjects	Subject matter
1.	Automotive	Metalworking techniques
		Engineering drawings
		Motorbike basics
		Motor unit
		Fuel system
		Electricity system
		Chassis
		Tune-Up
		Understand occupational safety and health.
		Business management
		PKL/Final assignment
2.	Multimedia	Art Knowledge

		Design basics
		Art and design insight
		Sketch
		Digital image
		Computer graphics
		Photography
		Videography
		Screen printing
		Industrial visit
		PKL/ Final assignment
3.	**Fashion**	**Get to know sewing tools**
		Understand sewing technology
		Get to know textile materials.
		Mastering pattern making
		Mastering fabric decorating techniques
		Mastering fashion design
		Mastering children's clothing-making
		Mastering the manufacture of women's clothing
		Mastering the manufacture of men's clothing
		Understand occupational safety and health.
		Understand business management
		Industrial visit

		PKL/Final assignment
4.	**Agricultural Product Processing Techniques**	**Basics of agricultural product management techniques**
		TPHP skills package
		Business management
		Industrial visit
		PKL/Final assignment
5.	**Welding Techniques**	**Understand occupational safety and health**
		Understand materials science
		Mastering technical drawing
		Understand electrical engineering
		Understanding gas cutting
		Mastering gas welding
		Mastering electric welding
		Master bench work
		Understand the inspection and testing of weld results.
		Understand business management
		Industry visits
		PKL/Final assignment

Initially, all students were not required to take part in a skills program but were allowed to take regular classes. However, starting in 2021, regular classes will be canceled; from the start of the entry, students must choose one of the skills majors that interests them. Learning model *Modified teaching factory* focuses on producing products and entrepreneurship. The following is a learning pattern *teaching factory:*

Chart 2. Learning Patterns *Teaching*



From the chart above, we can understand that in implementing skills practice, the product to be made will be described in *job sheets* and implemented using a block schedule. Products for internal and market needs must be made with attention to quality, efficiency, and creativity. Some effects produced during practice are sold, and some are used personally. If the goods are sold, the quality must be considered and made as attractive as possible so that consumers are interested in buying the product. Sales of products that have been running optimally are in the TPHP and multimedia departments, while fashion and automotive products are used for personal use.

Nowadays, technology is developing rapidly. Educators must have creativity and skills in using digital tools so that students can easily understand the lessons and be studied in depth (Lisliana, 2020). Apart from using digital in the learning process, MAN 2 Bantul also uses digital media in product sales. MAN 2 Bantul provides a website called MANSABA Products as a facility to promote products that have been produced during skills practice. Sometimes, the website must be updated, so the products displayed are still old. Students also use other media, such as WhatsApp, to market their products.

To develop students' competencies, madrasahs implement PKL programs. Where students are allowed to intern in one of the worlds of business or industry. The PKL program is intended for students who are in class XI. In choosing an internship location, students are free to choose the place they want, according to the part they are interested in. Internships are carried out in groups, and some are individual. The internship group usually consists of two or three people, making the internship practice more effective.

In implementing the PKL program, MAN 2 Bantul collaborates with the Business or Industrial World (DUDI) as a place for student internships. The advantage of this program is that several students are directly recruited by the parties who serve as interns, so before graduating, some of the students already have jobs. Some graduates even choose to work first and then continue to college.

Before students are declared to have graduated from MAN 2 Bantul, students must take a competency exam first. To be precise, for class XII, a competency exam is carried out based on each major. Students declared to have passed the competency exam will receive a certificate that can be used to apply for jobs; in its implementation, MAN 2 Bantul collaborates with the BLK (Vocational Training Center).

Third, Skills Program Learning Strategy. Learning strategies used in skills-based programs *modified the teaching factory,* namely the block system. This is what can be the difference between before and after the implementation of a *modified teaching factory.* The

aim of implementing the block system is to improve student academic achievement. Program learning activities are carried out in class X, modified teaching factory, namely Products, job sheets, *and block schedules.* The product is the main component because this learning model builds competencies based on production results. To produce quality products, it is necessary to have a job sheet and appropriate time allocation. *Job sheets contain* the learning/work material sequence students must complete to master a competency. *Job sheets consist of practical questions, work procedures,* and assessment formats. The job sheet is part of the RPP, prepared for the product, and adjusted to the block schedule.

The allocation of skills lesson hours is 8 hours each week, but if the specified lesson hours still need to be deemed sufficient to complete the product, learning uses a block system. The block system is learning that combines hours of subjects, initially conducted once a week, into a whole week or more until the issue is completed with the benchmark that the material can be delivered optimally. The advantages of the block system include: first, the block system allows students to concentrate on lessons. Second, students' grades and understanding increase because students can learn a lot in class and dig deeper into the subjects they are studying. During the MAN 2 Bantul pandemic, there was no structured schedule related to the block system; time allocation was still adjusted to needs. However, in the next academic year, the madrasah has prepared the block schedule neatly.

