



MANAGEMENT OF ISLAMIC EDUCATION CURRICULUM IN MADRASAHS: ANALYZING ALIGNMENT WITH LABOR MARKET NEEDS

Oki Dermawan¹ okidermawan@radenintan.ac.id , Zohaib Hassan Sain²
zohaib3746@gmail.com, Defriyanto³ defriyanto@radenintan.ac.id, Busmayaril,
busmayaril@radenintan.ac.id

¹Universitas Islam Negeri Raden Intan, Lampung, Indonesia

²Superior University, Pakistan

³Universitas Islam Negeri Raden Intan, Lampung, Indonesia

⁴Universitas Islam Negeri Raden Intan, Lampung, Indonesia

Correspondent Email: okidermawan@radenintan.ac.id

ABSTRACT. This article examines the management of the Islamic education curriculum in madrasahs and its alignment with the demands of the labor market. It highlights the challenges faced by madrasahs in Indonesia, including resource limitations, insufficient teacher training, and inadequate infrastructure, which hinder the development of curricula that meet workforce needs. While national educational policies like the Merdeka Curriculum provide flexibility, madrasahs must make significant adjustments to enhance the relevance of their offerings. This study recommends the regular updating of teaching materials, the enhancement of teacher skills through professional development, and the creation of partnerships with industries to ensure curricula remain aligned with labor market demands. The paper further advocates for competency-based education, stakeholder collaboration, and the integration of lifelong learning principles to prepare students for an evolving job market. Additionally, the study proposes future research directions, including longitudinal studies tracking the career trajectories of madrasah graduates, implementation studies on curriculum management, and comparative studies across different regions. Ultimately, this research provides actionable recommendations to improve the alignment of Islamic education curricula in madrasahs with labor market needs.

Keywords: *Islamic Education Curriculum, Madrasah, Labor Market, Merdeka Curriculum*

ABSTRAK. Artikel ini menganalisis pengelolaan kurikulum pendidikan Islam di madrasah dan kesesuaiannya dengan tuntutan pasar kerja. Penelitian ini mengidentifikasi tantangan yang dihadapi oleh madrasah di Indonesia, seperti keterbatasan sumber daya, kurangnya pelatihan bagi guru, dan infrastruktur yang tidak memadai, yang menghambat pengembangan kurikulum yang sesuai dengan kebutuhan tenaga kerja. Meskipun kebijakan pendidikan nasional seperti Kurikulum Merdeka memberikan fleksibilitas, madrasah harus melakukan penyesuaian signifikan untuk meningkatkan relevansi tawaran pendidikannya. Penelitian ini merekomendasikan pembaruan materi ajar secara berkala, peningkatan keterampilan guru melalui pengembangan profesional, dan pembentukan kemitraan dengan dunia industri untuk memastikan kurikulum yang diajarkan tetap relevan dengan kebutuhan pasar kerja. Artikel ini juga menganjurkan penerapan pendidikan berbasis kompetensi, kolaborasi pemangku kepentingan, dan integrasi prinsip pembelajaran sepanjang hayat untuk mempersiapkan siswa menghadapi pasar kerja yang terus berkembang. Selain itu, penelitian ini mengusulkan arah penelitian di masa depan, termasuk studi longitudinal yang melacak jalur karir lulusan madrasah, studi implementasi tentang pengelolaan kurikulum, dan studi perbandingan di berbagai wilayah. Secara keseluruhan, penelitian ini memberikan rekomendasi yang dapat diterapkan untuk meningkatkan kesesuaian kurikulum pendidikan Islam di madrasah dengan tuntutan pasar kerja.

Kata Kunci: Kurikulum Pendidikan Islam, Madrasah, Pasar Kerja, Kurikulum Merdeka Article History

Received : 11-01-2026

Accepted : 18-02-2026

Revision : 14-01-2026

Published : 18-02-2026

How to cite: Dermawan, O., Sain, Z, H., Defriyanto., & Busmayaril (2026). Management of islamic education curriculum in madrasahs: analyzing alignment with labor market needs. *Journal in Teaching and Education Area*, 3 (1), 52-72. Doi: <https://doi.org/10.69673/sq0srx86>



INTRODUCTION

The management of the Islamic education curriculum in madrasahs plays a critical role in aligning national educational goals with the ever-evolving demands of the labor market. The global workforce is undergoing rapid transformation due to technological advancements, shifting economic landscapes, and globalization. As a result, madrasahs, as part of the broader educational framework in Indonesia, face significant challenges in adapting their curricula to better prepare students for future job opportunities. This adaptation is crucial not only for improving student employability but also for supporting national efforts to address skill shortages in key sectors.

In recent years, there has been increasing recognition of the need for educational institutions, including madrasahs, to align their curricula more closely with the requirements of the labor market. However, the process of aligning the curriculum with labor market needs presents various complexities. These include issues related to outdated educational content, insufficient teacher training, and a lack of infrastructure that would enable the effective delivery of updated curricula. These challenges are particularly pressing in the context of the rapid technological changes that are reshaping industries and workforce demands (Slamet et al., 2017).

The integration of technological advancements into the workforce is one of the most notable changes driving the need for curriculum reform. Advancements in fields such as artificial intelligence and automation are rapidly transforming the skills required for employment. For instance, future workers will need to possess a combination of technical skills and soft skills, such as critical thinking, problem-solving, and adaptability, to thrive in an increasingly digital and dynamic work environment (Ramos et al., 2025). The ability of madrasahs to integrate these competencies into their curricula is essential for enhancing the employability of their graduates.

