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Sustainable Value-Based Internationalization in Pesantren-Based Secondary Education

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ABSTRACT

Educational internationalization in pesantren-based secondary schools requires institutional strategies that address global educational demands while maintaining Islamic identity, organizational culture, and educational values. This study examines strategies for educational internationalization, quality-assurance mechanisms, pesantren-value integration, and sustainability practices at SMA Trensains Tebuireng and SMA Darul Ulum 2 Jombang, East Java, Indonesia. The study employed a qualitative multiple-case design, with the institutional process of planning, implementing, monitoring, and sustaining internationalization as the primary unit of analysis. The findings demonstrate that the two institutions develop internationalization through distinctive but complementary pathways. SMA Trensains Tebuireng emphasizes integrating Qur'anic epistemology, scientific inquiry, and international curricula within its Semesta Curriculum. In contrast, SMA Darul Ulum 2 emphasizes international curricula, bilingual learning, international certification, scientific programs, and ISO 9001-based quality management. Four interconnected dimensions emerged from the comparative analysis: internationalization orientation, quality-system institutionalization, pesantren-value integration, and sustainability capacity. These dimensions provide the conceptual foundation for the Sustainable Value-Based Internationalization (SVI) Model, which positions global competence, Islamic identity, institutional quality, teacher capacity, international networking, and continuous improvement as interconnected components of sustainable internationalization in pesantren-based education.

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INTRODUCTION

Islamic boarding schools (pesantren) have historically functioned as important institutions for transmitting Islamic knowledge, moral values, social traditions, and educational identity within Indonesian Muslim communities across generations. The ongoing development of pesantren demonstrates that these institutions are not static educational structures but organizations capable of selectively responding to changing social, technological, and educational environments while maintaining their religious foundations. Contemporary educational globalization has created additional demands for pesantren to strengthen institutional governance, curriculum quality, scientific competence, foreign-language proficiency, technological literacy, and students' capacity to participate in international academic environments. Recent scholarship on pesantren transformation indicates that educational modernization increasingly involves the negotiation between contemporary institutional requirements and the preservation of Islamic identity.[1] This transformation places pesantren within a broader educational landscape in which global engagement and religious identity must be managed simultaneously rather than treated as mutually exclusive orientations.

Educational internationalization has consequently become an increasingly relevant strategy for institutions seeking to prepare students for academic, professional, and social environments characterized by transnational interaction, technological development, and intercultural communication. Internationalization in education extends beyond foreign-language instruction or participation in international competitions; it encompasses institutional policies, curriculum development, pedagogical practices, organizational networks, and the development of competencies required for meaningful engagement with global contexts.[2] Within secondary education, this orientation is closely associated with the development of global competencies, collaboration, communication, critical thinking, intercultural understanding, and the capacity to respond responsibly to complex global challenges.[3] Such developments are particularly significant for pesantren because internationalization must operate within an educational environment in which academic excellence remains connected to religious formation, ethical conduct, discipline, and spiritual development.

The development of contemporary pesantren management demonstrates that modernization can occur through selective institutional adaptation without necessarily eliminating traditional educational values and organizational identities. Research on Trensains demonstrates a significant shift in the orientation of Islamic education through the integration of Islamic learning with scientific knowledge, indicating that pesantren can reinterpret educational objectives in response to contemporary intellectual and societal

[1] Azaki Khoirudin et al., 'Trensains: The New Pesantren and Shifting Orientation of Islamic Education in Indonesia', *Jurnal Pendidikan Islam* 11, no. 2 (2022): 121, https://doi.org/10.14421/jpi.2022.112.121-135.

[2] Jane Knight, 'Internationalization Remodeled: Definition, Approaches, and Rationales', *Journal of Studies in International Education* 8, no. 1 (2004): 5, https://doi.org/10.1177/1028315303260832.; E. Auld and P. Morris, 'Science by Streetlight and the OECD's Measure of Global Competence: A New Yardstick for Internationalisation?', *Policy Futures in Education* 17, no. 2 (2019): 182, https://doi.org/10.1177/1478210318819246.

[3] Akhmad Nurul Kawakip, 'Globalization and Islamic Educational Challenges: Views from East Javanese Pesantren', *Ulumuna* 24, no. 1 (2020): 105, https://doi.org/10.20414/ujis.v24i1.385.

demands.[4] Similar developments in pesantren management during the digital era demonstrate increasing attention to educational management, technological competencies, and students' competitiveness while retaining the institutional foundations of Islamic boarding education.[5] These findings suggest that pesantren modernization should not be understood simply as the replacement of traditional systems with modern managerial structures, but as a process through which institutions selectively negotiate external educational demands with internal religious principles.

