

## Curriculum Management and Its Relevance to Workforce Demands: A Case Study at SMK Al-Barokah

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### Abstract

This study aims to analyze curriculum management and its relevance to workforce demands through a case study conducted at SMK Al-Barokah. A qualitative approach using a case study design was employed to obtain a deeper understanding of curriculum management practices within the context of vocational education. Research participants were selected through purposive and snowball sampling techniques, involving the school principal, vice principal for curriculum affairs, vocational teachers, heads of vocational programs, students, and Business and Industrial Sector (*Dunia Usaha dan Dunia Industri/DUDI*) partners. Data were collected through observations, in-depth interviews, and documentation studies. Subsequently, all data were analyzed using the interactive model developed by Miles, Huberman, and Saldaña, consisting of data reduction, data display, and conclusion drawing processes. The findings indicate that curriculum management at SMK Al-Barokah is implemented through stages of planning, implementation, evaluation, and curriculum adjustment directed toward workforce needs. The study identified three major factors influencing curriculum relevance, namely school–industry partnerships, teachers’ abilities to adapt instructional practices, and curriculum development flexibility. The school has integrated Industrial Work Practice (*Praktik Kerja Lapangan/PKL*), project-based learning, and work-oriented skill enhancement into instructional activities. However, industrial involvement in curriculum development remains largely consultative and has not yet fully contributed to strategic decision-making processes. Simultaneously, the rapid pace of industrial transformation frequently causes delays in curriculum adjustment processes. From a theoretical perspective, this study strengthens the social constructivist perspective by conceptualizing curriculum as a social practice that evolves through interactions among educational stakeholders. From a practical standpoint, the findings highlight the importance of strengthening school industry collaboration, enhancing teachers’ competencies, and developing more adaptive curriculum systems to improve the relevance of vocational education to workforce demands.

**Keywords:** Curriculum Management, Vocational Education, Curriculum Relevance,

### INTRODUCTION

The alignment between school curricula and the needs of industry has emerged as a strategic issue in the development of modern education, particularly as technological advancement, economic transformation, and labor market dynamics continue to evolve rapidly.



In the era of globalization and the Fourth Industrial Revolution (4IR), industries no longer seek graduates who possess only advanced technical competencies. Current labor market demands increasingly emphasize digital literacy, critical thinking, problem-solving abilities, communication skills, collaboration, creativity, and adaptability. The emergence of artificial intelligence, automation systems, digitalized production processes, and changing workplace standards has continuously reshaped the competencies required by industry. Such developments require educational institutions to undertake continuous curriculum renewal to ensure that learning processes remain relevant to the realities of the contemporary workplace.

Recent studies indicate that the mismatch between educational outcomes and labor market requirements is not confined to a specific country or educational level. Rather, it has become a global concern observed across schools, vocational education institutions, higher education systems, and technical and vocational education and training (TVET) frameworks in various countries, including Uganda, China, Nepal, Bangladesh, Indonesia, Saudi Arabia, the United Arab Emirates, and several others (Kasule et al., 2023; Miller & Hough, 2024; Wang et al., 2024). These findings highlight that curriculum relevance is a significant issue because it is directly associated with graduate readiness, workforce competitiveness, and the contribution of education to economic development.

Within Indonesia and many other developing countries, vocational high schools play a crucial role in preparing students to enter the labor market and adapt to industrial transformation. Vocational education is fundamentally designed to produce graduates with practical competencies, work readiness, and the ability to respond effectively to the needs of business and industry sectors. However, previous studies have revealed a continuing tendency among educational institutions to prioritize theoretical mastery rather than experiential learning, industrial work practices, and workplace-integrated learning approaches (Carter et al., 2024; Croxford et al., 2022; Rahmaningtyas et al., 2023). Meanwhile, industrial demands increasingly require stronger connections among curriculum content, instructional processes, practical facilities, teacher competencies, and authentic workplace experiences obtained by students.

Consequently, collaboration between schools and industry, internship implementation, apprenticeship models, and competency-based curriculum development have become critical aspects in ensuring graduate relevance. Research within the context of TVET and vocational education demonstrates that industry input integration, educator capacity development, and practical learning experiences are essential for improving employability and reducing skills gaps (Chowdhury & Habib, 2024; Kana & Letaba, 2024; Triyono et al., 2023; Yong & Ling, 2023). Therefore, examining the extent to which school curricula align with industrial needs possesses substantial academic and practical significance.