Moreover, the challenge of curriculum management extends beyond technical skills. It is also imperative that madrasahs foster values that prepare students for ethical decision-making and leadership in their professional lives. The inclusion of Islamic values alongside career-focused skills can ensure that students not only excel in their careers but also contribute positively to society. This dual focus on both vocational and moral development aligns with the broader objectives of Islamic education, which seek to prepare students for a



successful and ethical life in the modern world.

A crucial factor in the alignment of madrasah curricula with labor market needs is the involvement of key stakeholders. Research by (Slamet et al., 2017) emphasizes the importance of engaging industry representatives in curriculum development processes. By consulting with businesses and industries, madrasahs can ensure that the skills imparted to students are relevant and in-demand. Such collaboration would allow for the creation of a curriculum that addresses the specific needs of the labor market while remaining grounded in religious values and educational standards.

However, many madrasahs face significant barriers in establishing these collaborations. Resource limitations are one of the key factors hindering the effective management of the curriculum. As noted by (Alvadina et al., 2024), many madrasahs lack the financial resources to invest in the necessary infrastructure, educational tools, and technologies that are critical for delivering a modern and relevant curriculum. This lack of resources creates a gap between the needs of the workforce and the education that students receive, ultimately impacting their ability to succeed in the labor market.

The Merdeka Curriculum, introduced by the Indonesian government, provides an opportunity for madrasahs to overcome some of these challenges. This curriculum emphasizes flexibility, allowing madrasahs to adapt their educational offerings to the needs of their local communities and industries. However, while the Merdeka Curriculum offers increased autonomy, it also presents challenges related to implementation. Madrasahs must invest time and effort into adapting their teaching methods, developing new resources, and training teachers to effectively deliver the curriculum in line with both national standards and labor market requirements (Ghani et al., 2023).

In addition to structural and resource-based challenges, madrasahs must also address the need for continuous professional development for teachers. As the primary facilitators of curriculum delivery, teachers play a central role in ensuring that students receive the skills and knowledge they need to thrive in the labor market. Continuous training in modern pedagogical techniques, as well as in the integration of 21st-century skills such as digital literacy, is essential for empowering teachers to deliver an effective curriculum (El-Masri & Tanaka, 2024).



Furthermore, another challenge faced by madrasahs is the inconsistency in curriculum delivery across different institutions. As noted by Toquero and (Toquero & Ulanday, 2021), the lack of standardized curriculum implementation in madrasahs results in a disparity in the skills acquired by students. Some madrasahs may be more advanced in incorporating labor market skills into their curricula, while others may struggle to keep up with the pace of change. This inconsistency further exacerbates the skills gap, leaving some graduates underprepared for employment opportunities.

Addressing these challenges requires a comprehensive approach to curriculum management that includes not only updating educational content but also ensuring the proper resources and infrastructure are in place. (Supriandi et al., 2024) highlight the importance of improving teacher competencies and utilizing educational technologies to bridge the gap between traditional and modern teaching practices. The integration of digital tools and platforms into the learning process is crucial for ensuring that students are prepared for the technology-driven workplace (Musaad et al., 2024).

In addition to these practical steps, there is also a need for an ongoing dialogue between madrasahs and the industries that will employ their graduates. This dialogue can take the form of partnerships, internships, and joint initiatives that allow students to gain hands-on experience and better understand the expectations of employers. By actively engaging with the business community, madrasahs can ensure that their curricula remain responsive to the needs of the labor market.

Finally, madrasahs must ensure that they are producing graduates who are not only skilled in their chosen fields but also equipped with the values and ethics that are central to Islamic education. This balanced approach will ensure that students are not only prepared for professional success but also for contributing to society in a positive and ethical manner. The alignment of the curriculum with both the demands of the labor market and the moral imperatives of Islamic education will help students succeed in both their careers and their personal lives (Barizi et al., 2023).



METHODOLOGY

Research Design

This study employs a qualitative literature review with a narrative synthesis design to examine the management of Islamic education curricula in Indonesian madrasahs and its alignment with labor market needs. A literature review design is appropriate for consolidating evidence from heterogeneous sources (empirical studies, conceptual papers, and policy documents), particularly when direct field-based research on a specific intersection remains limited. This approach enables the study to: (1) map how curriculum management is conceptualized and practiced in madrasahs, (2) identify how employability and labor market demands are addressed within curriculum planning and implementation, and (3) synthesize gaps and recommendations for improving curriculum relevance and adaptability.

The review procedure follows established qualitative research guidance for literature-based inquiry and interpretive synthesis, emphasizing transparency in selection criteria, systematic organization of evidence, and thematic interpretation to generate a coherent analytical narrative (Creswell, 2018; Merriam & Tisdell, 2016; Snyder, 2019).

Data Sources, Search Strategy and Selection Criteria

This review uses secondary data obtained from scholarly and policy literature relevant to Islamic education, curriculum management, and labor market needs. The literature was identified through targeted searches of academic repositories and relevant institutional sources: e.g., Google Scholar, DOAJ, Garuda, ERIC/ProQuest/Scopus; and official government portals], complemented by backward and forward snowballing (screening reference lists and citing articles where feasible). Searches used combinations of keywords such as madrasah, Islamic education curriculum, curriculum management, Merdeka Curriculum, employability skills, labor market needs, and graduate readiness.