Quality assurance is another important dimension of this institutional transformation, as internationalization requires organizational systems capable of maintaining consistency, monitoring implementation, documenting performance, and supporting continuous improvement. Quality management research in primary and secondary education indicates that quality management practices encompass leadership, organizational processes, learning processes, communication, stakeholder satisfaction, and continuous improvement, demonstrating that quality cannot be reduced to administrative compliance alone.[6] Empirical research on ISO 9001 implementation in schools has also identified effects across management, quality systems, learning processes, communication, external relations, and organizational climate. However, the magnitude of these effects varies according to institutional context and implementation conditions.[7] More recent evidence involving educational organizations confirms that ISO 9001 implementation can be associated with differentiated organizational profiles, particularly in management, quality systems, learning processes, and external relations, reinforcing the importance of contextual analysis when evaluating quality-management practices in education.[8]

The relationship between internationalization and quality assurance remains insufficiently examined in pesantren-based secondary education, particularly when global educational standards are examined alongside Islamic values and institutional identity. Existing research on quality management has predominantly examined general educational organizations, while scholarship on pesantren modernization has frequently concentrated on curriculum transformation, technological adaptation, management reform, or the relationship between tradition and modernity. The literature concerning Trensains has provided important evidence on the emergence of science-oriented pesantren and the changing orientations of Islamic education. However, the relationship between such international or scientific orientations and formal quality-assurance systems requires further

[4] Khoirudin et al., 'Trensains', 125.

[5] Zaenal Abidin, 'Educational Management of Pesantren in Digital Era 4.0', *Jurnal Pendidikan Agama Islam* 17, no. 2 (2020): 203, https://doi.org/10.14421/jpai.2020.172-07.

[6] Nancy Bouranta et al., 'Findings of Quality Management Studies in Primary and Secondary Education: A Systematic Literature Review', *The TQM Journal* 33, no. 3 (2021): 729, https://doi.org/10.1108/TQM-02-2020-0020.

[7] Francisco José Fernández-Cruz et al., 'Impact of the Application of ISO 9001 Standards on the Climate and Satisfaction of the Members of a School', *International Journal of Educational Management* 34, no. 7 (2020): 1185, https://doi.org/10.1108/IJEM-10-2018-0332.; Angélica Martínez-Zarzuelo et al., 'Improvements in Climate and Satisfaction after Implementing a Quality Management System in Education', *Evaluation and Program Planning* 94 (2022): 102119, https://doi.org/10.1016/j.evalprogplan.2022.102119.

[8] Jesús Miguel Rodríguez-Mantilla et al., 'Identification of Profiles in Educational Organizations as a Result of the Implementation of a Quality Management System', *International Journal of Educational Management* 39, no. 8 (2025): 18, https://doi.org/10.1108/IJEM-01-2024-0064.

empirical investigation.[9] The limited intersection among these research streams creates an important analytical gap regarding how pesantren-based secondary schools institutionalize internationalization through systematic quality management mechanisms.

The significance of this research gap becomes particularly evident when internationalization is examined as an institutional process rather than merely as the presence of international programs, certifications, competitions, or overseas partnerships. A school may participate in international activities without necessarily transforming its organizational structures, quality-management procedures, curriculum systems, teacher development mechanisms, or institutional culture. Quality assurance can provide the organizational infrastructure needed to shift internationalization from individual initiatives to systematic, sustainable institutional practices. Research on quality management systems emphasizes the importance of leadership, process orientation, monitoring, and continuous improvement, while research on Islamic educational transformation emphasizes maintaining religious identity during modernization.[10] Examining these dimensions together, therefore, provides an opportunity to understand internationalization as a process of institutional transformation rather than a collection of externally oriented educational activities.

The present study addresses this gap by comparatively examining two pesantren-based secondary schools with distinctive educational orientations, namely SMA Trensains Tebuireng and SMA Darul Ulum (DU) 2 Unggulan BPPT Jombang, within the same broader geographical and cultural environment. SMA Trensains Tebuireng represents the development of a science-oriented pesantren model that emphasizes the integration of Islamic knowledge and scientific inquiry, while SMA DU 2 Unggulan BPPT Jombang is a pesantren-based secondary school with an established orientation toward academic excellence, international programs, and formal quality management practices. The comparison of these two cases provides an opportunity to examine whether internationalization emerges through similar institutional mechanisms or through contextually different pathways. The comparative perspective is particularly relevant because contemporary pesantren management research emphasizes selective modernization, institutional adaptation, and the preservation of local religious values rather than the wholesale adoption of external organizational models.[11] Recent scholarship similarly emphasizes that pesantren can selectively incorporate contemporary managerial practices while maintaining local wisdom, institutional identity, and religious commitments.

The theoretical contribution of this study is positioned at the intersection of educational internationalization, quality management, and Islamic educational institutionalism, thereby providing a framework for understanding how global educational practices can be embedded within organizations whose institutional identity is explicitly religious. Internationalization theory emphasizes the systematic integration of international and intercultural dimensions into educational purposes, functions, and delivery[12], while quality-management theory emphasizes process standardization, stakeholder orientation,

[9] Khoirudin et al., 'Trensains', 125.