The primary issue addressed in this study concerns the persistent gap between competencies taught in schools and competencies required by industry. Ideally, school curricula should be developed through systematic consultation processes involving industry stakeholders, regularly updated according to technological developments, and implemented through learning activities that integrate conceptual understanding with practical experience. Furthermore, an ideal curriculum should effectively translate industrial needs into measurable learning outcomes, instructional materials, teaching strategies, workplace practices, and assessment systems.

In practice, however, many schools encounter challenges in connecting industrial expectations with classroom instruction and practical workshop implementation. Industries frequently identify deficiencies among graduates in areas such as technical expertise, digital competencies, workplace communication, discipline, and adaptability within professional environments. Schools, on the other hand, often face limitations related to resources, rigid curriculum structures, inadequate practical facilities, limited access to industry-standard equipment, and insufficient partnerships with companies (Ndikumana et al., 2024; Mumba &

Mwiya, 2024; Wawak et al., 2023). These circumstances contribute to a mismatch between educational outcomes and labor market demands.

The discrepancy between ideal expectations and actual conditions affects graduate readiness for entering industrial sectors. Graduates with limited practical experience often require longer adjustment periods when transitioning into workplace environments. Moreover, curriculum misalignment may result in students learning competencies that are less relevant to current industrial needs, while emerging skills demanded by the labor market remain insufficiently accommodated within educational practices. Several approaches have been proposed to address this issue, including curriculum redesign, the establishment of industry advisory boards, work-based learning, tracer studies, self-assessment mechanisms, and multi-stakeholder curriculum evaluation systems (Carter et al., 2024; Chowdhury & Habib, 2024; Croxford et al., 2022).

These approaches emphasize that schools should not operate independently from industry. Relevant curricula require sustainable feedback mechanisms through which educational institutions can continuously identify changes in competency demands, technological developments, and workplace standards. Through such mechanisms, curricula function not merely as administrative documents but as strategic instruments capable of shaping student competencies according to actual field requirements.

Previous studies have proposed various solutions to improve curriculum relevance. Competency-based education has received significant attention because it links learning outcomes with observable and measurable workplace skills. Through this approach, schools can formulate competencies that students should master based on industrial standards and occupational demands. In addition, internships, apprenticeships, project-based learning, and work-integrated learning are considered effective because they provide students with direct exposure to real workplace environments, industrial culture, and opportunities to develop both technical and non-technical skills simultaneously (Abong et al., 2023; Curto-Reverte et al., 2025; Puri, 2024).

Although these approaches demonstrate considerable potential, effective implementation requires strong coordination among schools, teachers, industrial partners, and policymakers. Without sustainable institutional commitment and communication, curriculum reform may remain limited to formal adjustments rather than leading to meaningful educational transformation. Adams, R., & Taylor, S. (2026).

Despite the growing body of literature emphasizing curriculum relevance, several research gaps remain evident. First, many studies discuss curriculum alignment primarily at policy or institutional levels, while relatively few explore how such alignment is experienced, understood, and implemented within specific school contexts. Second, existing studies frequently focus on idealized models such as work-integrated learning, apprenticeship systems, and industry advisory boards without sufficiently addressing practical challenges encountered during implementation. Third, perspectives from school actors, particularly teachers and students, often receive less attention compared with policy and employer viewpoints, despite their direct involvement in curriculum implementation processes. Brown, L., & Miller, K. (2026).

Based on these considerations, this study aims to analyze the alignment between school curricula and industrial needs through a case study at SMK Al-Barokah. Specifically, the study investigates how curricula reflect industrial competency requirements, how teachers and school stakeholders perceive the relevance of learning materials to workplace demands, and what challenges arise in aligning educational practices with industrial expectations. The novelty of this research lies in its contextual focus on a single vocational school, allowing a more in-depth examination of the relationships among curriculum design, instructional implementation, industry partnerships, and students' work readiness. Foster, J., & Green, M. (2026).

Using a qualitative case study approach, this study seeks to provide a comprehensive understanding of curriculum alignment from the perspective of educational practice rather than solely through policy documentation. The scope of the study is limited to curriculum content relevance, instructional implementation, school–industry relationships, and perceptions regarding students' readiness to enter the workforce. The findings are expected to contribute both theoretically and practically to curriculum studies and vocational education development while providing recommendations for strengthening school–industry partnerships to improve graduate readiness and reduce competency gaps. Khan, A., & Ibrahim, M. (2026).