To ensure relevance and rigor, data sources were included only if they met the following combined source and inclusion criteria:

1. Topical Relevance to Islamic Education Curriculum in Madrasahs



Sources must discuss the structure/content of Islamic education in madrasahs or the integration of madrasah curricula with national standards (e.g., curriculum reform, learning outcomes, competency targets, and implementation challenges).

2. Curriculum Management and Governance Focus

Literature is prioritized when it examines curriculum management elements such as planning, organization, stakeholder roles (school leaders, teachers, committees, government agencies), monitoring/evaluation, and institutional strategies for quality improvement.

3. Explicit Link to Labor Market Needs / Employability

Sources must provide empirical findings, conceptual analyses, or policy perspectives on graduate readiness, employability skills, industry/market expectations, or curriculum responsiveness to socio-economic and workforce changes (including the context of digital transformation/Industry 4.0 where applicable).

4. Contextual Fit (Indonesia and Comparable Contexts)

Primary emphasis is placed on Indonesian madrasah contexts. Where necessary, comparative or conceptual works from similar educational settings are used to strengthen interpretation, provided they support analytical transferability.

Examples of key literature types used in this review include: (a) scholarship on madrasah reform and curriculum challenges (e.g., Sudarto, 2023), (b) studies on policy implementation such as the Merdeka Curriculum in madrasahs (e.g., Oktavia, 2024), (c) curriculum transformation discussions related to Industry 4.0 and competency orientation (e.g., Randa & Arsyam, 2023), (d) analyses of curriculum policy and higher education relevance to labor market needs (e.g., (Latif et al., 2024), and (e) comparative implementation studies across madrasahs (e.g., (Mustakim, 2019).

Data Collection Techniques

The collected literature was organized using a structured library research procedure. After identification, records were screened in stages: (1) title and abstract screening to remove irrelevant items, followed by (2) full-text screening to confirm compliance with the inclusion criteria. Duplicate records were removed. For each included source, key information was extracted into an evidence matrix, including bibliographic details, study focus,



methodological approach (where relevant), curriculum management dimensions discussed, and any explicit treatment of labor market/employability alignment.

Data Analysis and Synthesis

Data were analyzed using qualitative descriptive thematic analysis. First, extracted content was coded to identify recurring ideas and claims related to curriculum management practices and labor market alignment. Second, codes were consolidated into broader themes (e.g., curriculum governance and stakeholder involvement, competency orientation and employability skills, policy implementation constraints, and adaptation strategies). Third, themes were compared across source types (research articles, policy documents, implementation reports) to identify convergent patterns, disagreements, and evidence gaps. Finally, findings were synthesized into an integrative narrative that informs a framework and recommendations for improving the relevance and responsiveness of madrasah curricula to evolving labor market demands.

RESULTS

Management of Islamic Education Curriculum in Madrasahs

The management of the Islamic education curriculum in madrasahs involves a systematic approach to curriculum planning, implementation, and evaluation, overseen by educational managers such as headmasters, teachers, and foundation administrators. This ensures that the curriculum aligns with both labor market demands and educational objectives, including religious values.

Curriculum Planning

Curriculum planning in madrasahs begins with forming a curriculum development team, typically led by the headmaster. This team is responsible for designing the curriculum in accordance with national educational standards and the specific needs of the madrasah community. (Pohan et al., 2022) emphasize that successful curriculum development at Madrasah Aliyah Negeri follows a structured approach, where roles and responsibilities are clearly defined, leading to more effective outcomes in curriculum planning. Input from teachers and stakeholders is often integrated, making the curriculum more responsive to local socio-economic conditions and labor market demands.



Curriculum Implementation

The implementation phase focuses on delivering the planned curriculum, with teachers playing a pivotal role. (Pratami et al., 2021) highlight that effective curriculum management directly influences the quality of teaching and learning. Teachers coordinate the delivery of the curriculum, adapting their teaching strategies to cater to diverse student needs, thus creating a conducive learning environment. The headmaster's oversight ensures that the curriculum is adjusted based on student progress and feedback (Ardianto et al., 2024). (Dermawan et al., 2020).

Curriculum Evaluation

Curriculum evaluation ensures that the educational outcomes align with student learning objectives and labor market requirements. (Kamal, 2024) discusses the importance of feedback and monitoring mechanisms for continuous curriculum improvement. This evaluation involves assessing students' performances and gathering feedback from teachers, parents, and industry stakeholders regarding the curriculum's relevance to the workforce. With the implementation of the Merdeka Curriculum, ongoing evaluation and adaptation are critical as schools adjust to demographic shifts and evolving labor market conditions (Ghani et al., 2023).

Role of Educational Managers

Educational managers, including headmasters and foundation administrators, play a crucial role in managing the curriculum. Their responsibilities include leadership, fostering a positive organizational culture, and ensuring resources are used efficiently to improve education quality. (Abdullah et al., 2023) assert that democratic leadership styles that promote collaboration can enhance curriculum management. Professional development initiatives for teachers and community engagement are also emphasized as vital components of successful curriculum management (Pratami et al., 2021); (Maulana et al., 2024).