[10] Rodríguez-Mantilla et al., 'Identification of Profiles in Educational Organizations as a Result of the Implementation of a Quality Management System', 20.

[11] Khoirudin et al., 'Trensains', 121.

[12] Knight, 'Internationalization Remodeled: Definition, Approaches, and Rationales', 10.

evaluation, and continuous improvement. Pesantren scholarship adds a further dimension by demonstrating that educational modernization is mediated through religious values, institutional traditions, and local educational philosophies.[13] Bringing these perspectives together allows this study to investigate whether quality-assurance mechanisms can function not only as technical managerial instruments but also as organizational structures through which internationalization is interpreted and aligned with pesantren values.

The empirical focus of this study is therefore directed toward understanding institutional strategies, quality-assurance mechanisms, value integration, and sustainability across the two selected pesantren-based secondary schools in Jombang. The study asks three principal questions: (1) How are educational internationalization strategies designed and implemented at SMA Trensains Tebuireng and SMA DU 2 Unggulan BPPT Jombang? (2) How are quality-assurance mechanisms integrated with pesantren values and international educational practices within the two institutions? (3) How do the two schools sustain internationalization programs through organizational systems, human-resource development, and institutional culture? Addressing these questions enables the research to develop a contextually grounded explanation of how pesantren-based secondary schools negotiate global educational demands while maintaining their religious and institutional identities. The study consequently contributes empirical evidence for understanding internationalization as a value-sensitive institutional process within Indonesian Islamic education rather than as a standardized model detached from local educational contexts.

RESEARCH METHOD

Research Design

This study employed a qualitative multiple-case study design to investigate educational internationalization, quality-assurance practices, and the integration of pesantren values within two pesantren-based secondary schools in Jombang, East Java, Indonesia. A qualitative approach was selected because the study sought to understand institutional processes, organizational practices, and contextual meanings within their natural educational settings rather than measure predetermined variables numerically. Case study methodology is appropriate for examining contemporary phenomena within their real-life contexts when the boundaries between the phenomenon and its institutional environment remain closely interconnected.[14] The multiple-case design enabled each school to be investigated independently before conducting a cross-case comparison of internationalization and quality-assurance practices.

[13] Khoirudin et al., 'Trensains', 125.

[14] Robert K. Yin, *Case Study Research and Applications: Design and Methods* (New York: Sage Publications, 2017), 120.

Research Sites and Case Selection

The research was conducted at SMA Trensains Tebuireng and SMA Darul Ulum 2 Unggulan BPPT Jombang, which were purposively selected because both institutions represent pesantren-based secondary education that engages with contemporary educational development while maintaining Islamic educational identities. The selection of these cases was intended to examine how internationalization strategies and quality-assurance mechanisms are implemented within distinct pesantren educational environments. Each institution was treated as an individual case in the initial analysis, while similarities and differences among the cases were examined in the subsequent cross-case analysis.[15]

Participants and Unit of Analysis

The primary unit of analysis was the institutional process through which educational internationalization was planned, implemented, monitored, and sustained through quality-assurance mechanisms and pesantren values. Participants were selected through purposive sampling based on their direct knowledge of and involvement in the institutional processes examined. The participant categories included school principals, vice principals, ISOs or quality-assurance coordinators, teachers, international program personnel, and students. These participants provided perspectives concerning leadership, curriculum, quality management, international programs, teaching practices, and pesantren values. Snowball sampling was subsequently employed to identify additional informants possessing relevant information about specific institutional practices until sufficient information had been obtained.[16] The source manuscript identifies these participant categories but does not provide verified numerical information concerning the number of participants at each research site.

Data Collection

Data were collected through semi-structured, in-depth interviews, participant observation, and document analysis, enabling the researchers to obtain complementary evidence on institutional internationalization and quality assurance. Interviews addressed internationalization strategies, leadership practices, curriculum development, international programs, quality-assurance mechanisms, and the integration of Islamic and pesantren values into educational practices. Observations were conducted to examine institutional activities and educational practices related to internationalization and quality management in their natural settings. Documentary evidence included curriculum documents, quality manuals, institutional profiles, standard operating procedures, and records of internationalization activities.[17] The combination of these techniques supported methodological triangulation and strengthened the contextual interpretation of the cases.

Data Analysis

Data analysis followed the interactive analytical framework of Matthew B. Miles, consisting of data condensation, data display, and conclusion drawing and verification. Interview transcripts, observation records, and documentary materials were systematically organized and coded according to the research objectives and emerging empirical patterns.

