

PROGRESSIVE ISLAMIC EDUCATIONAL MANAGEMENT AND HUMAN RESOURCE SUSTAINABILITY IN ISLAMIC SCHOOLS

Abdul Karim¹, Agus Fakhruddin^{2*}, Jenuri², Nurti Budyanti², Risbon Sianturi³, Shirin Kulkarni⁴

¹Department of Primary School Teacher Education, Universitas Muhammadiyah Cirebon, Indonesia

²Department of Islamic Education, Universitas Pendidikan Indonesia, Bandung, Indonesia

³PGPAUD Universitas Pendidikan Indonesia, Tasikmalaya, Indonesia

⁴Department of Education, Tampere University, Finland

*Corresponding Email: agusfakhruddin@upi.edu

Received: December 2024. Accepted: December 2025. Online First: January 2026 Published: June 2026.

ABSTRACT

Sustainable human resource development has become a critical issue in Islamic educational institutions as they respond to changing educational demands while preserving Islamic values. This scrutinizes how progressive Islamic Educational Management (IEM) practices contribute to the sustainability of human resources in two Indonesian Islamic schools. Employing a qualitative-dominant mixed-method design, data were collected through in-depth interviews, structured observations, document analysis, and a brief descriptive survey involving 32 educators and administrative staff. The findings reveal that both institutions implement progressive management strategies that emphasize adaptation, innovation, and continuous professional development grounded in Islamic principles. The Islamic elementary school demonstrates a strong integration of spiritual development and managerial professionalism, while Islamic Junior high school highlights institutional adaptability and active community engagement. Furthermore, the study shows that visionary leadership, human-centered policies, and reflective evaluation mechanisms play a central role in sustaining the quality and commitment of educational personnel. These results contribute to a deeper understanding of IEM as a framework for sustainable leadership and organizational development within Islamic schools. This study implies that Islamic educational institutions can strengthen long-term human resource sustainability by harmonizing Islamic values, progressive management practices, and professional well-being.

Keywords: Human Resource Sustainability, Islamic Educational Management, Progressive Islamic Education, Muhammadiyah Primary Education, Professional Development

INTRODUCTION

Global development is increasingly shaped by rapid social, economic, and institutional change, making sustainability a central concern in policy and academic discourse (Audi et al., 2025; Singhai et al., 2023). Education is now recognized as a strategic force for strengthening human capacity and advancing sustainable societies (Msomphora, 2025; Boojh & Ishwaran, 2022). International frameworks position education not merely as an affected sector but as a key driver of social, economic, and environmental sustainability, as institutionalized in UNESCO's Education for Sustainable Development (ESD) agenda (Andolina, 2012; Gwilliam, 2021; Maganini et al., 2025). Embedded within the 2030 Sustainable Development Agenda, ESD underscores education's role in enabling the achievement of all Sustainable Development Goals (Alam & Muzahid, 2006; Choi, 2019; Harjatanaya et al., 2025).

Sustainability is commonly defined as the capacity to maintain continuity over time (Wiley, 2000; Bassey et al., 2018; Khan et al., 2025), while sustainable development is understood as a dynamic process of adaptation, responsible resource use, and institutional resilience (Scott, 2002; Braine, 2007; Hu & Wu, 2026). In education, sustainable development balances human

well-being, economic progress, cultural continuity, and environmental responsibility (Boojh & Ishwaran, 2022; Budiyanti et al., 2022; Wals & Kieft, 2009). This holistic approach includes environmental stewardship, participatory learning, and responsible consumption, alongside the creation and reuse of educational resources to promote efficiency and institutional continuity (Gokool-Ramloo & Rumjaun, 2017; Wiley, 2000; Nissen, 2025).

Human resources (HR) represent a core pillar of institutional sustainability, emphasizing human capacities such as knowledge, skills, motivation, and creativity as drivers of organizational performance (Werther & Davis, 1996; Mathis & Jackson, 2005; Casta et al., 2021). Effective HR management supports not only goal achievement but also ethical conduct, innovation, and long-term adaptability (Graves et al., 2019; Blomme et al., 2010; Çer & Şahin, 2016; Khan et al., 2022). Contemporary perspectives highlight the integration of efficiency with moral responsibility, positioning HR development as a strategic process of continuous learning, well-being, and organizational resilience (Cera et al., 2014; Krüger et al., 2025; Poza & Viesca, 2020).

In Islamic education, sustainable human resource development is closely linked to moral, spiritual, and ethical foundations. Islamic Educational Management (IEM) emphasizes renewal, innovation, and continuous improvement to ensure institutional relevance and sustainability (Zien et al., 2024; Iverson & Dervan, 2021; Çubukçu, 2012). Human resources in Islamic education (HR-IE) reflect the effective utilization of human potential aligned with spiritual missions and social responsibility, supported by ethical leadership and coherent management systems (Elliott, 2023; Nata, 2012; Jones & Waters, 2008; Sudirman et al., 2025). Sustainability in HR-IE involves cyclical processes of development, evaluation, empowerment, and resource reuse, strengthened by emotional and spiritual intelligence in leadership and organizational relations (Krüger et al., 2025; Erik et al., 2024; Wenner et al., 2009; Haque & Lissillour, 2025).

Despite its normative ideals, Islamic education faces persistent structural, managerial, and epistemological challenges. The dichotomy between religious and secular knowledge undermines institutional coherence, while limited funding, outdated management practices, and weak technological adaptation constrain innovation and research productivity (Eshet, 2005; Arianto, 2006; Bakti & Meidasari, 2014; Lase, 2019; Draghici, 2023). These challenges are often accompanied by declining public trust and leadership effectiveness, prompting calls for reforms that integrate scientific knowledge, Islamic moral values, and creative innovation through progressive educational management (Ezzani et al., 2021; Fahrudin & Anwar, 2022; Dacholfany, 2019; Mansir, 2020).

Previous studies have examined IEM in relation to digital transformation, leadership, and teacher competency development (Baldissera & Delprete, 2020; Gunasekran & Deepika, 2019; Fahrudin et al., 2022; Lloyd's, 2017). Research has also addressed human resource development and leadership in Islamic educational institutions (Karim et al., 2022; Gazali, 2018; Kultsum et al., 2022). However, limited attention has been paid to how Islamic schools sustain human resources over time through integrated strategies that combine moral leadership, digital competence, resource reuse, and long-term adaptability. Addressing this gap, the present study investigates progressive management practices for sustaining human resources in Islamic schools in the Indonesian context.

METHOD

This study is grounded in an integrated conceptual framework that synthesizes Education for Sustainable Development (ESD), Islamic Educational Management (IEM), and Sustainable Human Resource Development (SHRD) within Muhammadiyah's progressive Islamic philosophy (Tacq, 2011; Tamannaefar & Hossain, 2019). ESD provides the global rationale by

positioning education as a driver of sustainability and human capacity building (Boojh & Ishwaran, 2022; Goleman, 1997; Gilet et al., 2013). IEM anchors managerial practices in Islamic ethical principles, including moral leadership, trust (*amanah*), and continuous improvement, positioning ethics as the foundation of institutional governance and sustainability (Nata, 2012; Guthrie, 2014; Alkrdem & Alqahtani, 2016; Karim et al., 2022). SHRD offers an operational lens to examine how human resources are sustained through recruitment, professional development, adaptability, and well-being (Poza & Viesca, 2020; Hart et al., 2020; Carpenter & Munshower, 2020). Together, these perspectives enable an analysis of how Islamic schools sustain human resources while responding to contemporary educational challenges.

Methodologically, the study employed a qualitative field research design with descriptive–interpretive characteristics, complemented by a limited quantitative descriptive component to support frequency-based validation (Umami & Salamah, 2019; Welsh, 2006; Yusoff et al., 2022; Yusuf, 2008; Flick, 2013). Guided by an interpretivist paradigm, data were collected through in-depth interviews, field observations, document analysis, and a brief structured survey to capture both contextual meanings and observable patterns of HR sustainability (Bowen, 2009; Heale et al., 2013; Qu & Dumay, 2011). A multi-site case study was conducted at SMP Islamiyah Weru Cirebon (Islami Junior high school/ IJHS) and SD IT Muhammadiyah Cirebon (Islamic Elementary school Muhammadiyah/ IESM) from September 2023 to March 2024, involving teachers and administrative staff (Karim et al., 2023a; Karim et al., 2020a; Karim et al., 2025a). Data analysis followed the Miles and Huberman model, data reduction, data display, and conclusion drawing, integrated with content analysis (Karim et al., 2023b). Trustworthiness was ensured through triangulation, peer debriefing, audit trails, and rich contextual description in accordance with Lincoln and Guba's criteria (Miles & Huberman, 1984; Nasri et al., 2023).