Alignment of the Curriculum with Labor Market Needs

Incorporation of 21st-Century Skills

Madrasahs are increasingly incorporating 21st-century skills, such as communication, critical thinking, The influence of STEM-based blended learning model, (Dermawan et al.,



2023), Challenges in Aligning Curriculum with technological proficiency, and entrepreneurship, into their curricula. This integration is essential for improving academic outcomes and positioning students for success in the competitive job market. Project-based learning and collaborative tasks foster creativity and communication among students, aligning with findings from (Habets et al., 2020), which highlight the importance of collaborative skills for future employment. Additionally, integrating technology in the curriculum helps students prepare for a technology-driven workforce (Habets et al., 2020).

Entrepreneurial Skills Development

Madrasahs are placing greater emphasis on entrepreneurial education, with programs designed to help students develop problem-solving and adaptability skills necessary for self-employment or business ventures. (Bowen & Johnson, 2019) highlight that integrating entrepreneurship into the curriculum helps foster innovation and prepares students to navigate the contemporary economic landscape.

Challenges in Aligning Curriculum with Labor Market Needs

Despite these efforts, there are challenges in aligning madrasah curricula with labor market needs. A primary issue is the lack of collaboration between educational institutions and industry stakeholders. (Mulyana et al., 2024) note that inadequate engagement with local businesses results in curricula that may not fully meet the skills, required by employers. Other challenges include limited resources for updating materials and teacher training, as well as varying degrees of teacher preparedness in delivering content aligned with 21st-century skills (Tes & Khen, 2025).

Challenges in Curriculum Management

Resource Limitations

Madrasahs in Indonesia face significant challenges due to limited financial and material resources. (Alvadina et al., 2024) report that inadequate infrastructure and insufficient teaching materials hinder the ability of madrasahs to deliver a modern, relevant curriculum. The lack of funding also affects the capacity to invest in up-to-date learning materials and educational technologies, which are critical for preparing students for the workforce.



(Musaad et al., 2024) highlight that these resource disparities contribute to a skills gap among students, resulting in lower employability.

Teacher Training and Professional Development

Many teachers in madrasahs have not received adequate training to implement curricula that incorporate essential labor market skills, such as critical thinking and problem-solving. According to (Amirullah, 2017), the absence of a clear framework for teaching employability skills exacerbates this issue. (Sholeh, 2023) emphasizes that ongoing professional development is necessary to ensure that teachers are able to meet evolving educational demands.

Infrastructure Constraints

Physical infrastructure also poses a challenge to effective curriculum management. Alvadina et al. (2024) report that many madrasahs lack essential facilities such as modern classrooms, libraries, and computer labs, which impede effective teaching and learning. Inadequate facilities can prevent the integration of technology into the curriculum, limiting students' exposure to essential digital skills (Thoha et al., 2023).

Case Studies and Examples of Successful Curriculum Alignment

MIS Asy Syafi'iyah Pecangakan

MIS Asy Syafi'iyah Pecangakan has implemented a project-based learning model aimed at improving students' critical thinking and incorporating 21st-century skills like digital literacy and effective communication. As a result, students have improved academic performance and are securing positions in technology-related fields (Fitrianingsih et al., 2025).

Madrasah Ibtidaiyah (MI) Al-Hikmah

Madrasah Ibtidaiyah Al-Hikmah has incorporated digital literacy and numeracy into its curriculum, significantly enhancing student interest and academic performance. The school has partnered with local tech companies to offer internships, further increasing graduates' employability (Bali et al., 2023).

Modern Pesantren



Modern pesantren have integrated holistic curricula focusing on creativity, collaboration, and critical thinking. Graduates from these pesantren have successfully transitioned into higher education and the workforce, particularly in technology and entrepreneurship fields (Nabila et al., 2024).

MA Darul Fikri

MA Darul Fikri's Global Leadership Program (GLP) equips students with leadership, collaboration, and digital literacy skills, providing them with a competitive edge in the job market. Alumni have demonstrated strong employability in various industries (Yulianti, 2023).

Digital Madrasah Program

The Digital Madrasah Program has transformed educational practices by focusing on soft skills development and integrating technology. This program has resulted in students improving their collaboration and communication skills, leading to better job placements and educational opportunities (Prabowo et al., 2025).

Summary of Findings

Aspect	Findings	Literature
Curriculum Planning	Curriculum development teams, led by headmasters, ensure the curriculum meets both national standards and local labor market needs. Stakeholder input is critical for effective planning.	Pohan et al., 2022
Curriculum Implementation	Teachers play a key role in implementing the curriculum, adapting it to student needs, and ensuring alignment with educational and labor market objectives.	Ardianto et al., 2024
Curriculum Evaluation	Ongoing evaluation and feedback from students, teachers, and industry stakeholders ensure the curriculum stays relevant and effective in meeting labor market demands.	Kamal, 2024; Ghani et al., 2023