[15] Robert E. Stake, *Multiple Case Study Analysis* (New York: Guilford Press, 2013), 115.
[16] Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (Bandung: Alfabeta, 2014), 221.
[17] Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*, 235.

Within-case analysis was initially conducted separately for each school to identify distinctive institutional strategies and practices.[18] Cross-case analysis subsequently compared the two cases to identify convergent and divergent patterns concerning internationalization strategies, quality-assurance institutionalization, pesantren-value integration, and program sustainability. Thematic coding was used to develop analytical categories from recurring patterns, while interpretations were continuously compared with interview, observation, and documentary evidence.

Trustworthiness of the Data

The credibility of the findings was established through source, methodological, theoretical, and temporal triangulation, consistent with qualitative research principles.[19] Information obtained from school leaders, teachers, quality-assurance personnel, international-program personnel, and students was compared with observational evidence and institutional documentation to identify consistencies and discrepancies. Dependability was strengthened through systematic documentation of the research procedures and analytical decisions, while confirmability was supported by maintaining a clear connection between empirical evidence and interpretive conclusions. The use of multiple cases also strengthened analytical transferability by allowing patterns to be examined across two institutional contexts rather than relying exclusively on a single case.

Ethical Considerations

The research process was conducted in accordance with fundamental ethical principles governing qualitative educational research, particularly voluntary participation, informed consent, confidentiality, and responsible use of research information. Participants were informed about the purpose and academic nature of the study before their involvement in interviews or observations. Institutional and personal information was treated confidentially, while findings were presented primarily through institutional themes and analytical categories. These procedures were intended to protect participants while maintaining the integrity and credibility of the research process.

RESULT AND DISCUSSION

Overview of the Research Findings

The comparative analysis of SMA Trensains Tebuireng and SMA DU 2 Unggulan BPPT Jombang demonstrates that internationalization in pesantren-based secondary education develops through different institutional pathways while sharing a common orientation toward combining global educational competencies with Islamic identity. The two institutions represent distinctive forms of pesantren-based educational development: SMA Trensains Tebuireng emphasizes integrating Qur'anic epistemology and natural sciences through its Semesta Curriculum, whereas SMA DU 2 Unggulan BPPT Jombang places greater emphasis on international curricula, certification, bilingual education, scientific programs, and institutional quality assurance through ISO-based management. Existing

[18] Matthew B. Miles, et al., *Qualitative Data Analysis: A Methods Sourcebook and The Coding Manual for Qualitative Researchers* (Arizona: Sage Publications, 2013), 129.

[19] S. Nasution, *Metode Penelitian Naturalistik Kualitatif* (Bandung: Tarsito, 1988), 216.

institutional information confirms that Trensains Tebuireng was established to develop students with scientific competence, philosophical depth, and moral character, and that its curriculum combines national, international, and pesantren-sains components.

The findings indicate four interconnected dimensions underlying sustainable internationalization in the two pesantren-based schools: internationalization orientation, quality-system institutionalization, integration of pesantren values, and sustainability capacity. These dimensions provide the analytical basis for the Sustainable Value-Based Internationalization (SVI) Model developed at the end of this section. The comparison should not be interpreted as demonstrating that both schools implement identical internationalization mechanisms, because the available evidence indicates substantial differences in curricular architecture, institutional management, and international program development. The analytical purpose is instead to identify convergent and divergent mechanisms through which pesantren institutions respond to global educational demands. The institutional profile of the two research sites is presented in Table 1. The table differentiates their principal educational orientations and clarifies why the two cases are analytically complementary.

Table 1. Profile of the Two Research Sites

Dimension	**SMA Trensains Tebuireng**	**SMA DU 2 Unggulan BPPT Jombang**
Institutional context	Pesantren-based secondary school within Pesantren Tebuireng	Pesantren-based Unggulan secondary school in Jombang
Educational orientation	Integration of Qur'anic worldview, natural sciences, research, and character	Integration of pesantren education, national education, global curriculum, and academic excellence
Internationalization orientation	Global-oriented science education and international curriculum enrichment	International curriculum, certification, bilingual learning, research, and global academic programs
Curriculum orientation	Semesta Curriculum integrating national, international, and pesantren-sains components.	National curriculum enriched by Cambridge and other international programs
Quality assurance	Institutional governance and curriculum development mechanisms	ISO 9001-based quality management, SOPs, audits, and PDCA
International programs	International curriculum enrichment, English competency, science-oriented global preparation	Cambridge, DELF, ICAS, bilingual programs, international research, and competitions
Scientific development	Natural science, scientific research, astronomy, philosophy of science, Qur'an, and science	Scientific research, technology, innovation, laboratories, and international academic activities

Pesantren values	Qur'anic epistemology, akhlaq, pesantren ethics, and Hasyim Asy'ari educational values	Adab, Qur'anic literacy, worship discipline, pesantren ethics, and spiritual culture
Sustainability mechanism	Curriculum institutionalization and organizational governance	SOPs, quality manuals, audits, human-resource development, and PDCA

Table 1 shows that internationalization should not be reduced to the presence of foreign curricula or international examinations because the two institutions demonstrate broader organizational and epistemological interpretations of global education. SMA Trensains Tebuireng primarily develops its international orientation by cultivating a science-oriented educational identity that integrates national, international, and pesantren-sains curriculum components. Research on the Semesta Curriculum confirms that the curriculum was developed through collaboration among the school curriculum team, the initiator of the Trensains concept, and the FMIPA UNESA curriculum development team, demonstrating that its international orientation is embedded within a broader curricular architecture rather than being treated as an additional program.