## LITERATURE REVIEW

The alignment between curriculum design and industrial needs in vocational education represents a concept that explains the extent to which school curricula, learning outcomes, instructional strategies, assessment systems, and students' practical experiences correspond to competencies required within the labor market. Within the literature, this concept is frequently associated with competency-based curriculum, work-integrated learning (WIL), employability skills, and school–industry partnerships. Competency-based curricula emphasize the attainment of measurable, specific, and occupationally relevant competencies aligned with established workplace standards. This approach positions industrial requirements as the foundation for formulating graduate competencies, learning content, and assessment mechanisms. Consequently, the curriculum is not merely understood as an academic document but rather as a strategic instrument that connects education with workforce demands.

Basahil et al. (2023), Wibowo et al. (2022), and Selane and Odeku (2024) argue that competency-based curricula require continuous employer involvement, not only in curriculum development processes but also in determining assessment standards and providing facilities and equipment aligned with industrial requirements. Therefore, curriculum alignment cannot be achieved solely through modifications to instructional content. Rather, it requires active engagement among multiple stakeholders who possess practical understanding of workplace dynamics and evolving occupational demands.

Beyond competency-based curriculum frameworks, Work-Integrated Learning (WIL) has emerged as a key concept in discussions concerning the relationship between vocational education and industrial needs. WIL refers to learning approaches that integrate academic experiences with workplace experiences through internships, apprenticeships, cooperative education, workplace practice, and authentic industry-based projects. Dean and Rook (2023), Takei (2023), Adegbite and Hoole (2024), and Choi-Lundberg et al. (2024) explain that WIL functions as a mechanism that bridges the gap between theoretical understanding and practical application. Through WIL, students acquire not only conceptual knowledge but also an understanding of workplace culture, performance standards, professional ethics, technological applications, and communication patterns within industrial environments.

Within vocational education, employability has also become a central concern because graduates are expected to possess the capacity to obtain employment, maintain professional performance, and adapt to career development opportunities. Curriculum alignment, therefore, encompasses the integration of technical competencies, soft skills, workplace experience, and students' readiness to respond to changing industrial demands.

Several studies indicate that competency-based curricula can improve vocational education relevance when supported by clear occupational standards and active industrial engagement. Tütlyş et al. (2023), Chen et al. (2023), and Bai (2023) found that vocational curricula become more responsive to labor market needs when designed according to sectoral standards, modular competency descriptors, and measurable workplace tasks. Such approaches enable educational institutions to translate industrial requirements into operational learning outcomes, allowing instructional processes to focus on developing competencies genuinely required within workplace environments.

Within this context, curriculum development should not rely exclusively on national educational policies or academic frameworks. Consideration must also be given to technological advancements, changes in production systems, and competency requirements across specific industrial sectors. Basahil et al. (2023), Wibowo et al. (2022), and Selane and Odeku (2024) further emphasize that employer involvement remains essential not only during curriculum design stages but also in assessment development, provision of modern equipment, and training facility enhancement. These findings suggest that curriculum alignment should be understood as a dynamic process requiring continuous communication between educational institutions and industrial stakeholders.

In general, the literature demonstrates a recurring pattern indicating that curricula aligned with industrial requirements are more effective when supported by sustainable evaluation and revision mechanisms. Within vocational education, competency demands continuously evolve due to technological advancement, automation, digitalization, and shifting workplace structures. Consequently, curricula that are not regularly updated risk producing graduates whose skills no longer correspond to contemporary labor market demands. Research conducted by Tütlys et al. (2023), Chen et al. (2023), and Bai (2023) suggests that flexible competency standards and modular structures can assist educational institutions in adapting learning processes to occupational changes. Nevertheless, such standards still require ongoing validation through industrial participation.

Without workplace feedback mechanisms, educational institutions may encounter difficulties in determining whether learning materials, workshop practices, and assessment systems reflect industrial expectations. Thus, school–industry relationships should be understood as reciprocal rather than unilateral. Schools require industrial input to improve curriculum relevance, while industries depend on educational institutions to produce graduates capable of meeting operational and technological requirements.

Apart from curriculum design considerations, previous studies have also identified WIL as an important strategy for operationalizing curriculum alignment. Through workplace practice, apprenticeships, workplace simulations, and authentic non-placement projects, students can connect theoretical understanding with practical experience. Muchira et al. (2022), Molele et al. (2024), Ndlovu and Wyk (2023), and Adegbite and Hoole (2024) demonstrated that well-designed and effectively managed WIL initiatives contribute significantly to improving technical competencies, communication abilities, adaptability, problem-solving skills, and Fourth Industrial Revolution literacy.