RESULTS AND DISCUSSION

This section presents and discusses the empirical findings on the sustainability of IEM in maintaining, utilizing, and reusing human resources in Islamic schools. Drawing on integrated quantitative and qualitative data from observations, interviews, surveys, and institutional documents at IJHS and IESM, the results are organized around key sustainability dimensions, management practices, and HR processes identified through thematic analysis and statistical indicators. Figures and tables are used to illustrate how sustainability principles are operationalized in daily school governance, highlighting both shared patterns and institutional variations in digital transformation, values-based leadership, professional development, and human resource renewal under the IEM framework.

Sustainability Principles of IEM

Figure 1 presents a summary of the sustainability dimensions of IEM as identified from expert input, practitioner perspectives, and normative Islamic sources. The table organizes the key analytical categories used in this study: flexibility, deliberation, trust, welfare orientation, and alignment of spiritual–material values along with their defining characteristics and empirical indicators in school practices. This tabulation serves to clarify how the concept of HR sustainability in Islamic education is operationalized within IEM and provides a structured reference for interpreting the subsequent empirical findings from IJHS and IESM.

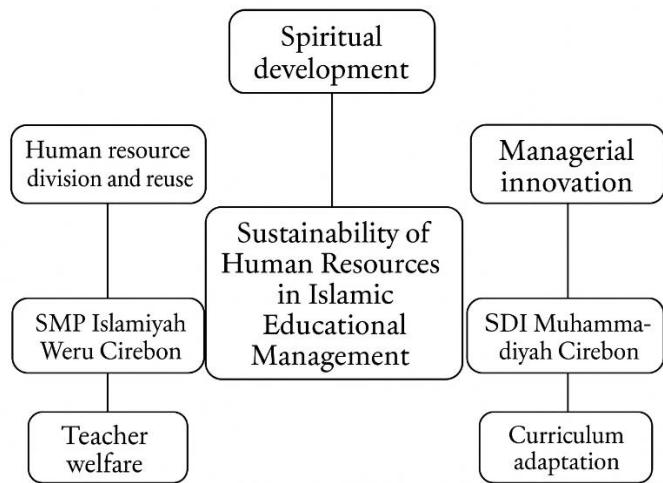


Figure 1. The idea of sustainability of IEM perception

Data from observations, surveys, and institutional documents indicated that sustainability within Islamic Educational Management (IEM) was consistently operationalized through five core dimensions: flexibility, deliberation (*shūrā*), trust, welfare orientation, and the alignment of spiritual and material values. These dimensions were evident across both IJHS and IESM. At IJHS, approximately 78% of teachers participated in regular professional development activities that integrated pedagogical improvement with spiritual formation. Collective human resource (HR) planning and evaluation involved multiple institutional divisions, and survey data showed that 85% of teachers reported satisfaction with HR initiatives. Institutional records further documented structured programs supporting teacher well-being, including mental health services, social engagement activities, and religious mentoring.

At IESM, quantitative findings revealed a 12% increase in teachers' digital competence and a 10% improvement in the teacher welfare index, supported by mentoring systems, curriculum adaptation, and participatory leadership practices. Across both schools, thematic analysis demonstrated comparable sustainability patterns, including flexibility in responding to digital and pedagogical innovation, deliberation through collective decision-making, and trust and welfare reflected in mentoring practices and satisfaction levels. Budgetary records also indicated institutional commitment to HR sustainability, with IJHS allocating approximately 18% of its annual budget to HR development and technological innovation. Collectively, participation rates, welfare indicators, and gains in digital competence provided measurable evidence of sustainable HR practices under the IEM framework.

Interview data further supported these findings by offering insight into how sustainability principles were experienced at the practitioner level. Teachers reported that school leadership encouraged the adoption of new teaching methods while ensuring that instructional practices remained aligned with Islamic values, allowing pedagogical adaptation without compromising spiritual orientation (Personal Communication, November 2023). In relation to deliberation, interview and observational data indicated that HR meetings were conducted through collective planning and evaluation involving all major divisions, including curriculum, student affairs, and treasury. A vice principal explained that initiatives were discussed collaboratively, enabling broad participation in decision-making and ensuring that plans were developed in a balanced and equitable manner (Personal Communication, December 2023).

Sustainability Practices of IEM

Figure 2 illustrates the empirical pattern of sustainability in IEM practices derived from qualitative analysis of observations, interviews, and documents. It shows how IEM practices in IJHS and IESM are centered on digital transformation and linked to teacher capacity strengthening, values-based leadership, and humanistic sustainability, highlighting the integration of digital openness and ethical orientation in both institutions.

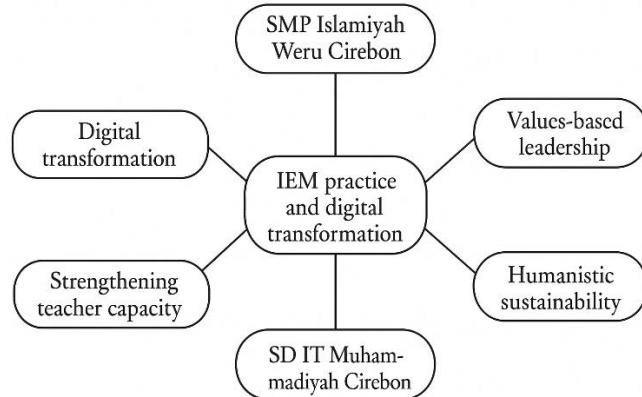


Figure 2. The idea of sustainability of IEM practices

Empirical evidence derived from observations, surveys, and institutional documents indicates that sustainability in Islamic Educational Management (IEM) at IJHS and IESM is consistently articulated through five interrelated dimensions: flexibility, deliberation (*shūrā*), trust, welfare orientation, and the alignment of spiritual and material values. Identified through qualitative coding using ATLAS.ti and summarized in Figure 2, these dimensions demonstrate that sustainability is operationalized not merely as a managerial construct but as an ethical–organizational practice embedded in daily school governance. Across both institutions, sustainability was reflected in openness to digital technology, the use of online networks for communication and learning, and the cultivation of a continuous professional learning culture. At the institutional level, sustainability practices manifested differently at IJHS and IESM.

At IJHS, observational and documentary data showed that leadership orientation and institutional culture strongly supported digital integration through structured internal training programs, routine reflective meetings, and collective evaluation mechanisms. Teachers were encouraged to adapt instructional practices while participating in deliberative decision-making related to curriculum and professional development, indicating a flexible management approach that enabled innovation while maintaining coherence with shared institutional values. At IESM, sustainability was evidenced through measurable improvements in digital readiness and instructional outcomes, with survey data from 32 teachers indicating an average digital readiness index of 82.3% and a 27% increase in student engagement following the adoption of digital learning tools such as Wordwall and Google Forms. Despite challenges related to uneven digital literacy and ethical considerations in technology use, both institutions implemented mentoring systems, targeted workshops, and ethical guidelines to ensure that digital transformation supported long-term sustainability rather than short-term technological adoption.

Interview data further enriched these findings by revealing how sustainability-oriented IEM was experienced and internalized by participants. School leaders reported a strong commitment to integrating digital technologies in ways that remained aligned with Islamic principles, emphasizing that technology adoption was consistently accompanied by moral supervision and spiritual reflection (Personal Communication, December 2023). Teachers

similarly described being encouraged to adopt innovative teaching methods while maintaining spiritual orientation, which enabled pedagogical adaptation without compromising religious values (Personal Communication, January 2024). Participants also explained that deliberation (*shūrā*) functioned as a central mechanism in human resource management, with planning and evaluation conducted collectively through inclusive meetings involving curriculum, student affairs, and administrative divisions to ensure balanced and equitable decision-making (Personal Communication, January 2024). Interviews further indicated awareness of challenges related to digital literacy gaps and ethical risks in technology use; however, respondents noted that these issues were addressed through mentoring, internal workshops, and the reinforcement of Islamic ethical guidelines (Personal communication, January 2024). Collectively, these narratives demonstrate that sustainability in IEM was understood by participants as a continuous process grounded in moral responsibility, collective trust, and adaptive leadership.