SMA Darul Ulum 2 presents a more explicitly managerial pathway to internationalization, in which international programs are linked to formal quality management procedures. The original empirical findings indicate that leadership commitment, quality policy, quality-assurance structures, global needs assessment, SOP development, program implementation, internal and external audits, and corrective action are connected within a PDCA cycle. This finding suggests that internationalization becomes sustainable when global initiatives are transformed from individual projects into organizational routines.

Internationalization Strategies in Pesantren-Based Secondary Education SMA Trensains Tebuireng

The internationalization strategy of SMA Trensains Tebuireng is primarily constructed through the development of a distinctive scientific-pesantren educational model that positions Qur'anic knowledge and natural science as mutually reinforcing domains rather than separate areas of instruction. Institutional documentation describes the school as an educational institution dedicated to developing scientific excellence through learning, research, and experimentation, while maintaining philosophical depth and noble character. This orientation is significant because internationalization at Trensains is not primarily reflected in institutional branding or foreign partnerships, but in the development of competencies designed to prepare students for participation in contemporary scientific and academic environments.

The Semesta Curriculum is the principal mechanism by which this orientation is operationalized, as it combines national curriculum requirements, international curriculum enrichment, and the distinctive Muatan Kearifan Pesantren Sains (MPKPS). Semesta Curriculum is a curriculum developed through an adaptation and adoption process involving national, international, and pesantren-sains elements. Earlier research similarly identifies the

combination of Qur'anic studies, science, language, and international curriculum as an important characteristic of the Trensains model.

This configuration provides an important alternative to an understanding of internationalization that equates global orientation exclusively with the transplantation of Western curricula. Instead, the Trensains model illustrates how an Islamic educational institution can selectively incorporate international educational components while retaining a distinctive epistemological foundation. Such an approach is consistent with critical discussions of internationalization that emphasize the importance of context, reciprocity, and local knowledge rather than treating internationalization as a one-directional transfer of educational models.

Internationalization Strategies in Pesantren-Based Secondary Education SMA Darul Ulum 2 Unggulan BPPT Jombang

SMA Darul Ulum 2 demonstrates a more explicitly programmatic and managerial form of internationalization through international curriculum, bilingual instruction, global competency assessment, scientific research, certification, and international academic activities. The empirical evidence indicates that Cambridge curriculum integration, DELF and ICAS assessment, English and Arabic immersion, international research, student publications, and international competitions are incorporated into the school's broader quality-management structure.

The significance of these activities lies in their institutionalization rather than in their individual existence, as internationalization becomes a recurring organizational process when programs are supported by SOPs, quality indicators, monitoring mechanisms, and audits. This finding corresponds with contemporary quality-assurance research emphasizing that sustainable educational quality requires organizational structures that move beyond compliance toward continuous institutional improvement.

The two cases, therefore, reveal complementary pathways: Trensains emphasizes internationalization through epistemological and curricular integration, whereas Darul Ulum 2 emphasizes internationalization through programmatic, managerial, and quality-assurance institutionalization. These differences are important for developing a comparative understanding of pesantren internationalization because they demonstrate that the same broad objective, preparing students for global educational environments, can be pursued through different institutional architectures.

Institutionalization of Internationalization through Quality Assurance ISO 9001

The strongest empirical evidence regarding formal quality assurance comes from SMA Darul Ulum 2, where ISO 9001 is linked to the institutionalization of internationalization. The available findings show that internationalization is incorporated into quality policy, SOPs, performance indicators, monitoring activities, internal audits, external certification audits, and corrective actions. Such institutionalization is important because international programs can easily become dependent on individual leaders, temporary funding, or particular teachers when they are not incorporated into organizational systems.

Recent scholarship on quality assurance in pesantren similarly indicates that Islamic boarding schools increasingly need formal quality systems that remain compatible with their

distinctive religious identities. Quality assurance in pesantren must respond simultaneously to modernization, accountability, educational relevance, and preservation of local and religious values.[20] Ahmadi and Khozin likewise demonstrate the importance of contextualized quality assurance rather than the mechanical adoption of external management frameworks.[21]

Within this context, ISO 9001 can be interpreted not simply as an administrative certification mechanism but as an organizational infrastructure through which internationalization becomes reproducible, traceable, and subject to continuous evaluation. The empirical findings indicate that quality procedures at Darul Ulum 2 link international programs to institutional planning and monitoring, thereby reducing internationalization's dependence on individual leadership initiatives.