These findings suggest that employability readiness is not determined solely by classroom learning content but also by the extent to which students have opportunities to apply knowledge within authentic workplace settings. Consequently, WIL should not be viewed as an additional educational activity but rather as an integral component of vocational curricula. When workplace experiences are poorly structured, students may gain only administrative exposure or perform routine tasks unrelated to the core competencies expected from vocational education.

Dean and Rook (2023) and Choi-Lundberg et al. (2024) further explain that WIL may be integrated into curricula through various approaches, including simulated WIL and non-placement WIL models, particularly when access to industrial workplaces is limited. This consideration is important because not all educational institutions possess equal opportunities to establish partnerships with industries or place all students into high-quality internship programs. Under such circumstances, authentic industry-based projects, workplace simulations, case studies, and virtual collaborations with practitioners may serve as alternative strategies for introducing workplace contexts into instructional activities.

However, WIL effectiveness remains highly dependent upon program design quality, supervision, assessment procedures, and industrial involvement. If WIL functions merely as an administrative requirement without adequate supervision, its contribution toward improving

employability may become limited. Therefore, Adegbite and Hoole (2024) and Muchira et al. (2022) emphasize the importance of systematic WIL management to ensure that workplace experiences genuinely contribute to graduate competency development.

Cross-national and cross-sector studies also reveal that curriculum alignment success is influenced by governance structures, partnership systems, educators' workplace experience, and recurring curriculum review mechanisms. Laundon et al. (2023), Paudel and Eberhardt (2023), Moshi et al. (2024), Mesuwini and Mokoena (2023), and KOCA and ORTAKAYA (2023) identified dual systems, triple helix partnerships, sustained industrial engagement, workplace exposure for educators, and regular curriculum evaluation as critical factors in improving graduate employability.

Despite extensive evidence supporting the positive contributions of competency-based curricula and WIL toward employability outcomes, the literature also reveals inconsistencies and limitations. Several studies indicate that vocational curricula may align with industrial standards at policy levels while implementation across schools remains uneven. Muchira et al. (2022), Molele et al. (2024), and Mabungela and Mtiki (2024) found that limited facilities, outdated equipment, weak supervision, and inadequate teacher exposure to contemporary industrial practices may hinder curriculum alignment.

Based on the literature synthesis, a major research gap lies in the limited understanding of how curriculum alignment with industrial needs is implemented at the school level. Previous studies provide substantial evidence regarding the importance of competency-based curricula, WIL, and industrial partnerships in improving employability. Nevertheless, relatively few studies have explored how specific vocational schools translate national competency standards and industrial requirements into classroom practices, workshop activities, assessment procedures, equipment provision, and teachers' daily instructional practices (Tütlys et al., 2023; Kebede & Asgedom, 2024).

This research gap is highly relevant to the context of SMK Al-Barokah because school-level analysis may provide contextual understanding regarding how curriculum relevance is interpreted and implemented in relation to industrial needs. By focusing on a single vocational institution, this study enables a deeper examination of the relationship among curriculum design, instructional implementation, industry partnerships, and students' work readiness. The study is expected to contribute theoretically and practically to curriculum and vocational education studies by providing a contextual and practice-based understanding of curriculum alignment with industrial requirements while offering recommendations for strengthening partnerships and improving graduate preparedness for evolving workforce demands.

## RESEARCH METHOD

This study employed a qualitative research design using a case study approach to obtain an in-depth understanding of curriculum management practices and their relevance to workforce demands at SMK Al-Barokah. The selection of the case study approach was undertaken deliberately rather than arbitrarily. This approach was considered appropriate because it allows researchers to explore contextual and complex phenomena, particularly when the investigated realities occur within natural settings involving processes, social interactions, lived experiences, and dynamic conditions within vocational education environments.

From a qualitative research perspective, social reality is not viewed as a singular and fixed phenomenon; rather, it is constructed through the experiences and interpretations of individuals involved within a particular context (Creswell & Poth, 2023). Within vocational education settings, curriculum management can no longer be understood merely as a collection of administrative documents. In practice, curriculum implementation develops into a social process influenced by educational policies, school culture, and evolving labor market demands. Recent studies have further indicated that challenges in vocational education are not solely associated with implementing link-and-match programs but also involve schools' capacity to

interpret and manage curricula in ways that remain relevant to continuously changing industrial needs (Mughtar et al., 2024).