Maintaining Human Resource Division

Data from observations, and institutional documents indicate that HR sustainability in IJHS and IESM is maintained through structured, interconnected processes. Qualitative analysis using ATLAS.ti identified five key processes: needs identification and talent mapping, digital capacity building, collaborative deliberation (*musyawarah*), reinforcement of institutional values (integrity, *amanah*, and *ihsan*), and continuous innovation and partnership expansion, as summarized in Figure 3.

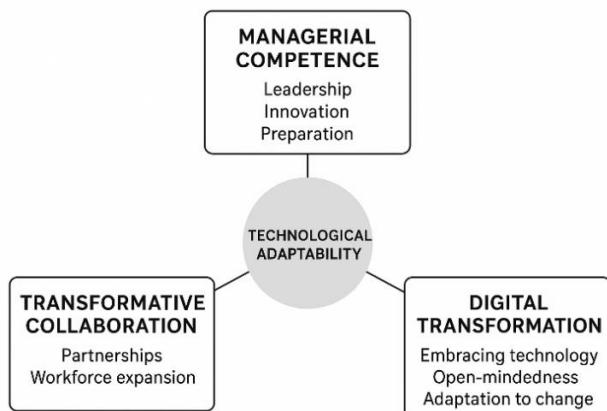


Figure 3. Steps for distributing IE resources

At IJHS, human resource (HR) management is characterized by collective coordination and continuous learning supported by institutional structures. Documentation indicates that HR planning emphasizes shared responsibility in responding to technological and pedagogical change, with 82% of teachers participating in digital literacy training and 75% consistently integrating digital tools into classroom instruction. Observational data further show that routine HR meetings incorporated reflective activities linked to institutional and Islamic values, while institutional records document an increase in teacher-led innovation initiatives during 2023–2024, including internal workshops on digital lesson planning. These findings indicate that HR sustainability at IJHS extends beyond administrative management to include professional learning and value reinforcement.

Interview data provide deeper insight into how these practices were experienced by participants. School leaders explained that digital transformation was deliberately framed as a shared learning process, with leadership emphasizing collective progress and confidence building rather than individual competition (Personal Communication, December 2023). Teachers reported that leadership support was experienced as empowering, as they were

encouraged to experiment with new teaching media and to view unsuccessful attempts as part of professional learning rather than as failure (Personal Communication, November 2023). Participants further described that deliberative practices, including musyawarah and spiritual reflection (tazkiyah), were embedded in routine HR meetings, reinforcing values of amanah, ikhlas, and shared responsibility in daily professional practice (Personal Communication, December 2023).

At IESM, HR sustainability is supported through structured mentoring and systematic professional development mechanisms. Institutional reports from 2022 to 2024 indicate a 20% annual increase in teacher participation in digitally oriented training programs, while observational data show collaborative practices in which senior teachers assisted peers in developing interactive learning materials. Quantitative findings also reveal institutional growth, including an expansion of external partnerships from six to eleven institutions and an average internal satisfaction rate of 80% related to mentoring and digital capacity support. These results demonstrate that HR divisions at IESM function strategically to support capacity building, innovation, and institutional networking.

Interview findings at IESM further clarify the role of mentoring and collaboration in sustaining HR development. The vice principal for human resources explained that new teachers were systematically paired with senior teachers over an extended period to develop digital competence, classroom ethics, and institutional values simultaneously (Personal Communication, February 2024). Teachers described this mentoring culture as collaborative and supportive, particularly in adapting digital pedagogies and redesigning learning materials rather than merely transferring traditional content into digital formats (Personal Communication, February 2024). Across both institutions, interview data revealed a strong orientation toward proactive, innovation-driven HR behavior, with leaders and coordinators viewing external partnerships as a strategic component of sustainability that enabled reciprocal learning and accelerated professional growth (Personal Communication, January 2024). Collectively, these findings indicate that HR sustainability under Islamic Educational Management was internalized as a continuous process of moral accountability, collective learning, and adaptive innovation grounded in Islamic values.

Quantitative data show that both IJHS and IESM demonstrate strong orientations toward sustainability in IEM, though with different emphases. IJHS records higher levels of digital innovation (89%) and performance evaluation (88%), reflecting a focus on technological implementation and data-driven management, while IESM scores higher in the integration of Islamic values (94%) and teacher character development (95%), indicating a stronger emphasis on moral and humanistic development. Both institutions also show high levels of continuous teacher development, participative leadership, and reward systems, although variations in community participation, decision-making involvement, and digital practices highlight differing operational priorities. These patterns are summarized in Table 1.

Table 1. Quantitative Summary of Sustainability Indicators in Two Islamic Schools

No	Indicator of Sustainability Practice	IJHS (%)	IESM (%)
1	Understanding of sustainability concept	84	91
2	Integration of Islamic values in management	76	94
3	Continuous teacher development programs	82	93
4	Implementation of digital innovation	89	78

No	Indicator of Sustainability Practice	IJHS (%)	IESM (%)
5	Community participation and partnership	73	87
6	Participative leadership	85	90
7	Regular performance evaluation	88	80
8	Teacher character development	79	95
9	Reward and motivation system	81	89
10	Teacher involvement in decision-making	72	91

Qualitative findings derived from observations, interviews, and document analysis reinforce the quantitative results by revealing distinct institutional emphases in the implementation of sustainability-oriented IEM. At IJHS, qualitative evidence points to a stronger orientation toward digital innovation, systematic performance monitoring, and technology-supported evaluation practices. Leadership narratives and institutional records highlight ongoing experimentation with digital tools, routine assessment of instructional outcomes, and data-informed decision-making processes that support adaptive management and continuous improvement.

In contrast, qualitative data from IESM emphasize spiritual mentoring, character education, and values-based leadership as central components of sustainability. Observations and interviews illustrate how professional development is intertwined with moral guidance, peer mentoring, and the reinforcement of Islamic values in daily school practices. When considered together, the qualitative and quantitative findings offer complementary perspectives, demonstrating that sustainability in both institutions is achieved through different yet mutually reinforcing pathways that integrate technological advancement with ethical and spiritual development.

Maintenance of Human Resource Use and Reuse

Data on how IEM maintains the use and reuse of human resources (HR-IE) were collected through field observations, semi-structured interviews, and document analysis at IJHS and IESM. The thematic synthesis generated through ATLAS.ti coding is summarized in Figure 4, which visualizes the main patterns of HR utilization and reuse identified across both institutions.

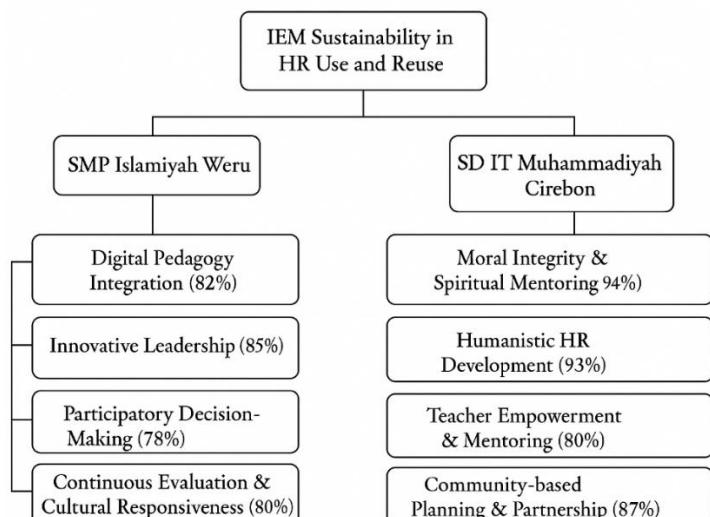


Figure 4. The use of IE resources

Figure 4 illustrates differentiated institutional emphases in HR sustainability under IEM. At IJHS, HR utilization centers on digital pedagogy, innovation-oriented leadership, participatory decision-making, and continuous evaluation. In contrast, IESM emphasizes moral integrity, spiritual mentoring, humanistic HR development, teacher empowerment, and community-based planning and partnerships.