Standardization of Internationalization Programs

The standardization of internationalization is evident in the development of formal SOPs covering bilingual instruction, international research, global collaboration, international certification, and international-class quality assurance. Standardization provides an institutional memory that allows educational programs to continue despite personnel changes.

This mechanism is particularly relevant to pesantren because educational continuity is often strongly influenced by leadership and organizational culture. A formal quality system bridges charismatic or value-based leadership and bureaucratic continuity. Quality assurance in pesantren requires attention to human-resource planning, institutional demand, and resourcing strategies to preserve quality while maintaining pesantren identity.[22]

Internal and External Quality Audits

Internal and external audits provide a monitoring mechanism through which internationalization programs are evaluated against established standards and institutional expectations. At Darul Ulum 2, audit processes are connected to international programs and broader educational performance. The audit process, therefore, functions as a feedback mechanism rather than merely as an administrative requirement. The quality-assurance cycle derived from the findings is presented in Figure 1.

[20] Zahra Khusnul Lathifah et al., 'Quality Assurance in Pesantren: Modernization, Adaptability, and Integration into Indonesia's Education System', *Jurnal Pendidikan Islam* 11, no. 1 (2025): 101, https://doi.org/10.15575/jpi.v11i1.43951.

[21] Ahmadi and Khozin, 'Implementing Contextualized Quality Assurance in Islamic Boarding Schools: A Case Study of TMI Al-Amien Prenduan', *Al-Ishlah: Jurnal Pendidikan* 17, no. 4 (2025): 7048, https://doi.org/10.35445/alishlah.v17i4.7855.

[22] Azka Sya'bana et al., 'Model Penjaminan Mutu Sumber Daya Manusia di Pesantren: Pendekatan Supply Demand and Resourcing Strategy', *Nusantara: Jurnal Pendidikan Indonesia* 4, no. 4 (2024): 1097, https://doi.org/10.14421/njpi.2024.v4i4-15.; Hans de Wit and Philip G. Altbach, 'Internationalization in Higher Education: Global Trends and Recommendations for Its Future', *Policy Reviews in Higher Education* 5, no. 1 (2021): 28, https://doi.org/10.1080/23322969.2020.1820898.

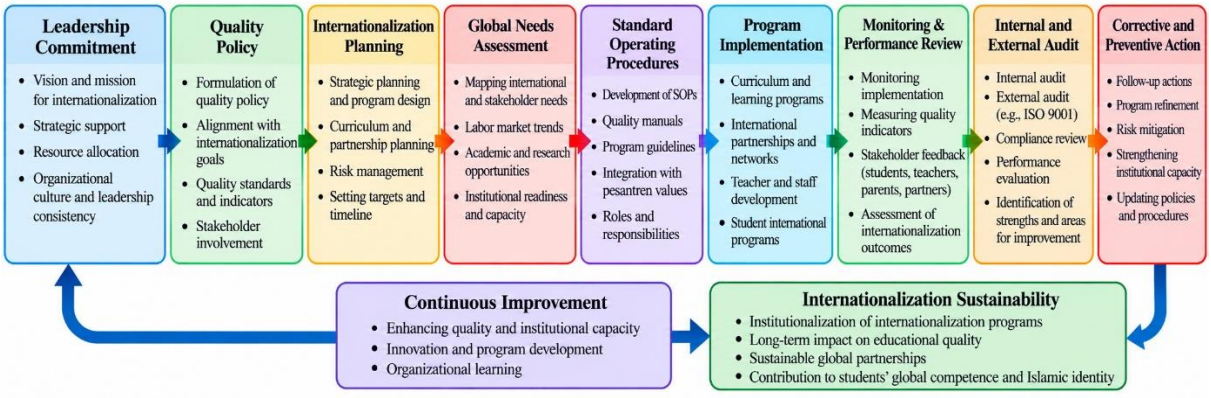


Figure 1. Quality-assurance cycle for educational internationalization

Figure 1 illustrates an integrated quality-assurance framework for sustainable internationalization of education in pesantren-based education. The framework comprises nine interconnected stages: leadership commitment, quality policy, internationalization planning, global needs assessment, standard operating procedures, program implementation, monitoring and performance review, internal and external audit, and corrective and preventive action. Leadership commitment provides the institutional foundation through a clear vision and mission, strategic support, resource allocation, and organizational consistency. This commitment is operationalized through quality policies aligned with internationalization goals and translated into strategic plans informed by global needs, labor market trends, academic opportunities, and institutional readiness. Standard operating procedures establish consistent implementation guidelines, roles, responsibilities, and the integration of pesantren values into institutional processes. Program implementation then encompasses curriculum and learning development, international partnerships, staff capacity building, and student internationalization activities.