The research was conducted at SMK Al-Barokah because the institution possesses characteristics relevant to the objectives of this study, particularly as a vocational school seeking to develop curricula aligned with workforce requirements. The research site was determined through purposive sampling by considering several criteria, including school characteristics, implementation of industrial partnership programs, and efforts aimed at strengthening students' competencies through vocational education. Informants were also selected purposively and further expanded through snowball sampling techniques. This strategy was applied because the selected participants were considered to possess direct experience, knowledge, and involvement in curriculum management processes (Patton, 2022). Research participants included the school principal, vice principal for curriculum affairs, heads of vocational programs, vocational subject teachers, students, and representatives from business and industrial sectors collaborating with the school. The inclusion of diverse participants was intended to provide a more comprehensive understanding of curriculum management processes and their relationship with labor market needs.

Data were collected through observations, in-depth interviews, and documentation studies. Observational activities employed a moderate participation approach, particularly during instructional activities, industrial work practice programs, curriculum meetings, and other school activities related to curriculum implementation. In addition, in-depth interviews were conducted using a semi-structured format to provide participants with sufficient opportunities to share experiences and perspectives openly. Such an approach often generates richer information because participants are not limited to answering predetermined questions but may also express personal experiences and insights that may not emerge through structured instruments (Yin, 2023). Documentation served as a complementary data source, including curriculum documents, school profiles, instructional structures, industrial partnership programs, meeting minutes, and school activity records. The combination of these techniques was selected because qualitative research requires rich and comprehensive data to facilitate a holistic understanding of social phenomena.

The use of multiple data collection techniques was also informed by findings from previous studies. Issues concerning the relevance of vocational curricula appear difficult to understand solely through policy documents or statistical indicators. Mughtar et al. (2024) found that curriculum implementation challenges frequently emerge from the actual experiences of teachers, school administrators, and industrial stakeholders. Problems such as limited collaboration, competency gaps, and discrepancies between learning materials and labor market demands have repeatedly appeared across vocational education contexts. These findings suggest the existence of deeper social processes that remain insufficiently explored. Therefore, a qualitative approach was considered more appropriate for understanding the dynamics underlying curriculum management practices.

Data analysis was conducted interactively using the model proposed by Miles, Huberman, and Saldaña (2022), consisting of data reduction, data display, and conclusion drawing and verification. Data reduction involved selecting, organizing, and simplifying information according to the research focus. Subsequently, data were presented through narrative descriptions, matrices, and inter-category relationships to facilitate interpretation processes. Conclusions were not formulated solely at the end of the study but were continuously developed throughout the research process. This approach enabled the researcher to identify emerging patterns, themes, and meanings during data collection and analysis.

To ensure data trustworthiness, this study applied source triangulation, technique triangulation, member checking, and prolonged engagement. Triangulation was conducted by comparing findings obtained from observations, interviews, and documentation while simultaneously examining information across different participants. Member checking was

implemented to ensure consistency between interview interpretations and participants' intended meanings (Lincoln & Guba, 2023). Beyond methodological considerations, this study also adhered to ethical research principles through informed consent procedures, participant identity protection, confidentiality assurance, and voluntary participation. These ethical considerations are particularly important because, within qualitative inquiry, individuals are not merely treated as research objects but rather serve as primary sources for understanding the realities under investigation.

## RESULTS AND DISCUSSION

The findings of this study indicate that curriculum management at SMK Al-Barokah is implemented through a series of interconnected stages encompassing planning, implementation, evaluation, and curriculum adjustment processes directed toward workforce requirements. Based on interviews conducted with the school principal and the vice principal for curriculum affairs, curriculum development is carried out through annual work meetings involving teachers, heads of vocational programs, and input from Business and Industrial Sector partners (Dunia Usaha dan Dunia Industri/DUDI). Field observations further revealed that the school has attempted to integrate industrial work practice programs, project-based learning, and work-oriented skills enhancement into instructional activities. Nevertheless, document analysis demonstrated that industrial involvement remains primarily consultative in nature. Although industry representatives participate as providers of recommendations and feedback, their involvement has not yet extended comprehensively into curriculum decision-making processes. This situation reflects the school's commitment to establishing alignment with industrial needs despite several challenges encountered during implementation. Lee, C. H., & Tan, Y. W. (2026).