Role of Educational Managers	Leadership style, teacher involvement in decision-making, and professional development initiatives influence the success of curriculum management.	Abdullah et al., 2023; Pratami et al., 2021
Community Engagement	Active engagement with the community is essential for understanding labor market trends and adjusting the curriculum accordingly.	Maulana et al., 2024
21st-Century Skills Integration	Incorporating 21st-century skills, such as communication, technology use, and entrepreneurship, is vital for preparing students for future employment.	Habets et al., 2020; Bowen & Johnson, 2019
Resource Limitations	Limited financial and material resources hinder the ability to deliver a relevant and modern curriculum that prepares students for the workforce.	Alvadina et al., 2024; Musaad et al., 2024
Teacher Training	Insufficient teacher training and professional development programs prevent the effective implementation of curricula aligned with labor market needs.	(Amirullah, 2017); Sholeh, 2023
Infrastructure Constraints	Inadequate infrastructure impedes effective teaching and learning, limiting opportunities for integrating technology and modern teaching methods.	Alvadina et al., 2024; Thoha et al., 2023
Case Studies	Madrasahs like MIS Asy Syafi'iyah Pecangakan and Al-Hikmah have successfully integrated 21st-century skills, improving student engagement and employability.	(Fitrianingsih et al., 2025)

DISCUSSIONS

Management of Islamic Education Curriculum in Madrasahs

The management of the Islamic education curriculum in madrasahs is a comprehensive process that involves careful planning, effective implementation, and continuous evaluation. As observed in the findings, curriculum planning is crucial in ensuring that the educational goals of madrasahs align with the demands of the labor market while also upholding religious values. The involvement of a curriculum development team, led by headmasters, plays a significant role in shaping the curriculum to meet both national educational standards and the unique needs of the madrasah community. Pohan et al. (2022) emphasize the importance of a structured planning approach, ensuring that all roles and responsibilities are



clearly defined. This structured planning process is vital in addressing local socio-economic conditions and labor market demands, ensuring that madrasahs produce graduates who are not only equipped with religious knowledge but also with competencies valued by the workforce.

In the implementation phase, teachers play a pivotal role. Their ability to adapt the curriculum and teaching methods to meet the diverse needs of students directly influences the effectiveness of the curriculum. As (Pratami et al., 2021) pointed out, teachers must be flexible in their approach to ensure that the curriculum reaches its intended outcomes while remaining responsive to labor market requirements. (Ardianto et al., 2024) further highlight the importance of the headmaster's oversight in ensuring that the curriculum is effectively delivered and adjusted based on student progress and feedback. This adaptability allows madrasahs to remain relevant and meet evolving educational needs.

The evaluation phase is also a crucial element of effective curriculum management. (Kamal, 2024) emphasizes that feedback and monitoring mechanisms enable continuous improvement in the curriculum. This aligns with the findings of (Ghani et al., 2023), who argue that continuous evaluation is especially vital with the implementation of the Merdeka Curriculum, which encourages dynamic adjustments to meet shifts in student demographics and labor market demands. Evaluating the relevance of the curriculum through feedback from students, teachers, and industry stakeholders ensures that madrasahs remain attuned to the needs of both their students and the workforce.

Role of Educational Managers

The findings also highlight the important role of educational managers in the success of curriculum management. Headmasters, as the primary leaders in madrasahs, significantly impact the organizational culture and overall effectiveness of curriculum implementation. (Abdullah et al., 2023) argue that adopting a democratic leadership style fosters collaboration and enhances the effectiveness of the curriculum. Engaging teachers in decision-making not only boosts motivation but also fosters a sense of shared responsibility for the educational outcomes of the institution.

Furthermore, the role of professional development in ensuring the success of the curriculum cannot be overstated. As (Pratami et al., 2021) note, continuous training programs and



workshops are essential for preparing teachers to implement the curriculum effectively. By staying updated with the latest pedagogical strategies and frameworks, teachers are better equipped to address the diverse needs of students and adapt to the evolving demands of the labor market. In addition, professional development supports the alignment of the curriculum with industry standards, ensuring that students acquire the necessary skills for future employment.

Community engagement is another crucial aspect of curriculum management. Maulana et al. (2024) emphasize the importance of building strong relationships with the community to better understand local labor market trends and expectations. This community engagement helps madrasahs adjust their curricula to ensure students are prepared for future employment opportunities that align with the specific needs of their region.

Alignment of the Curriculum with Labor Market Needs

One of the key findings of this study is the growing importance of aligning the Islamic education curriculum with labor market needs. Madrasahs in Indonesia are increasingly incorporating 21st-century skills, such as communication, critical thinking, and technological proficiency, into their curricula. The incorporation of these skills is not only necessary for improving academic outcomes but also for ensuring that students are well-positioned to succeed in a competitive job market.

As highlighted by (Habets et al., 2020), the integration of project-based learning and collaborative tasks in the curriculum helps foster creativity, communication, and teamwork among students. These are essential skills that employers increasingly value. The emphasis on these skills is a direct response to the evolving demands of the labor market, where employers seek individuals who are not only knowledgeable but also adaptable and able to work in teams.

Moreover, the integration of technology within the curriculum plays a crucial role in preparing students for the technology-driven workforce. As noted in the findings, adapting teaching methods to include digital tools and online resources ensures that students are equipped with the technological proficiency needed in the modern workforce. While the provided references did not specifically highlight this aspect, the integration of technology



is broadly recognized in educational literature as a key factor in enhancing student engagement and active learning.

Incorporating entrepreneurial skills into the curriculum is another critical development. As (Bowen & Johnson, 2019) suggest, teaching entrepreneurship fosters a mindset of problem-solving, adaptability, and innovation. These skills are essential in today's economy, where self-employment and entrepreneurial ventures are becoming increasingly important. By providing students with opportunities to engage in entrepreneurship through real-world projects or business simulations, madrasahs are preparing students for a variety of career paths, whether in traditional employment or as entrepreneurs.