Table 2. Skills Program Schedule with Block System

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week I							
Week II							
Week III							

Description:

: Class X

: Class XI

: Class XII

: Regular Class

Based on the table above, we can conclude that class X carried out skills practice from Monday to Thursday in the first week. Then, in the second week, with the same day allocation, class XI carried out practical learning, as did class XII in the third week. Meanwhile, skills practice is used for regular classes on Fridays and Saturdays. There is no practice schedule on Sundays because it is a school holiday.

Fourth, Skills Preparation Tools. The MAN 2 Bantul skills program has four majors: Automotive/Welding (metal crafts), Multimedia, Fashion Design, and Food Processing Engineering (TPHP). There are several teaching aids in the MAN 2 Bantul skills class: Clothing Design skills training tools (The tools needed during practice in the fashion design department are thread, fabric, needle, tape measure, and sewing machine), Automotive skills training tools (Tools needed during exercise in the automotive department, namely drilling machines and others), TPHP skills training tools (The focus of the TPHP department is processing agricultural products, so the tools needed in practice include: mixers, dryers and other cooking utensils), Multimedia skills training tools (Products generated in Multimedia Skills are MUG, PIN etc. The tools used in practice in the multimedia skills program are laminating tools, clock printing tools, pressing machines, and PIN printing tools).

Fifth, madrasa partners. In implementing the skills program, MAN 2 Bantul collaborates with several partners, such as the Business World or Industrial World (DUDI) as a place for students to do street vendors or internships, *Uniti College* (one of the campuses in Malaysia, which has a Halal Industrial Management study program), and BLK (Work Training Center) related to the implementation of competency exams and training to improve teacher competency skills.

2. Development and Implementation Stage.

Evaluation is a process carried out to observe and analyze the effectiveness of a madrasah program that has been implemented. According to Arikunto, evaluation is a process of collecting data to determine to what extent, in what ways, and in what part educational goals can be achieved. Curriculum evaluation includes the overall evaluation process starting from the planning stage, content, strategies, and methods used during curriculum implementation. The success of evaluation activities depends on the evaluator's skills. Evaluation should not only stop at analyzing the institution's shortcomings but also discuss the institution's future direction. Three elements must be remembered in formulating an evaluation. First, intervention is deliberately given to the planned program. Second, some goals and objectives are desired and have positive value. Third, there is a method for determining the level of achievement of goals as expected (Machali & Haamid, 2017). At this stage, there are two types of evaluation.

First, Curriculum Evaluation. Curriculum evaluation in related skills subjects *modified teaching factory* This is done by observing how the learning model is implemented and what industry standards need to be implemented in institutions to improve student competency. In the internal area, skills teachers conduct evaluations once a week to discuss how the learning was implemented that week, while the overall curriculum evaluation is carried out once a year.

Second, Learning Evaluation. Curriculum evaluation can always be connected to learning evaluation. Learning evaluation is carried out to obtain information about the effectiveness of teaching and learning activities in helping students achieve predetermined goals optimally (Suardipa & Priyamana, 2020). MAN 2 Bantul uses formative and summative evaluation models to evaluate student learning. First, formative evaluation. Formative evaluation is carried out in the middle of the learning process. This evaluation aims to monitor student learning progress and provide feedback to students and teachers. The formative evaluation form is a knowledge assessment consisting of assignments, daily grades, process grades, and Mid-Semenster Examinations (UTS). The effect of knowledge assessment on student learning outcomes with a weight of 70%. Second, summative evaluation. Summative evaluation is carried out at the end of the school year. The purpose of this evaluation is to find out the extent to which a learning program is implemented. The summative evaluation activities are odd End Semester Examinations (UAS) and even End Semester Examinations (UAS)—the influence of knowledge assessment on UAS with a weight of 30%.

The skills program uses specific criteria to assess teaching factory-based learning: performance or practice, portfolio, projects, products, and other techniques.

3. Challenges Faced by Institutions in Implementing Modified Teaching Factory

Educational institutions face challenges in implementing Modified Teaching Factory-based education. Challenges do not mean weakening, but these challenges must be able to become a trigger for institutions to continue to improve the quality of education within them. The challenges faced by Madrasah Aliyah Negeri 2 Bantul are as follows.

First, the Learning Model is Still New. Learning model *modified teaching factory* MAN 2 Bantul was just launched in 2020. The implementation is still in progress, especially since the COVID-19 pandemic has made the implementation process less than optimal in all departments. Therefore, efforts to optimize the learning process continue to be made by the madrasah.

Second, Infrastructure in the Skills Program. Fulfillment of infrastructure is the main focus to support the ongoing learning process. The problem is that the computers in the

madrasa still use old computers. Corel Draw application has not yet been upgraded to the new version, so teachers and students must be able to master the old, more manual method.