Monitoring and performance review assess implementation progress, quality indicators, stakeholder feedback, and internationalization outcomes, while internal and external audits evaluate compliance, performance, institutional strengths, and areas requiring improvement. The findings inform corrective and preventive actions, including program refinement, risk mitigation, capacity strengthening, and policy revision. The framework further incorporates continuous improvement through institutional learning, innovation, and enhanced organizational capacity, leading to internationalization sustainability characterized by institutionalized programs, long-term improvements in educational quality, sustainable global partnerships, and the development of students' global competence alongside their Islamic identity. The cyclical structure emphasizes that sustainable internationalization is not a one-time achievement but an ongoing institutional process driven by quality assurance, evaluation, and continuous improvement.

Integration of Pesantren Values and Global Educational Standards

The comparative evidence indicates that the international orientation of pesantren-based schools is constrained and shaped by institutional values rather than operating as a culturally neutral process. At SMA Trensains Tebuireng, Qur'anic epistemology forms the basis for understanding natural science. In contrast, at SMA Darul Ulum 2, pesantren ethics,

Qur'anic literacy, discipline, worship practices, and adab are integrated into international educational programs. The original findings specifically show that spiritual indicators were incorporated into SOPs, quality indicators, and monitoring systems at Darul Ulum 2.

This pattern indicates that internationalization does not necessarily require institutional secularization. Instead, global competencies can be integrated within an Islamic normative framework. Such a finding is consistent with research on Islamic science curricula in Indonesia, which identifies efforts to construct educational models in which Islamic and scientific knowledge interact within specific institutional contexts. Muttaqin demonstrates that integrating Islam and science requires careful curricular design rather than the simple juxtaposition of religious and scientific subjects.[23]

Curriculum Integration

Curriculum integration represents the most visible point of convergence between the two cases. SMA Trensains Tebuireng uses the Semesta Curriculum, while Darul Ulum 2 combines pesantren education, national curriculum requirements, Cambridge programs, DELF, ICAS, and other global academic activities. The original manuscript documents the integration of Cambridge, DELF, and ICAS at Darul Ulum 2.

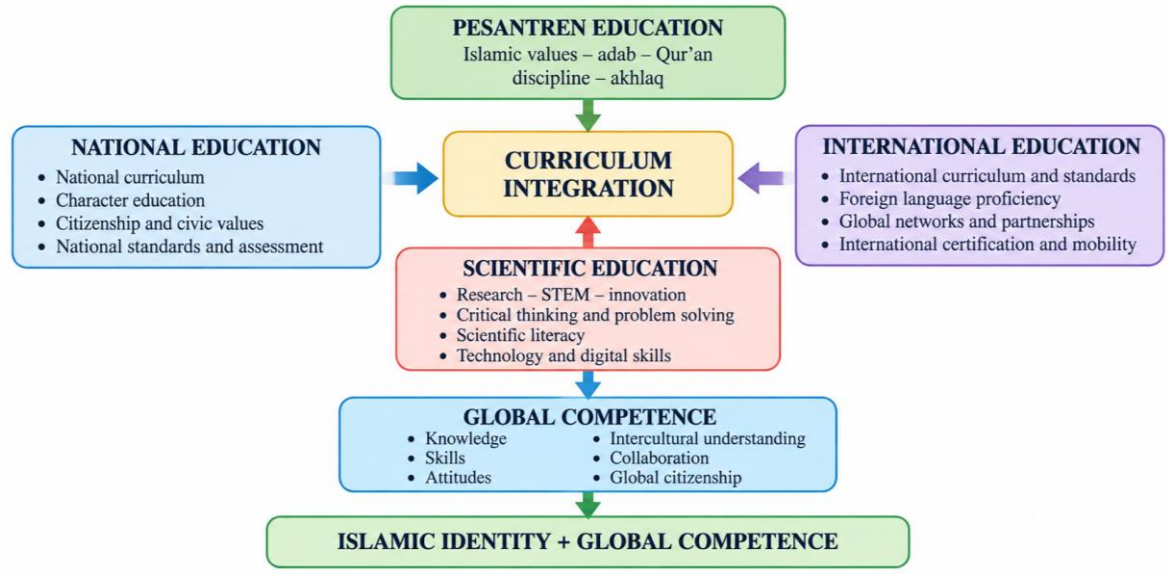


Figure 2. Integration of pesantren, national, scientific, and international education

Figure 2. Illustrates a curriculum integration framework that brings together four educational orientations (pesantren education, national education, scientific education, and international education) to develop students' global competence while maintaining a strong Islamic identity. At the center of the framework, curriculum integration serves as the mechanism that connects these educational orientations into a coherent learning system. Pesantren education imparts Islamic values, adab, Qur'anic principles, discipline, and akhlaq,