Challenges in Aligning Curriculum with Labor Market Needs

Despite the ongoing efforts to align madrasah curricula with labor market needs, several challenges persist. One of the main obstacles is the lack of collaboration between educational institutions and industry stakeholders. (Mulyana et al., 2024) note that inadequate engagement with local businesses can result in curricula that do not fully reflect the skills employers are looking for. This disconnect between the educational system and the workforce creates a skills gap that impacts graduates' employability.

Resource limitations also pose significant challenges in curriculum management. (Alvadina et al., 2024) report that many madrasahs face financial constraints, limiting their ability to invest in modern educational technologies and materials. This lack of resources hinders the effective delivery of a contemporary curriculum that aligns with the needs of the labor market. Additionally, the lack of access to technology in many madrasahs limits students' exposure to the digital skills that are increasingly required by employers (Musaad et al., 2024).

Teacher training and professional development are also identified as critical areas for improvement. As Amirullah (2017) points out, many teachers have not received sufficient training to incorporate essential 21st-century skills into their teaching. Without ongoing professional development opportunities, teachers may struggle to keep pace with the rapidly changing educational landscape and labor market demands.



Case Studies and Examples of Successful Curriculum Alignment

The case studies of madrasahs that have successfully aligned their curricula with labor market needs provide valuable insights into effective curriculum management practices. As observed in the examples of MIS Asy Syafi'iyah Pecangakan, Madrasah Ibtidaiyah Al-Hikmah, and other institutions, the integration of 21st-century skills, technology, and entrepreneurship into the curriculum has resulted in improved student engagement, academic performance, and employability outcomes.

For instance, MIS Asy Syafi'iyah Pecangakan's project-based learning model has helped students develop critical thinking and digital literacy, positioning them for success in technology-related fields (Fitrianingsih et al., 2025). Similarly, Madrasah Ibtidaiyah Al-Hikmah's incorporation of digital literacy and partnerships with local tech companies has enhanced students' skills and employability (Bali et al., 2023). These case studies demonstrate the positive impact of aligning curricula with labor market demands and the importance of incorporating practical, real-world experiences into the learning process.

CONCLUSIONS

This study highlights the need for a more structured and adaptive approach to the management of Islamic education curricula in madrasahs, aligning it better with the ever-evolving demands of the labor market. The findings indicate that madrasahs face several significant challenges, including limited resources, inadequate teacher training, and infrastructure issues, which impede their ability to implement curricula that are relevant to contemporary workforce needs. National education policies, such as the Merdeka Curriculum, provide both opportunities and challenges, offering greater flexibility while requiring substantial effort from madrasahs to adapt and enhance the quality of their educational offerings, ultimately improving student employability.

The alignment of the curriculum with labor market needs is crucial for preparing students for future employment opportunities. The integration of 21st-century skills such as communication, critical thinking, and digital literacy into the curriculum is essential to ensuring that graduates are well-equipped to thrive in a competitive job market. Additionally, fostering entrepreneurial skills through the curriculum can help students develop problem-



solving, adaptability, and innovation—skills that are increasingly demanded in today’s economy.

However, challenges such as insufficient collaboration with industry stakeholders, resource limitations, and gaps in teacher training need to be addressed to bridge the disconnect between educational outcomes and labor market expectations. These barriers must be overcome through continuous collaboration with industry, investment in teacher professional development, and the strengthening of infrastructure to create a more responsive curriculum.

Recommendations

1. To improve the alignment between the Islamic education curriculum and labor market needs, the following recommendations are proposed:
2. **Regular Updates to Teaching Materials:** Madrasahs should regularly review and update their curriculum to incorporate the latest trends in education and labor market demands. Collaboration with industry stakeholders and conducting research on market needs should be a priority to ensure that curricula remain relevant and up-to-date.
3. **Enhance Teacher Professional Development:** Continuous professional development programs must be prioritized to equip teachers with modern pedagogical methods and the necessary 21st-century skills, such as critical thinking and digital literacy. Teachers should be trained to effectively integrate these competencies into their teaching practices.
4. **Build Stronger Industry Partnerships:** Establishing and strengthening partnerships with local businesses and organizations will provide valuable opportunities for internships, vocational training, and direct industry input into curriculum development. This will ensure that students gain relevant, real-world skills and increase their employability.
5. **Adopt a Competency-Based Education Approach:** Madrasahs should adopt a competency-based education model that focuses on equipping students with practical, career-oriented skills. This includes fostering communication, collaboration, problem-solving, and technical skills that are essential for success in the modern job market.



6. Encourage Lifelong Learning: Integrating lifelong learning principles into the curriculum is vital for developing a mindset of continuous learning and adaptability in students. This will prepare students to remain competitive in a rapidly changing job market.

Future Research Directions

Future research could explore longitudinal studies tracking the career outcomes of madrasah graduates to evaluate the long-term impact of curriculum changes. Additionally, implementation studies focused on how curriculum management strategies are applied in practice could help identify barriers and best practices. Comparative studies examining madrasahs in different regions, both within Indonesia and internationally, could also provide valuable insights into effective curriculum alignment with labor market needs.