Third, there needs to be more educators in skills programs. Fourth, existing skills programs should be adapted to community needs. The increasingly complex needs of society make educational institutions busy thinking about what skills need to be adapted to society's current needs. Academic institutions can only provide some of the many abilities the community requires. The skills program majors are adjusted to students' needs and the institution's ability to implement them because there are 4 majors in the skills program at MAN 2 Bantul: Multimedia Skills, Fashion Skills, Automotive Skills, and TPHP Skills (Food et al.).

Fifth, Product Marketing. The product marketing process becomes important after making the product because it can train the attitudes of entrepreneur students. The problems in the product marketing process are that it is not yet optimal, and there needs to be complete labeling, which causes the products to be sold separately. Plans, MAN 2 Bantul, will create a madrasa market where the goods in the school market can be filled with products produced by students in the skills program. Apart from that, it can also be a facility for students to sell and market their products.

Sixth, Student Problems. The social conditions of students can influence the learning process. Most of the students' parents are from the lower middle class; this can sometimes hinder practical activities at the madrasah. For example, in the fashion skills department, some students take a long time to buy fabric materials, so inevitably, the teacher has to wait for all the children to have fabric so that no one student is left behind in sewing practice. The problem for students in the multimedia skills program is that some students need help during the course. This forces teachers to provide extra support to students. Some students do not have laptops, so when doing assignments, students have to go to school to do the tasks using school facilities.

Discussion

This research focuses on implementing curriculum management in skills-based subjects using a modified teaching factory approach at MAN 2 Bantul. This concept supports the importance of Nasbi's education curriculum (Nasbi, 2017), which emphasizes planning and organizing learning activities to achieve specific goals. The research objective is to explore the planning, development, and execution of curriculum management in the context of skills-based programs. This involves exploring Posser and Dewey's ideas about vocational education and practice-based learning. This study aims to understand how the curriculum is adapted to meet the needs of industry and the job market.

The research results show that integrating skills programs in the MAN 2 Bantul curriculum responds to the need for graduates ready to work and be entrepreneurial. The emphasis on vocational education, based on Posser's 16 postulates and Dewey's practice-based learning, provides the basis for students to acquire applicable skills. The modified teaching factory approach has proven effective in combining theory and practice and strengthening the link between education and industry needs. This shows appropriate adaptation between the educational curriculum and the actual conditions of the world of work. This implementation highlights practical skills as an essential element in vocational education.

This finding aligns with Mestry (Mestry & Govindasamy, 2021), emphasizing the principal's instructional leadership's role in managing curriculum change. Although different from Chauhan's research (Chauhan et al., 2022) in India and van Hooft (van Hooft et al., 2018) in Peru, similarities lie in the importance of staff collaboration and specific training. The MAN 2 Bantul approach contrasts with simulation models in nursing education and emergency management (Patphol, 2022; Zhao et al., 2020). However, they all show the importance of adapting the curriculum to specific needs and contexts. This approach demonstrates the importance of flexibility and innovation in vocational education.

Adapting the MAN 2 Bantul curriculum to the job market's needs is essential in creating competent graduates. The application of the modified teaching factory shows the connection between theory and practice in effective vocational education. Although the results are

promising, interpretation must remain cautious, considering the specific context and conditions of the madrasah. The use of technology in education, emphasized by Lisliana (Lisliana, 2020), adds an essential dimension to modern learning. These findings offer a valuable perspective on how skills-based education can be developed to meet the needs of industry and society (Lisliana, 2020).

These findings significantly affect curriculum development and education policy in Indonesia, especially in the madrasa context. The adaptation of a curriculum oriented towards work readiness and practical skills at MAN 2 Bantul can be a model for other educational institutions. This aligns with global education trends that emphasize work readiness and practical skills. This approach reflects the global need for results-oriented education and practical skills, as reflected in various studies on curriculum development (Chauhan et al., 2022; Mestry & Govindasamy, 2021; Patphol, 2022; van Hooft et al., 2018; Zhao et al., 2020).

Conclusion

MAN 2 Bantul implements a skills program as one of the subjects aimed at equipping students with specific skills so that they can be used when entering the world of work and able to take on roles amidst intense competition. The skills subject curriculum at MAN 2 Bantul is prepared by the madrasah's philosophical objectives and is developed based on the madrasah's abilities and the needs of students. In curriculum development, MAN 2 Bantul has its characteristics, namely implementing a Modified Teaching Factory-based learning model with the application of halal management. The block system is the learning strategy for implementing the modified teaching factory learning model. To increase students' competency, MAN 2 Bantul holds a PKL program and competency exams as graduation requirements. MAN 2 Bantul faces several challenges while implementing Modified Teaching Factory-based education, including new learning models, infrastructure in skills programs, lack of educators in skills programs, adapting existing skills programs to community needs, product marketing, and participant problems. Educate.

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