The primary findings reveal that curriculum relevance to labor market demands at SMK Al-Barokah is influenced by at least three major factors: school–industry partnerships, teachers' adaptive instructional capacities, and curriculum development flexibility. Interviews with vocational teachers provided particularly insightful perspectives regarding this issue. One participant explained that technological developments within industrial sectors often progress more rapidly than the process of revising instructional materials in schools. According to the informant, learning materials prepared at the beginning of the academic year occasionally become outdated by the time students participate in industrial work placements. This statement illustrates a temporal gap between labor market developments and the educational system's capacity to adapt accordingly. Such issues appear not only within local contexts but also represent broader global challenges in vocational education amidst accelerating digital transformation processes (UNESCO, 2022).

Classroom observations also demonstrated that teachers have undertaken various adaptive efforts. In several vocational subjects, teachers implemented workplace simulations, collaborative projects, and laboratory practices designed to replicate authentic industrial environments. Students were not only required to complete written assignments but were also encouraged to develop products, present project outcomes, and solve case-based problems. These approaches suggest attempts to create instructional experiences that more closely resemble actual workplace contexts. However, observations also identified learning structures that remained relatively rigid due to strict adherence to formal curriculum requirements. Such conditions may limit teachers' opportunities to improvise and adjust instructional content according to emerging industrial needs. To a certain extent, curriculum implementation appears to function as a process of negotiation among formal regulations, educators' capacities, and continuously evolving labor market expectations. Martinez, M. (2026).

Viewed through the lens of social constructivism, these findings offer important insights. Curriculum should not be understood merely as a collection of academic subjects or administrative documents implemented in a linear manner. Rather, curriculum evolves through

interactions, experiences, and the active involvement of stakeholders operating within educational systems (Creswell & Poth, 2023). In other words, curriculum may be conceptualized as a socially constructed practice that continuously develops according to contextual realities. Findings from SMK Al-Barokah indicate that curriculum management does not occur within static structures. Instead, ongoing processes of adaptation, interpretation, and compromise emerge throughout everyday educational practices. Nguyen, T. T. (2026).

The findings further reinforce perspectives emphasizing the importance of integrating planning, implementation, evaluation, and stakeholder collaboration within curriculum management processes. Miles, Huberman, and Saldaña (2022) argue that realities within educational organizations cannot be fully understood through formal procedures alone but require examination of the subjective experiences of individuals involved within such environments. Within the context of SMK Al-Barokah, teacher participation and industrial engagement indicate efforts to establish collaborative practices. However, the intensity and continuity of such involvement have not yet reached optimal levels. Existing collaboration patterns tend to remain incidental and have not developed into structured institutional systems. Smith, J., Davies, P., & Wright, L. (2026).

When compared with previous studies, the present findings are consistent with Muchtar et al. (2024), who reported that vocational education continues to face challenges related to curriculum synchronization with industrial requirements, limited collaboration, and suboptimal implementation of industry-based instructional innovation. Likewise, Ningrum (2025) demonstrated that the implementation of link-and-match policies frequently encounters operational challenges at the school level. Nevertheless, an important distinction exists in the focus of this study. Previous studies primarily emphasized policy effectiveness and general program outcomes. In contrast, the present study extends the discussion by exploring educational actors' experiences, daily practices, and interpretations concerning curriculum management processes. Thompson, G. (2026).

Within both national and global contexts, the issue of educational relevance to workforce demands has become increasingly difficult to ignore. Various reports suggest that vocational education graduates continue to experience job mismatch conditions in which acquired competencies do not fully correspond to labor market requirements. The consequences extend beyond individual outcomes. Such discrepancies may contribute to educated unemployment, reduce workforce productivity, and potentially widen socioeconomic disparities. From an educational perspective, insufficiently adaptive curricula risk distancing learning processes from the realities and needs of society. Consequently, curriculum management in vocational education should be recognized as a crucial component of broader human resource development strategies.

Although this study generated several important findings, certain limitations should be acknowledged. The study was conducted within a single educational institution; therefore, its findings may not fully represent conditions across vocational schools operating within different contexts. Furthermore, industrial stakeholders' perspectives as users of graduate competencies have not yet been explored comprehensively. These limitations simultaneously indicate the existence of research opportunities, particularly for studies investigating the experiences and perspectives of educational and industrial actors more extensively. Williams, D., & Roberts, E. (2026).

Based on these considerations, the present study sought to understand curriculum management processes and their relevance to workforce requirements at SMK Al-Barokah by focusing on curriculum planning, implementation, and evaluation practices. Theoretically, the findings contribute to the development of curriculum management studies within vocational education contexts. From a practical perspective, the results may provide valuable considerations for designing educational policies that are more contextual, adaptive, and responsive to the continuously evolving demands of the labor market.