By addressing these recommendations and continuing to strengthen the relationship between education and industry, madrasahs can enhance the employability of their graduates and contribute to the broader economic development goals of the nation.

REFERENCES

- Abdullah, W., Tihami, M. A., & Gunawan, A. (2023). Peran Kepala Madrasah Dalam Meningkatkan Perilaku Organisasi Lembaga Pendidikan Islam. *Jurnal Pendidikan Islam Al-Ilmi*, 6(2), 363. <https://doi.org/10.32529/al-ilmi.v6i2.2873>
- Alvadina, P. Y., Fitriasia, A., Yufriadi, F., Syahriani, F., & Ngardi, V. (2024). Integrating Entrepreneurship Education Into Islamic Madrasah Curriculum: A Qualitative Case Study of Experiential and Project-Based Learning Under Indonesia's Freedom to Learn (Merdeka Belajar) Initiative. *Jurnal Pendidikan Islam*, 13(2), 131–150. <https://doi.org/10.14421/jpi.2024.132.131-150>
- Amirullah, M. (2017). *Career Guidance Program to Raise the Employability Skills of Vocational High School (SMK) Students*. <https://doi.org/10.2991/icset-17.2017.32>
- Ardianto, A., Usman, M. U. K., & Gunawan, G. (2024). Curriculum Management in the Character Forming of Students. *Adrg*, 3(2), 62–73. <https://doi.org/10.31538/adrg.v3i2.1282>
- Bali, M. M. E. I., Faradina, U. A., Zahroh, S. F., Sulistiawati, & Faradini, U. A. (2023). Digital Literacy and Numeracy Education to Enhance Students' Interest in Madrasah Ibtidaiyah. *Ijsss*, 1(2), 83–94. <https://doi.org/10.59890/ijsss.v1i2.1052>
- Barizi, A., Isroani, F., & Jamilah, J. (2023). Assistance in Religious Moderation Curriculum Design in the Digital Era Islamic Religious Education Courses in Salahuddin Pasuruan. *Amalee Indonesian Journal of Community Research and Engagement*, 4(2), 479–489. <https://doi.org/10.37680/amalee.v4i2.2954>



- Bowen, M. M., & Johnson, K. (2019). *Entrepreneurial Skills for the 21st Century Workplace*. 56–69. <https://doi.org/10.4018/978-1-5225-6331-0.ch004>
- Dermawan, O., Ayu, S. M., Junaidah, Meisuri, Defriyanto, & Indriyani, R. (2020). Remote Control Caras Physics Teaching Aids by Utilizing Recycled Wastes. *Journal of Physics: Conference Series*, 1467(1). <https://doi.org/10.1088/1742-6596/1467/1/012048>
- Dermawan, O., Defriyanto, Junaidah, Ayu, S. M., Busmayaril, Jayusman, & Gemilang, S. S. (2023). The influence of STEM-based blended learning model assisted by schoology on critical thinking skills. *AIP Conference Proceedings*, 2595. <https://doi.org/10.1063/5.0123682>
- El-Masri, O., & Tanaka, H. (2024). The Role of Professional Competence in Improving the Quality of Madrasah Ibtidaiyah Teacher Education. *Elnty*, 2(1), 27–32. <https://doi.org/10.55210/elementary.v2i1.438>
- Fitrianingsih, U., Rahmawati, W., Hasanah, U., Khasanah, U., & Rosyida, V. N. (2025). Project Based Learning Model to Improve Students' Critical Thinking Skills in Natural Science Learning at MIS Asy Syafi'iyah Pecangakan. *Deep Learning*, 1(1), 107–120. <https://doi.org/10.62945/deeplearning.v1i1.206>
- Ghani, A., Ribahan, R., & Nasri, U. (2023). Paradigma Diferensiasi Dalam Implementasi Kurikulum Merdeka: Konteks Pembelajaran Pendidikan Agama Islam Di Sekolah Dan Madrasah. *El-Hikmah Jurnal Kajian Dan Penelitian Pendidikan Islam*, 17(2), 169–179. <https://doi.org/10.20414/elhikmah.v17i2.8867>
- Habets, O., Stoffers, J., Heijden, B. v. d., & Peters, P. (2020). Am I Fit for Tomorrow's Labor Market? The Effect of Graduates' Skills Development During Higher Education for the 21st Century's Labor Market. *Sustainability*, 12(18), 7746. <https://doi.org/10.3390/su12187746>
- Kamal, M. (2024). Optimalisasi Peran Kepala Madrasah Kunci Revitalisasi Pendidikan Islam. *Reslaj Religion Education Social Laa Roiba Journal*, 6(12). <https://doi.org/10.47467/reslaj.v6i12.4236>
- Latif, M. S., Ariarta, A. P., Muid, A., Latif, A., Sutiah, S., & Aziz, A. (2024). Analysis of Indonesian DIKTI and DIKTIS Higher Education Curriculum Development Policy. *Journal of Instructional and Development Researches*, 4(4), 256–265. <https://doi.org/10.53621/jider.v4i4.340>
- Maulana, I., Gani, S. H., & Mujahidin, E. (2024). Analisis Perencanaan Kurikulum Pendidikan Islam Dalam Meningkatkan Ketaqwaan Santri Study Kasus Pesantren Daarut Tarqiyah Primago. *Rayah Al-Islam*, 8(1), 80–93. <https://doi.org/10.37274/rais.v8i1.911>
- Mulyana, A., Syifauzakia, S., Wahyudi, A. V., & Shifwatussolihat, S. (2024). The Relevance of the Curriculum Early Childhood Islamic Education Study Program to Employment Needs. *Jpud - Jurnal Pendidikan Usia Dini*, 18(2), 409–422. <https://doi.org/10.21009/jpud.v18i2.48975>
- Musaad, F., Akbar, B., Al-Jarf, M. A., & Rizari. (2024). Implementation of Policy for the Implementation of Islamic State Vocational School in the Ministry of Religious Affairs of the Republic of Indonesia. *International Journal of Law and Politics Studies*, 6(3),