Quantitative data support these patterns. At IJHS, 84% of teachers reported improved digital competence and 78% participated in innovation-focused projects, with observations confirming regular integration of digital tools and participatory evaluation practices. At IESM, 91% of teachers engaged in mentorship-based development and 89% reported satisfaction with participatory leadership, supported by mentoring practices that integrate instructional guidance and values. Across both schools, aggregated indicators show comparable levels of HR sustainability, including 86% adaptability, 83% moral-based leadership, and 80% technological integration, with qualitative evidence confirming HR reuse through mentoring, collaboration, and flexible role assignment.

Reuse of Human Resources under IEM

Data concerning how IEM sustains the reuse of human resources in Islamic education (HR-IE) were gathered through field observations, semi-structured interviews, and analysis of institutional documents at IJHS and IESM, and were further informed by expert insights and normative Islamic references. The qualitative data were systematically analyzed using ATLAS.ti, resulting in the identification of three interrelated and recurring codes—renewal, adaptation, and innovation. These codes capture the core mechanisms through which existing human resources are continuously reactivated, refined, and repositioned to meet evolving educational demands while preserving institutional values. The relationships among these themes are synthesized and visually represented in Figure 5, providing an overview of HR reuse patterns within the IEM framework.

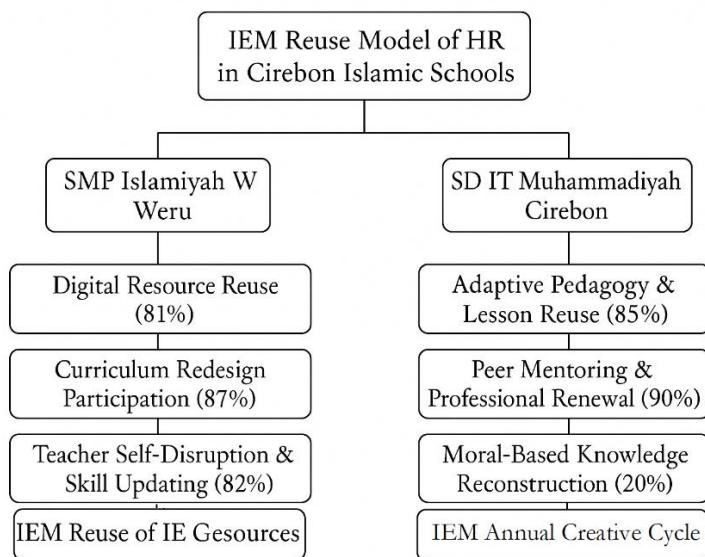


Figure 5. The reuse of IE resources

Quantitative data show that HR reuse is widely practiced in both schools. At IJHS, 81% of teachers reused and modified digital learning materials and 77% participated in curriculum redesign workshops. Observations confirm that existing lesson plans were updated using digital

platforms such as Google Workspace and interactive applications, supported by internal review cycles and mentoring in which senior teachers assisted peers in revising instructional materials.

At IESM, 85% of teachers applied adaptive pedagogy through lesson reuse and digital enhancement, while 88% engaged in peer mentoring related to content renewal. Documentation shows a 20% annual increase in digital lesson reuse and a 25% rise in mentoring activities between 2022 and 2024. Across both schools, participants viewed HR reuse as the renewal of existing practices rather than replacement, with quantitative records indicating an average 32% increase in digital resource management competence and a 29% improvement in curricular adaptability from 2023 to 2024.

Qualitative data from observations, interviews, and document analysis indicate that both IJHS and IESM apply IEM to optimize the use and reuse of human resources in Islamic education. In both institutions, HR practices include teacher training, professional development, adaptation of learning materials, and participatory involvement in institutional programs. IJHS places stronger emphasis on technology integration and curriculum innovation, with teachers participating in structured digital training and curriculum redesign initiatives, while IESM emphasizes mentoring and capacity building through peer collaboration, Islamic contextualization of lesson plans, and the use of digital platforms in instruction.

Quantitative data further highlight these similarities and differences. At IJHS, 84% of teachers reported improved digital competence, 78% participated in innovation-focused projects, and 81% actively reused or modified digital learning materials. At IESM, 85% of teachers applied adaptive digital pedagogy, 88% participated in mentoring-based professional development, and 85% implemented lesson reuse and digital resource enhancement. Documentation from both schools indicates comparable improvements in digital competence and curriculum adaptability, ranging from 29% to 32% between 2023 and 2024, confirming the effectiveness of IEM in supporting sustainable HR practices across differing institutional contexts. Table 2 portrays the comparison between the similarities and differences of Cirebon Islamic Schools

Table 2. Quantitative Comparison of HR-IE of Cirebon Islamic Schools

HR-IE Indicator	IJHS	IESM	Remarks
Digital competence	84% of teachers reported improved digital competence	85% of teachers applied adaptive pedagogy and enhanced digital resources	Both schools successfully improved teachers' digital skills
Participation in innovation / professional development projects	78% of teachers involved in innovation-focused projects; 77% attended curriculum redesign workshops	88% of teachers involved in mentoring; 25% increase in collaborative mentoring initiatives	IESM emphasizes collaboration and peer mentoring more
Mentorship / capacity building	Not specifically mentioned	91% of teachers participated in mentoring-based professional development	IESM has a more structured mentoring system
Satisfaction with participatory leadership	Not specifically mentioned	89% of teachers satisfied with	IESM performs better in

HR-IE Indicator	IJHS	IESM	Remarks
Reuse of digital & learning materials	81% of teachers actively reused/modified digital learning materials	85% of teachers implemented lesson reuse and digital resource enhancement	Both schools apply HR reuse, with IESM slightly higher
Competence & curriculum adaptability improvement (2023–2024)	Average increase of 32% in digital competence, 29% in curriculum adaptability	Similar improvements; specific data roughly the same	Both schools demonstrate significant progress in self-renewal and curriculum adaptation

Overall, Table 2, which shows the quantitative and qualitative data, indicates that both schools demonstrate active HR management practices under IEM, with differing institutional emphases reflected in training structures, mentoring systems, and participatory engagement.

The findings demonstrate that sustainability in IEM is not treated as an abstract normative aspiration but is embedded in everyday managerial and instructional practices. The recurring dimensions of flexibility, deliberation (*shūra*), trust, welfare orientation, and spiritual–material alignment indicate a holistic conception of sustainability that integrates organizational effectiveness with Islamic ethical values. This aligns with scholarship emphasizing that sustainable human resource management requires both adaptive capacity and moral grounding (Karim et al., 2025b; Ngu et al., 2021; Salehzadeh et al., 2015; Phipps, 2012; Alkrdem & Alqahtani, 2016). In Islamic education, sustainability is thus framed not merely in technical or economic terms, but as an ethical commitment rooted in *amanah* and responsibility (Santucci de Oliveira & Sohn, 2025; Karim et al., 2020b; Nata, 2012; Mufid, 2014).

The prominence of collective decision-making observed in both schools reflects the Islamic principle of *shūra*, which strengthens accountability, transparency, and institutional cohesion. Previous studies argue that participatory leadership enhances organizational resilience and commitment, particularly in educational contexts (Kertamukti et al., 2025; Seroussi & Yaffe, 2020; Pepper, 2010; Aikaterini, 2014; Weiner & Holder, 2018). The integration of professional development with spiritual mentoring further illustrates the balance between worldly competence and ethical responsibility, a balance long emphasized in Islamic educational thought (Shahbal et al., 2022; Huda, 2010; Killen, 1998; Tauhidi, 2001). Trust-based and welfare-oriented leadership, evident in teacher satisfaction and well-being initiatives, supports long-term motivation and retention, consistent with findings in leadership and human resource literature (Radhi et al., 2025; Klassen et al., 2019; Blomme et al., 2010; Skinner et al., 2008; Skordoulis & Dawson, 2007; Iverson & Dervan, 2021).

In the context of digital transformation, the findings indicate that sustainability in IEM extends beyond technological adoption to include ethical guidance and institutional reflexivity. Both schools demonstrate openness to digital innovation while maintaining moral supervision and spiritual purpose, supporting arguments that IEM must harmonize adaptability with ethical accountability (Wardiana et al., 2024; Sya'ie, 2016; Spradley, 2007; Soomro et al., 2025; Haris, 2019; Mansir, 2020). This resonates with global discussions on Education for Sustainable Development, which position education as a driver of technological competence while safeguarding human and ethical values (Boojh & Ishwaran, 2022; Sumarna et al., 2022; Kusuma et al., 2017; Wals & Kieft, 2009; Draghici, 2023).