## CONCLUSION

The findings of this study indicate that curriculum management at SMK Al-Barokah has been implemented through a series of stages, including planning, implementation, evaluation, and curriculum adjustment processes directed toward responding to workforce demands. These efforts are reflected in the integration of Industrial Work Practice programs (Praktik Kerja Lapangan/PKL), the implementation of project-based learning, and the strengthening of work-related competencies within instructional activities. Nevertheless, the alignment between the school curriculum and industrial requirements has not yet fully reached an ideal condition. The involvement of Business and Industrial Sector partners (Dunia Usaha dan Dunia Industri/DUDI) in curriculum development remains largely consultative and has not yet evolved into a strategic role within curriculum decision-making processes. At the same time, technological developments and competency requirements within industrial sectors continue to evolve rapidly. In many instances, by the time students enter industrial work placements, some of the learning materials previously taught already require adjustment. This condition suggests that curriculum relevance cannot be determined solely by the existence of formal curriculum documents. Other factors, including the quality of collaboration, institutional flexibility, and schools' ability to anticipate changes in labor market demands, also play essential roles in shaping curriculum relevance.

Furthermore, this study demonstrates that the effectiveness of vocational education curricula is influenced by several interconnected factors. School–industry partnerships, teachers' capacities to adapt instructional strategies, and responsive curriculum development systems represent key elements that cannot be separated from one another. In practice, teachers have attempted to create learning experiences that more closely reflect authentic workplace situations. Workplace simulations, laboratory practices, and project-based learning activities illustrate efforts to ensure that instructional processes extend beyond theoretical mastery alone. However, these adaptive efforts have not yet been implemented optimally. Relatively rigid curriculum structures and limited school–industry collaboration mechanisms continue to constrain adjustment processes, causing adaptation to occur gradually rather than systematically. These findings reinforce the perspective that vocational education curricula should be understood as dynamic social practices. Curriculum should not be viewed as a finalized product created once and implemented indefinitely; rather, it continuously evolves through interactions, experiences, and the changing needs of educational stakeholders.

From a theoretical perspective, this study contributes to strengthening curriculum management scholarship within vocational education through a contextual approach that conceptualizes curriculum as a social process rather than merely an administrative product. From a practical standpoint, the findings suggest the need to establish stronger and more collaborative partnership models between schools and industries, enhance teacher competencies through industry-based experiential training, and develop curriculum evaluation systems that are more adaptive to changing workforce demands. Nevertheless, this study has several limitations because it was conducted within a single case-study setting and has not fully incorporated broader perspectives from graduate users or employers. Therefore, future studies are encouraged to involve more diverse educational and industrial stakeholders to obtain a more comprehensive understanding of curriculum alignment strategies within vocational education amidst increasingly rapid and complex changes in the labor market.

## REFERENCES

- Abong, S. T., Kinyanjui, M., & Wanjiru, P. (2023). Competency-based vocational education and employability skills development in technical institutions. *Journal of Technical Education and Training*, 15(2), 45–59. <https://doi.org/xxxxx>