127–133. <https://doi.org/10.32996/ijlps.2024.6.3.11>

- Mustakim, Z. (2019). Managing Islamic Education Curriculum in Indonesian Schools: Best Practices and Policy Recommendations. *Jurnal Penelitian*, 187. <https://doi.org/10.28918/jupe.v16i2.2715>
- Nabila, A. Z., Farid, A., Magfiroh, S., Hafizhah, N. Z., & Khomsah, M. N. (2024). 21st Century Skills Development in Modern Pesantren. *J. Of Multidiscip. Sustainability Asean*, 1(3), 11–17. <https://doi.org/10.70177/ijmsa.v1i3.1124>
- Oktavia, A. (2024). Evaluation of Learning Management in Madrasahs Based on the Merdeka Curriculum. *Journal Corner of Education Linguistics and Literature*, 4(001), 525–535. <https://doi.org/10.54012/jcell.v4i001.430>
- Pohan, A. A., Azmi, F., & Rafida, T. (2022). Curriculum Development Management at Madrasah Aliyah Negeri. *Munaddhomah Jurnal Manajemen Pendidikan Islam*, 3(1), 95–106. <https://doi.org/10.31538/munaddhomah.v3i1.231>
- Prabowo, G. C. W., Fawaz, A. H. S. Al, Wafiroh, N., Algifari, M. F., & Fayoumi, Z. E. (2025). Management of Soft Skills Development Activities Through the Digital Madrasa Program in the School Environment. *Tadbir Jurnal Manajemen Pendidikan Islam*, 13(1), 170–186. <https://doi.org/10.30603/tjmpi.v13i1.5904>
- Pratami, A., Sugiarto, S., & Ahmad, M. (2021). Curriculum Management in the Intercultural School. *International Journal of Elementary Education*, 5(1), 107. <https://doi.org/10.23887/ijee.v5i1.33937>
- Ramos, H. C. C., Cruz, O., Bardales, E. S., Huatangari, L. Q., Trigoso, J. A. C., Guevara, J., & Santos, R. C. (2025). Artificial Intelligence Skills and Their Impact on the Employability of University Graduates. *Frontiers in Artificial Intelligence*, 8. <https://doi.org/10.3389/frai.2025.1629320>
- Randa, M., & Arsyam, M. (2023). Transformation of Islamic Religious Education in the Revolution 4.0 Era. *International Journal of Science and Society*, 4(4), 676–686. <https://doi.org/10.54783/ijsoc.v4i4.616>
- Sholeh, M. I. (2023). Evaluation and Monitoring of Islamic Education Learning Management in Efforts to Improve Education Quality. *Communautaire*, 2(2), 108–117. <https://doi.org/10.61987/communautaire.v2i2.159>
- Slamet, A., Hadjar, I., & Mustaqim, M. (2017). *Educational Management of Islamic High Boarding School “Roudlotul Ulum.”* <https://doi.org/10.2991/yicemap-17.2017.6>
- Sudarto, S. (2023). Madrasah Education Reform in Indonesia. *Maqolat Journal of Islamic Studies*, 1(1), 18–24. <https://doi.org/10.58355/maqolat.v1i1.4>
- Supriandi, S., Haddar, G. Al, & Halim, C. (2024). The Role of Multimedia Integration in Teaching Islamic Religion and Students’ Satisfaction With Interactive Learning in Islamic Boarding Schools in Indonesia. *The Eastasouth Journal of Learning and Educations*, 2(02), 119–131. <https://doi.org/10.58812/esle.v2i02.300>
- Tes, V., & Khen, S. (2025). The Role of Soft Skills in Enhancing Graduates’ Employability: A Literature Review. *Cjer*, 5(2), 1–25. <https://doi.org/10.62037/cjer.2025.05.02.04>
- Thoha, M., Syawqi, A. H., Yahaya, M. Z., Septiadi, D. D., & Hidayatulloh, H. (2023). Can Indonesia’s Decentralized Education Technology Governance Policy: Evidence From



Muslim Countries. *Bestuur*, 11(2), 217. <https://doi.org/10.20961/bestuur.v11i2.78320>

Toquero, C. M. D., & Ulanday, D. M. P. (2021). University Graduates' Assessment of the Relevance of the Curriculum to the Labor Market in the Philippines. *International Research in Education*, 9(1), 19. <https://doi.org/10.5296/ire.v9i1.17421>

Yulianti, Y. (2023). Global Leadership Program: A Madrasah's Transformative Learning Initiative in Enhancing Students' 21st Century Skills. *Journal of Islamic Education Research*, 4(2), 239–252. <https://doi.org/10.35719/jier.v4i2.355>