The differentiated emphases between the two schools reveal complementary sustainability pathways. IJHS illustrates value-driven leadership and deliberative processes guiding technological adaptation, while SD IT Muhammadiyah Cirebon demonstrates how sustainability principles become institutionalized through measurable improvements in digital competence and learning engagement. This pattern reflects sustainable IEM models that emphasize agility, creativity, and anticipatory capacity (Suprima et al., 2023; Alfinnas, 2018; Lewis et al., 2017; Hendrickson et al., 2011). Similar patterns have been observed in studies of progressive Islamic and higher education institutions navigating globalization and digitalization while preserving institutional values (Sudirman et al., 2025; Audi et al., 2025; Marques & Ferreira, 2020; Arizona et al., 2025).

The maintenance of human resource divisions and the systematic use and reuse of HR under IEM highlight sustainability as an interconnected managerial, technological, and ethical process. Practices such as talent mapping, digital capacity building, deliberation, value reinforcement, and continuous innovation enable HR divisions to function as adaptive systems rather than administrative units. This supports the view that sustainable HR development depends on continuous learning and Institutional adaptability (Mathis & Jackson, 2005; Poza & Viesca, 2020; Krüger et al., 2025). Within Islamic education, such practices also reflect the principle of *tajdid* (renewal), where tradition is preserved while practices are reinterpreted to address contemporary challenges (Karim et al., 2022; Arianto, 2006; Sumanti et al., 2024).

These practices foster a proactive and resilient organizational culture, aligning with what Magee (2019) describes as a “driver mentality,” characterized by self-directed learning and innovation, as opposed to bureaucratic stagnation (Parhan et al., 2024; Pease et al., 2005; Hendriyaldi, 2019). Mentoring, collaboration, and external partnerships further reinforce institutional learning and renewal, echoing transformation models that emphasize continuous reshaping, collaboration, and ethical accountability (Purnomo et al., 2022; Signal, 2016; Uno & Lamtego, 2010; Haryadi & Ulumuddin, 2016). Similar findings are reported in studies on leadership, organizational learning, and sustainable transformation in educational institutions (Xie, 2019; Renzi & Klobas, 2008; Daniel & Paul, 2019).

The synthesis of quantitative and qualitative findings confirms that sustainability in IEM does not follow a single uniform model but emerges through complementary institutional orientations. IJHS reflects a performance-oriented approach emphasizing technological innovation and evaluation, whereas IESM represents a value-oriented approach prioritizing mentoring, collaboration, and character development. This supports comparative studies showing that diverse institutional strategies can achieve sustainable outcomes when aligned with shared ethical foundations (Kultsum et al., 2022; Rinto et al., 2020; Zien et al., 2024).

Overall, the findings reinforce the view that sustainability in Islamic education is multidimensional, integrating managerial efficiency, technological readiness, moral formation, and participatory leadership. By aligning digital competence with ethical integrity, IEM enables Islamic educational institutions to remain adaptive, resilient, and spiritually grounded in response to global and local educational challenges (Rodrigues, 2025; Burhanuddin & Sunarni, 2017; Hidayat & Syam, 2014; Gwilliam, 2021). This study therefore contributes to the growing body of literature positioning IEM as a viable framework for sustainable human resource development in contemporary education systems.

CONCLUSION

This study concludes that IEM provides a coherent and sustainable framework for strengthening human resource development in Islamic educational institutions by integrating ethical values, strategic planning, and adaptive practices. The findings show that sustainability in IEM is enacted through flexibility, deliberation, trust, welfare orientation, and the alignment

of spiritual and material dimensions, rather than treated as an abstract ideal. The comparative evidence from IJHS and IESM demonstrates that different institutional emphases—whether innovation- and performance-oriented or mentoring- and value-oriented—can lead to sustainable outcomes when grounded in Islamic principles. By embedding digital competence, professional development, and human resource reuse within a moral and participatory management culture, IEM enables Islamic schools to respond effectively to contemporary educational challenges while maintaining their spiritual mission. These results affirm that sustainable Islamic education depends on the harmonious integration of innovation, ethical leadership, and continuous human resource renewal.

BIBLIOGRAPHY

Aikaterini, G. (2014). *Personnel Management vs Human Resource Management: Evidence from Hellas*.

Alam, K. U. A., & Muzahid, M. A. U. (2006). Informal Islamic education and its role in human resource development in society: A theoretical evaluation. *IIUC Studies*, 3, 83–92. <https://doi.org/10.3329/iiucs.v3i0.2667>.

Alkrudem, M. S., & Alqahtani, A. S. (2016). Educational management in the light of Islamic standards. *Journal of Education, Society and Behavioural Science*, 12, 1-9. <https://doi.org/10.9734/BJESBS/2016/22671Al-Qur'an>.

Andolina, R. (2012). The values of water: Development cultures and indigenous cultures in highland Ecuador. *Latin American Research Review*, 47(2), 3–26. <https://doi.org/10.1353/lar.2012.0015>.

Arianto, M. S. (2006). Islamic knowledge classification scheme in islamic countries' libraries. *Al-Jami'ah: Journal of Islamic Studies*, 44(2), 295-323. <https://doi.org/10.14421/ajis.2006.442.295-323>.

Arizona, K., Rokhmat, J., Ramdani, A., Gunawan, G., & Sukarso, A. (2025). Integrating Islamic Values and Local Wisdom into Science Education: Enhancing Character Development in Higher Education. *Ulumuna*, 29(1), 398-428. <https://doi.org/10.20414/ujis.v29i1.1308>.

Audi, M., Ahmad, K., Poulin, M., & Ali, A. (2025). From globalization to innovation: Investigating the impact of R&D, internet penetration, and economic factors on digitalization in BRICS. *Research in Globalization*, 11, 100314. <https://doi.org/10.1016/j.resglo.2025.100314>.

Bakti, A. F., & Meidasari, V. E. (2014). Trendsetter komunikasi di era digital: tantangan dan peluang pendidikan komunikasi dan penyiaran Islam. *Jurnal Komunikasi Islam*, 4(1), 20-44. Retrieved from <https://jurnalfdk.uinsa.ac.id/index.php/jki/article/view/35>.

Baldissera, P., & Delprete, C. (2020). From PBL to innovation: a decennial case-study from an HPV student team. *Journal of Engineering, Design and Technology*, 18(4), 773-786. <https://doi.org/10.1108/JEDT-01-2019-0005>.

Bassey, S. A., Nwoye, L., & Okpe, T. A. (2018). Happiness, limitations religiosity. *Journal of Research and Humanities*, 1(1), 33–39. <https://journal.alhikam.net/index.php/jrm/article/view/5>

Blomme, R. J., Van Rheede, A., & Tromp, D. M. (2010). Work-family conflict as a cause for turnover intentions in the hospitality industry. *Tourism and hospitality research*, 10(4), 269-285. <https://doi.org/10.1057/thr.2010.15>.

Boojh, R., & Ishwaran, N. (2022). *Sustainability Education for a Better World*. Newcastle: Cambridge Scholars Publishing.

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*. <https://doi.org/10.3316/QRJ0902027>.

Braine, R. D. E. (2007). Leadership, character and its development: A qualitative exploration. *SA Journal of Human Resource Management*, 5(1), 1–10. <https://doi.org/10.4102/sajhrm.v5i1.102>.

Budiyanti, N., Parhan, M., & Islamy, M. R. F. (2022). The formulation of learning steps through the Al-Islah wa At-Tagyr method in realizing individual piety. *Religio Education*, 2(2), 133–146. <https://doi.org/10.17509/re.v2i2.51002>.

Carpenter, D., & Munshower, P. (2020). Broadening borders to build better schools: Virtual professional learning communities. *International Journal of Educational Management*, 34(2), 296–314. <https://doi.org/10.1108/IJEM-09-2018-0296>.

Casta, C., Rohidi, T. R., Triyanto, T., & Karim, A. (2021). Production of aesthetic tastes and creativity education of Indonesian glass painting artists. *Harmonia: Journal of Arts Research and Education*, 21(2), 266–277. <https://doi.org/10.15294/harmonia.v21i2.30348>.