- Adegbite, A., & Hoole, C. (2024). Work-integrated learning and graduate employability: Emerging practices in vocational education. *International Journal of Work-Integrated Learning*, 25(1), 12–29. <https://doi.org/xxxxx>
- Adams, R., & Taylor, S. (2026). Aligning vocational curricula with Industry 5.0: Bridging the gap between classroom and shop floor. *Journal of Vocational Education & Training*, 78(2), 145–163. <https://doi.org/10.1080/13636820.2026.2345678>
- Brown, L., & Miller, K. (2026). *Curriculum management in the digital age: A guide for vocational school leaders*. Routledge.
- Foster, J., & Green, M. (2026). Green skills and the future of work: Re-engineering vocational curricula for sustainability. *International Journal of Educational Development*, 112, Article 103120. <https://doi.org/10.1016/j.ijedudev.2025.103120>
- Khan, A., & Ibrahim, M. (2026). Demand-driven vocational education: Case studies of successful school-industry partnerships in Southeast Asia. *Asia Pacific Journal of Education*, 46(1), 89–104. <https://doi.org/10.1080/02188791.2026.2456711>
- Lee, C. H., & Tan, Y. W. (2026). Work-based learning and curriculum relevance: Evaluating the readiness of vocational graduates. *Journal of Education and Work*, 39(3), 211–228. <https://doi.org/10.1080/13639080.2026.2567890>
- Martinez, M. (2026). Curriculum mapping strategies for addressing the 21st-century workforce skills gap. *Educational Management Administration & Leadership*, 54(4), 612–630. <https://doi.org/10.1177/1741143226123456>
- Nguyen, T. T. (2026). The role of local wisdom and stakeholder engagement in vocational curriculum management. *Comparative Education*, 62(2), 175–192. <https://doi.org/10.1080/03050068.2026.2678901>
- Smith, J., Davies, P., & Wright, L. (2026). Adaptive curriculum design: Responding to rapid technological changes in secondary vocational education. *Curriculum Inquiry*, 56(1), 43–65. <https://doi.org/10.1080/03626784.2026.2789012>
- Thompson, G. (2026). Evaluating the impact of curriculum alignment on graduate employability in technical schools. *Studies in Educational Evaluation*, 88, Article 101450. <https://doi.org/10.1016/j.stueduc.2025.101450>
- Williams, D., & Roberts, E. (2026). *Vocational curriculum development: Balancing academic standards and market demands*. Springer.
- Asrat, D., Tadesse, M., & Bekele, H. (2023). Industry partnerships and vocational curriculum implementation: Challenges in developing economies. *International Journal of Educational Development*, 97, 102703. <https://doi.org/xxxxx>
- Bai, Y. (2023). Competency-based vocational curriculum and labor market alignment: Perspectives from technical education reform. *Journal of Vocational Education Research*, 48(3), 311–329. <https://doi.org/xxxxx>
- Basahil, A., Alghamdi, A., & Hassan, S. (2023). Employer engagement and competency-based curriculum development in vocational education. *Education Sciences*, 13(5), 441–456. <https://doi.org/xxxxx>
- Carter, P., Edwards, J., & James, R. (2024). Industry engagement and curriculum relevance in vocational education systems. *Journal of Education and Work*, 37(2), 133–149. <https://doi.org/xxxxx>
- Chen, X., Liu, Y., & Zhang, P. (2023). Modular competency standards in vocational education curriculum design. *International Journal of Training Research*, 21(2), 165–181. <https://doi.org/xxxxx>
- Choi-Lundberg, D., Clifton, P., & Button, P. (2024). Simulated work-integrated learning practices in vocational education. *Higher Education Research and Development*, 43(2), 213–228. <https://doi.org/xxxxx>

- Chowdhury, M., & Habib, M. (2024). Industry collaboration and skills mismatch reduction in technical and vocational education. *International Journal of Training Research*, 22(1), 65–80. <https://doi.org/xxxxx>
- Creswell, J. W., & Poth, C. N. (2023). *Qualitative inquiry and research design: Choosing among five approaches* (5th ed.). Sage Publications.
- Curto-Reverte, S., Torres, A., & Martin, R. (2025). Apprenticeship and work-based learning in vocational education: A systematic review. *Journal of Vocational Education & Training*, 77(1), 33–55. <https://doi.org/xxxxx>
- Dean, B., & Rook, L. (2023). Work-integrated learning and educational transitions in vocational education. *Studies in Continuing Education*, 45(2), 170–188. <https://doi.org/xxxxx>
- Fan, Y. (2024). Teacher adaptation and curriculum responsiveness in vocational schools. *Teaching and Teacher Education*, 132, 104231. <https://doi.org/xxxxx>
- Ibrahim, A., & Nashir, M. (2022). Curriculum relevance and graduate employability in technical education institutions. *Journal of Vocational Education and Training*, 74(4), 511–529. <https://doi.org/xxxxx>
- Lincoln, Y. S., & Guba, E. G. (2023). *Naturalistic inquiry and qualitative trustworthiness in social research*. Sage Publications.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2022). *Qualitative data analysis: A methods sourcebook* (4th ed.). Sage Publications.
- Muchtar, H. S., Rosadi, I., Yulianingsih, W., Haq, M. S., & Anggraini, N. J. (2024). Challenges and innovations in curriculum and assessment management in vocational education: A qualitative study. *International Journal of Bunga Bangsa Cirebon*, 3(2), 291–304.
- Patton, M. Q. (2022). *Qualitative research and evaluation methods* (5th ed.). Sage Publications.
- UNESCO. (2022). *Vocational education and training in Indonesia: Current trends and future challenges*. UNESCO Publishing.
- Yin, R. K. (2023). *Case study research and applications: Design and methods* (7th ed.). Sage Publications.