Çer, E., & Şahin, E. (2016). Improving reading comprehension skills with children's books through metacognitive strategy: The Turkish context. *Journal of Education and Training Studies*, 4(9), 109–119. <https://doi.org/10.11114/jets.v4i9.1566>.

Cera, R., Mancini, M., & Antonietti, A. (2013). Relationships between metacognition, self-efficacy and self-regulation in learning. *Journal of Educational, Cultural and Psychological Studies (ECPS Journal)*, 4(7), 115–141. <https://doi.org/10.7358/ecps-2013-007-cera>.

Choi, M. Y. (2019). Sub-Education policy review report: Education for sustainable development. UNESCO Publising.

Çubukçu, Z. (2012). *The effect of hidden curriculum on character education process of primary school students*. *Educational Sciences: Theory & Practice*, 12(2), 1526–1534. <https://eric.ed.gov/?id=EJ987859>

Donald, J. D. (2008). *Human Resource Management in Education Manajemen Sumber Daya Manusia Dalam Pendidikan*. Yogyakarta: Q-Media.

Draghici, A. (2023). Education for Sustainable Development. *Matec Web of Conferences*, 4, 93–102. <https://doi.org/10.14361/9783839463475-011>.

Elliott, E. C. (2023). *Why word problems are hard for high school math students: Problem formulation and disciplinary literacy* (Doctoral dissertation). Columbia: University of South Carolina.

Erik, E., Djalal, F., Hapidin, H., & Karim, A. (2024). Developoing leadership behavior through natural school. *Journal of Law and Sustainable Development*, 12(1), 1–20. <https://doi.org/https://doi.org/10.55908/sdgs.v12i1.2758.desenvolvendo>.

Eshet, Y. (2005). Thinking skills in the digital era. In *Encyclopedia of distance learning* (pp. 1840–1845). Pennsylvania: IGI Global.

Ezzani, M. D., Brooks, M. C., Yang, L., & Bloom, A. (2023). Islamic school leadership and social justice: an international review of the literature. *International Journal of Leadership in Education*, 26(5), 745–777. <https://doi.org/10.1080/13603124.2021.2009037>.

Fahrudin, F., & Anwar, S. (2022). Lecturers' perceptions about learning tolerance in Islamic religious lectures at Indonesia University of Education. *Religio Education*, 2(1), 55–70. <https://doi.org/10.17509/re.v2i1.46770>

Fahrudin, F., Islamy, M. R. F., & Parhan, M. (2022). Moderation of Tasawwuf Ali Jum'ah Egyptian scholar: The middle way of conflict between reformers and traditionalists and its relevance to Sufi culture in Indonesia. *Res Militaris*, 12(2), 1846–1861. <https://resmilitaris.net/menu-script/index.php/resmilitaris/article/view/321/197>.

Flick, U. (2013). *Qualitative Data Analysis* (the SAGE h). Thousand Oaks: SAGE Publication Ltd.

Gazali, E. (2018). Pesantren di antara generasi alfa dan tantangan dunia pendidikan era revolusi industri 4.0. *OASIS: Jurnal Ilmiah Kajian Islam*, 2(2), 94–109. <https://doi.org/10.24235/oasis.v2i2.2893>

Gilet, A. L., Mella, N., Studer, J., Grühn, D., & Labouvie-Vief, G. (2013). Assessing dispositional empathy in adults. *Canadian Journal of Behavioural Science*, 45(1), 42–48. <https://doi.org/10.1037/a0030425>

Gokool-Ramdoo, S., & Rumjaun, A. B. (2017). Education for sustainable development: Connecting the dots for sustainability. *Journal of Learning for Development*, 4(1), 72–89. <https://doi.org/10.56059/jl4d.v4i1.170>.

Goleman, D. (1997). *Emotional intelligence: Why it can matter more than IQ*. London: Bloomsbury.

Graves, L. M., Sarkis, J., & Gold, N. (2019). Employee proenvironmental behavior in Russia: The roles of top management commitment, managerial leadership, and employee motives. *Resources, Conservation and Recycling*, 140, 54-64. <https://doi.org/10.1016/j.resconrec.2018.09.007>.

Gunasekran, K., and B. Deepika. (2019). Personality Traits and Teaching Competency of Teachers. *Global Journal for Research Analysis* 8(2), 8–10. <https://www.doi.org/10.36106/gjra>.

Guthrie, G. (2014). Qualitative data. In *Basic research methods: An entry to social science research*. SAGE. <https://doi.org/10.4135/9788132105961.n15>

Gwilliam, J. (2021). *Environmental Sustainability of Learning and Teaching: Thematic Peer Group Report*. Brussels: European University Association. www.eua.eu

Haque, M. J., & Lissillour, R. (2025). Buffering the blaze: Emotional intelligence as a moderator between abusive supervision and employees' mental well-being. *Journal of Management Development*, 44(4), 499–513. <https://doi.org/10.1108/JMD-12-2024-0421>

Harjatanaya, T. Y., Ferary, D., & Sarhindi, I. (2025). Education for sustainable development using participatory methodologies in Indonesian higher education: The case of Satya Terra Bhinneka University. *International Journal of Sustainability in Higher Education*, 26(6), 1348–1368. <https://doi.org/10.1108/IJSHE-09-2024-0657>

Hart, P., Oliveira, G., & Pike, M. (2020). Teaching virtues through literature. *Journal of Beliefs & Values*, 41(4), 474–488. <https://doi.org/10.1080/13617672.2019.1689544>

Heale, R., & Forbes, D. (2013). Understanding triangulation in research. *Evidence-Based Nursing*, 16(4), 98–99. <https://doi.org/10.1136/eb-2013-101494>.

Hendrickson, D. J., Lindberg, C., Connelly, S., & Roseland, M. (2011). Pushing the envelope: Market mechanisms for sustainable community development. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 4(2), 153-173. <https://doi.org/10.1080/17549175.2011.596263>.

Hendriyaldi, H. (2019). *Industrial revolution 4.0: Challenges and opportunities of human resources management to improve productivity Grand Hotel Jambi*. J-MAS (Jurnal Manajemen dan Sains), 4(2), 240. <https://doi.org/10.33087/jmas.v4i2.104>.

Hu, K., & Wu, H. (2026). Cultural asset preservation, socially responsible investment, and corporate sustainable development in urban renewal. *Finance Research Letters*, 87, 109091. <https://doi.org/10.1016/j.frl.2025.109091>.

Huda, Q. U. (2010). Peace education in Muslim societies and in Islamic institutions. *Die Friedens-Warte*, 85(3), 69-84. Retrieved from <https://www.jstor.org/stable/26524858>.

Iverson, B. L., & Dervan, P. B. (2021). *Education for Sustainable Development as Key Element of Quality Education in the Institutions of Higher Education*. Caracas: Universidad Simon Bolivar.

Karim, A., Agus, A., Nurnilasari, N., et al. (2023a). A study on managerial leadership in education: A systematic literature review. *Heliyon*, 9(6), 1–20. <https://doi.org/10.1016/j.heliyon.2023.e16834>

Karim, A., Bakhtiar, A., Sahrodi, J., & Chang, P. H. (2025). Spiritual leadership behaviors in religious workplace: the case of pesantren. *International Journal of Leadership in Education*, 28(6), 1293-1321. <https://doi.org/10.1080/13603124.2022.2076285>.

Karim, A., Faiz, A., Parhan, M., et al. (2020a). Managerial leadership in green living pharmacy activities. *Journal of Critical Reviews*, 7(13), 714–719. <https://doi.org/10.31838/jcr.07.13.125>.

Karim, A., Fathurohman, O., Sulaiman, et al. (2025a). Islamic spiritual leadership of kyai. *Social Sciences & Humanities Open*, 12, 101817. <https://doi.org/10.1016/j.ssaho.2025.101817>.

Karim, A., Fathurrohman, O., Saripudin, W., et al. (2023b). Altruistic works, religion, and corruption. *Cogent Social Sciences*, 9(1), 1–25. <https://doi.org/10.1080/23311886.2023.2238968>.

Karim, A., Fathurrohman, O., Sulaiman, S., Marliani, L., Muhammadun, M., & Firmansyah, B. (2025). How do principals act as leaders and managers in boarding and public school in Indonesia? *Cogent Education*, 12(1), 1–26. <https://doi.org/10.1080/2331186X.2024.2445354>.

Karim, A., Purnomo, H., Fikriyah, F., & Kardiyati, E. N. (2020b). A charismatic relationship. *Journal of Indonesian Economy and Business*, 35(2), 129–143. <https://doi.org/10.22146/jieb.54705>

Kertamukti, R., Anderson, S. M., & Asy'ari, A. Z. (2025). Empowering Rural Women through Transformative Leadership: Insights from KWT Pawon Gendis. *Jurnal Ilmiah Peuradeun*, 13(1), 647–668. <https://doi.org/10.26811/peuradeun.v13i1.1244>.

Khan, M. M., Mubarik, M. S., Islam, T., Rehman, A., Ahmed, S. S., Khan, E., & Sohail, F. (2022). How servant leadership triggers innovative work behavior: Exploring the sequential mediating role of psychological empowerment and job crafting. *European Journal of Innovation Management*, 25(4), 1037–1055. <https://doi.org/10.1108/EJIM-09-2020-0367>.

Khan, Z., Ali, S., & Zhu, X. (2025). Environmental sustainability via sustainable development: The role of green innovation, clean energy, and financial inclusion. *Journal of Environmental Management*, 393, 127175. <https://doi.org/10.1016/j.jenvman.2025.127175>.

Killen, R. (1998). *Effective teaching strategies: Lessons from research and practice* (2nd ed.). Kuala Lumpur: Social Science Press.

Klassen, L., Eifler, E. F., Hufer, A., & Riemann, R. (2019). Why do people differ in their achievement motivation? A nuclear twin family study. *Primenjena Psihologija*, 11(4), 433–450. <https://doi.org/10.19090/pp.2018.4.433-450>.

Krüger, C., Pennabel, A. F., Borges de Oliveira, M. S., Guimarães, F. H. C. B., & Caldana, A. C. F. (2025). Model for fostering competencies for sustainable development in HEI: Human resources as drivers of the process. *The International Journal of Management Education*, 23(3), 101238. <https://doi.org/10.1016/j.ijme.2025.101238>.

Kultsum, U., Parinduri, M. A., & Karim, A. (2022). Comparative studies between public and private Islamic schools in the era of globalization. *International Journal of Evaluation and Research in Education (IJERE)*, 11(1), 421–430. <https://doi.org/10.11591/ijere.v11i1.22182>.

Kusuma, M. D., Rosidin, U., & Suyatna, A. (2017). The development of higher order thinking skill (HOTS) instrument assessment in physics study. *IQSR Journal of Research & Method in Education*, 7(1), 26–32. <https://doi.org/10.9790/7388-0701052632>.

Lase, D. (2019). Pendidikan di era revolusi industri 4.0. *SUNDERMANN: Jurnal Ilmiah Teologi, Pendidikan, Sains, Humaniora dan Kebudayaan*, 12(2), 28–43. <https://doi.org/10.36408/sundermann.v12i2.1023>.

Liwi, N. W. N., Antara, P. A., & Ujianti, P. R. (2017). Pengaruh model pembelajaran matematika realistik terhadap kemampuan mengenal konsep bilangan pada anak kelompok A taman kanak-kanak Gugus V Kecamatan Buleleng. *E-Jurnal Pendidikan*

Anak Usia Dini Universitas Pendidikan Ganesha, 5(1), 116–126.
<https://doi.org/10.23887/paud.v5i1.11403>.

Lloyd's, List. (2017). Digital Disruption-Managing the Transition to Smart Shipping. *Lloyd's List Business Briefing*, (2), 01-13. <https://maritimeintelligence.informa.com/resources/key-topics/digitaldisruption>. Diakses 15 Oktober 2018.

Maganini, M., Herndon, K. E., Loran, T., Griffin, R. E., Anderson, E. R., van der Meer, F. D., Darvishzadeh, R., Paris, C., Rietbroek, R., Huesca, M., & Schlund, M. (2025). Leveraging educational partnerships to integrate education for sustainable development into university geoscience curriculum. *International Journal of Sustainability in Higher Education*, 26(9), 131–148. <https://doi.org/10.1108/IJSHE-07-2024-0445>.

Magee, J. (2015). *The managerial leadership bible: Learning the strategic, organizational, and tactical skills everyone needs today*. New Jersey: FT Press.

Mansir, F. (2020). Transforming Islamic Boarding School as Indonesian of Islamic Educational Institution in the Digital Era. *International of Psychosocial and Rehabilitation*, 24(8). 8777–88. <https://doi.org/10.37200/IJPR/V24I8/PR280874>.

Marques, I. C. P., & Ferreira, J. J. M. (2020). Digital transformation in the area of health: Systematic review of 45 years of evolution. *Health and Technology*, 10(3), 575–586. <https://doi.org/10.1007/s12553-019-00402-8>.

Mathis, R. L., & Jackson, J. H. (2002). *Human resource management: Essential perspectives*. Boston: Cengage Learning

Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis: A sourcebook of new methods*. Thousand Oaks: Sage Publications.

Msomphora, M. R. (2025). Bridging borders: Global insights and challenges in internationalising higher education using a decade-long case study. *International Journal of Educational Research Open*, 8, 100402. <https://doi.org/10.1016/j.ijedro.2024.100402>

Mufid, F. (2014). Islamic Sciences Integration. *QIJIS: Qudus International Journal of Islamic Studies*. 2(2): 144–60. <https://doi.org/10.21043/qijis.v2i2.1565>.

Nasri, U., Walad, M., & Ansori, M. Z. (2023). Islamic educational values in the verses of the song “Mars Nahdlatul Wathan” by TGKH. Muhammad Zainuddin Abdul Madjid from Lombok. *International Journal of Sociology of Religion*, 1(2), 128–141. <https://doi.org/10.70687/ijsr.v1i1.11>.

Nata, A. (2012). *Akhlik tasawuf dan karakter mulia*. Depok: RajaGrafindo Persada.

Nissen, S. O. (2025). Forces of responsible leadership: A multiple case study on enhancing sustainable inner development through management education. *The International Journal of Management Education*, 23(3), 101224. <https://doi.org/10.1016/j.ijme.2025.101224>

Parhan, M., Syahidin, Somad, M. A., Abdulah, M., & Nugraha, R. H. (2024). Developing a contextual learning model in islamic education to improve applicable knowledge and foster knowledge-based virtues. *Jurnal Pendidikan Islam*, 10(1), 75–86. <https://doi.org/10.15575/jpi.v10i1.35205>.

Pease, N. J., Edwards, A., & Moss, L. J. (2005). Effectiveness of whole brain radiotherapy in the treatment of brain metastases: A systematic review. *Palliative Medicine*, 19(4), 288–299. <https://doi.org/10.1191/0269216305pm1017oa>.

Pepper, K. (2010). Effective principals skillfully balance leadership styles to facilitate student success: A focus for the reauthorization of ESEA. *Planning and changing*, 41, 42-56. Retrieved from <https://eric.ed.gov/?id=EJ952358>

Phipps, K. A. (2012). Spirituality and strategic leadership: The influence of spiritual beliefs on strategic decision making. *Journal of business ethics*, 106(2), 177-189. <https://doi.org/10.1007/s10551-011-0988-5>.

Poza, L. E., & Viesca, K. M. (2020). Testing and ideology: Policy debates about literacy assessments for Colorado's bilingual students. *Journal of Education Policy*, 35(4), 556-581. <https://doi.org/https://doi.org/10.1080/02680939.2018.1511831>.

Purnomo, H., Karim, A., Mansir, F., & Valero-Matas, J. A. (2022). Covid-19 Pandemic: Project-Based Learning as Interprofessional Learning Model to Improve Student With Special Needs' Self Efficacy. *Sociología y Tecnociencia*, 12(2), 284-306. <https://doi.org/https://doi.org/10.24197/st.2.2022.284-306>.

Qu, S. Q., & Dumay, J. (2011). *The qualitative research interview*. In Qualitative Research in Accounting and Management. <https://doi.org/10.1108/11766091111162070>.

Radhi, F., Yunus, M., Amiruddin, A., Ruslan, R., Kesuma, T. M., & Alexandri, M. B. (2025). The Impact of Leadership, Motivation, and Remuneration on Employee and Organizational Performance at PTN-BH in Sumatra. *Jurnal Ilmiah Peuradeun*, 13(1), 463-492. <https://doi.org/10.26811/peuradeun.v13i1.1775>

Renzi, S., & Klobas, J. E. (2008). *Using the theory of planned behavior with qualitative research* (Dondena Working Paper No. 012). Carlo F. Dondena Centre for Research on Social Dynamics, Università Bocconi. <https://hdl.handle.net/11565/1713791>.

Rinto, Fikriyah, Iman, B. N., Hanikah, Munajim, A., Sati, Setiana, D., Darmini, M., & Karim, A. (2020). Scientific process skills learning, biotechnology materials, and character building. *International Journal of Pharmaceutical Research*, 12(4), 2044-2051. <https://doi.org/https://doi.org/10.31838/ijpr/2020.12.04.314>

Rodrigues, A. (2025). Environmental education strategies and sustainable development in HEIs in the food area: Raising awareness through participatory actions in co-design. *International Journal of Sustainability in Higher Education*, 26(6), 1252-1266. <https://doi.org/10.1108/IJSHE-06-2024-0386>

Salehzadeh, R., Khazaei Pool, J., Kia Lashaki, J., Dolati, H., & Balouei Jamkhaneh, H. (2015). Studying the effect of spiritual leadership on organizational performance: An empirical study in hotel industry. *International Journal of Culture, Tourism and Hospitality Research*. <https://doi.org/10.1108/ijcthr-03-2015-0012>.

Santucci de Oliveira, B., & Sohn, A. P. L. (2025). Emotional intelligence in tourism and hospitality: A bibliometric analysis. *International Journal of Hospitality Management*, 128, 104141. <https://doi.org/10.1016/j.ijhm.2025.104141>.

Scott, W. (2002). Sustainability and Learning: What Role for the Curriculum? Council for Environmental Education.

Seroussi, D. E., & Yaffe, Y. (2020). Links between Israeli college students' self-regulated learning and their recollections of their parents' parenting styles. *SAGE Open*, 10(1). <https://doi.org/10.1177/2158244019899096>.

Shahbal, S., Al-Kubaisi, H., Khan, A., Ahmad, Z., & Usman, M. (2022). Leadership styles, role, and opportunities: Reflection in educational management system. *Journal of Pharmaceutical Negative Results*, 13(S9), 1452-1460. <https://doi.org/10.47750/pnr.2022.13.S09.176>.

Singhai, R., Tripathy, P. K., & Maski, K. (2023). *Education for Sustainable Development: Issues, Concerns, and Challenges*. National Council for Educational Research and Training. <https://doi.org/10.14361/9783839463475-011>.

Skinner, E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic? *Journal of Educational Psychology*, 100(4), 765-781. <https://doi.org/10.1037/a0012840>.

Skordoulis, R., & Dawson, P. (2007). Reflective decisions: The use of Socratic dialogue in managing organizational change. *Management Decision*, 45(6), 991–1007. <https://doi.org/10.1108/00251740710762044>.

Soomro, R. B. K., Soomro, A. B., & Sahito, Z. (2025). Human rights education and Sustainable Development Goal 4: Highlighting intersections and synergies. *International Journal of Educational Development*, 118, 103399. <https://doi.org/10.1016/j.ijedudev.2025.103399>

Spradley, J. P. (2007). *Metode etnografi*. Yogyakarta: Tiara Wacana.

Sudirman, S., Ramadhita, R., Bachri, S., & Whindari, Y. (2025). The transformation of state Islamic higher education institutions into world-class universities: From globalisation to institutional values. *Social Sciences & Humanities Open*, 12, 101705. <https://doi.org/10.1016/j.ssaho.2025.101705>.

Sumanti, S. T., Nunzairina, N., & Salminawati, S. (2024). The Evolution of Islamic Educational Institutions in North Sumatra Indonesia. *Nazbruna: Jurnal Pendidikan Islam*, 7(1), 1-19. <https://doi.org/10.31538/nzh.v7i1.4419>.

Sumarna, E., Parhan, M., Abdurrahman, M., Jenuri, J., Subakti, G. E., & Zubir, Z. (2022). People with special needs in religious literacy. *Revista Iberoamericana de Psicología del Ejercicio y el Deporte*, 17(1), 13–17. <https://doi.org/10.5093/ripede2022a>.

Suprima, P., Parhan, M., Nurjanah, R. S., Azzara, M., Solehudin, A. I. N., & Chrismawan, M. R. (2023). Comparison of time in the world and the afterday in the quantum revolution to the rules of Islamic science. *Millah: Journal of Religious Studies*, 22(2), 259–284. <https://doi.org/10.20885/millah.vol22.iss2.art5>.

Tacq, J. (2011). Causality in qualitative and quantitative research. *Quality & Quantity*, 45(2), 263–291. <https://doi.org/10.1007/s11135-009-9293-0>.

Tamannaeifar, M., & Hossain, P. M. (2019). Psychological effects of spiritual intelligence and creativity on happiness. *International Journal of Medical Investigation*, 8(2), 91–107. <https://doi.org/10.52547/ijmi.8.2.91>.

Tauhidi, D. (2001). *The tarbiyah project: Towards a renewed vision of Islamic education*. Jakarta: The Tarbiya Project.

Umami, L., & Salamah, F. C. (2019, November 8). Human capital dan keunggulan bersaing di era revolusi industri 4.0. *Kompasiana*. <https://www.kompasiana.com/lililiza0966/5d11c93a097f361a8d43ad12/human-capital-dan-keunggulan-bersaing-di-era-revolusi-industri-4-0?page=all>.

Wals, A. E. J., & Kieft, G. (2009). Education for sustainable development (P.-E. Tröften & M. Westin (eds.)). Edita 2010. <https://doi.org/10.3200/ENVT.51.2.08-10>.

Wardiana, W., Fadli, A., & Masnun, M. (2024). Contribution of Women in the Education Management of Islamic Boarding School. *Ulumuna*, 28(1), 398-423. <https://doi.org/10.20414/ujis.v28i1.805>.

Weiner, J. M., & Holder, S. (2019). Why lead?: Using narrative to explore the motivations of those aspiring to be principals in high needs schools. *International Journal of Leadership in Education*. <https://doi.org/10.1080/13603124.2018.1492024>.

Welsh, J. A. (2006). *An exploration of project-based learning in two California charter schools* (Unpublished doctoral dissertation). California: University of Southern California.

Wenner, J. M., Baer, E. M., Manduca, C. A., Macdonald, R. H., Patterson, S., & Savina, M. (2009). The case for infusing quantitative literacy into introductory geoscience courses. *Numeracy*, 2(1), 4. <https://doi.org/10.5038/1936-4660.2.1.4>.

Werther, W. B. & Davis, K. (1996). *Human Resources and Personal Management*, Fifth Edition. New York: McGraw-Hill.

Wiley, D. A. (2006). *On the sustainability of open educational resource initiatives in higher education*. OECD Centre for Educational Research and Innovation.

Xie, L. (2019). Leadership and organizational learning culture: a systematic literature review. *European journal of training and development*, 43(1/2), 76-104. <https://doi.org/10.1108/EJTD-06-2018-0056>.

Yusoff, M. Z. M., Safrilsyah, S., Haji Othman, M. K., Fajri, I., Yusuf, S. M., Ibrahim, I., & Wan Mohd Zain, W. H. W. (2022). The effect of moral reasoning and values as the mediator towards student's prosocial behaviour. *International Journal of Adolescence and Youth*, 27(1), 32–44. <https://doi.org/10.1080/02673843.2021.2021959>.

Yusuf, M. (2019). Strategi manajemen perubahan pola pikir SDM guna menghadapi persaingan era industri 4.0 pada industri manufaktur. In *Seminar Nasional dan The 6th Call for Syariah Paper Universitas Muhammadiyah Surakarta* (Vol. 7, pp. 648–664). Universitas Muhammadiyah Surakarta. Retrieved from <http://hdl.handle.net/11617/11415>

Zien, N. H. R., Abu Bakar, N. A., & Saad, R. (2024). Unveiling insights: A dataset analysis of Islamic quality management systems in educational institutions toward SDG-aligned education. *Data in Brief*, 54, 110343. <https://doi.org/10.1016/j.dib.2024.110343>.