[23]Ahmad Muttaqin, 'Konstruksi Kurikulum Sains Islam Keindonesiaan (Integrasi Islam, Sains Kealaman, Sains Humaniora dan Keindonesiaan)', *Edukasi: Jurnal Penelitian Pendidikan Agama dan Keagamaan* 16, no. 1 (2018): 16, https://doi.org/10.32729/edukasi.v16i1.460.; Wildana Wargadinata et al., 'Alternative Education in the Global Era: Study of Alternative Models of Islamic Education in Tazkia International Islamic Boarding School Malang', *Library Philosophy and Practice (e-Journal)*, (2019): 12, https://scholarworks.sjsu.edu/libphilprac/3748.

while national education provides the national curriculum, character education, citizenship and civic values, and national assessment standards. International education contributes international curricula and standards, foreign language proficiency, global networks and partnerships, and international certification and mobility. Scientific education complements these foundations through research, STEM, innovation, critical thinking, problem-solving, scientific literacy, and technological and digital skills. The integration of these components is expected to develop global competence across knowledge, skills, attitudes, intercultural understanding, collaboration, and global citizenship. Ultimately, the framework positions the integration of Islamic identity and global competence as the intended educational outcome, demonstrating that international engagement and scientific advancement can be pursued without compromising the religious and moral foundations of pesantren education.

Global Competence and Islamic Identity

The findings further suggest that global competence in pesantren education is understood to involve more than language proficiency, international certification, or scientific knowledge. It also includes ethical behavior, discipline, intellectual responsibility, and the capacity to participate in global environments without abandoning religious identity. This interpretation is particularly relevant because recent scholarship increasingly questions approaches to internationalization that treat global engagement as inherently desirable without considering questions of identity, equity, and local epistemologies.[24]

The empirical findings at Darul Ulum 2 show that religious routines and academic programs are not treated as mutually exclusive domains. Instead, spiritual practices are incorporated into the organizational culture surrounding international learning. In this sense, pesantren values operate as an internal normative framework that determines how global educational opportunities are interpreted and implemented.

Human Resource Development and Teacher Roles

Teacher capacity is a critical mechanism linking international standards to classroom practice, as internationalization cannot be sustained through curriculum documents alone. The findings indicate that teachers at Darul Ulum 2 are engaged in professional development in international curricula, bilingual pedagogy, research, quality management, ISO standards, and international academic activities.

This finding is consistent with contemporary quality-assurance perspectives that identify human resources as a central component of sustainable quality improvement. Sya'bana emphasizes the importance of supply-demand analysis and resourcing strategies in developing quality-assurance systems for pesantren. Teacher development, therefore, functions as a sustainability mechanism rather than simply a professional development activity.[25]

At SMA Trensains Tebuireng, available institutional information also indicates that teachers are supported by curriculum specialists and academic experts, and that many have backgrounds from public universities. This organizational arrangement supports the school's

[24] Leechin Heng and Hui-Chin Yeh, 'Interweaving Local Cultural Knowledge with Global Competencies in One Higher Education Course: An Internationalisation Perspective', *Language, Culture and Curriculum* 35, no. 2 (2022): 151, https://doi.org/10.1080/07908318.2021.1958832.

[25] Sya'bana et al., 'Model Penjaminan Mutu Sumber Daya Manusia Di Pesantren', 1100.

scientific orientation and demonstrates the importance of external academic expertise in developing a distinctive pesantren-science curriculum.

Teachers as Mediators between Global Education and Pesantren Values

The findings indicate that teachers occupy a mediating position between international academic expectations and pesantren educational values because they translate curriculum standards into pedagogical practices appropriate to the institutional culture. This role is particularly important in settings where global curricula contain assumptions concerning pedagogy, assessment, communication, and knowledge that may differ from traditional pesantren practices.

Three teacher roles can consequently be identified: epistemic integration, spiritual-pedagogical mediation, and identity-based role modeling. Epistemic integration concerns connecting Islamic perspectives with scientific knowledge; spiritual-pedagogical mediation concerns incorporating adab and pesantren ethics into global learning; and identity-based role modeling concerns demonstrating that global competence and Islamic identity can coexist in professional practice.[26] These roles provide an important explanation for why internationalization in pesantren should be analyzed as both a cultural and an organizational process.

Sustainability of Internationalization Programs

The sustainability of internationalization depends on whether programs are embedded within institutional structures rather than attached exclusively to individual leaders. The findings from Darul Ulum 2 demonstrate that quality manuals, SOPs, performance indicators, audits, and PDCA procedures establish organizational mechanisms that preserve internationalization amid leadership and personnel changes.

This finding is consistent with recent research arguing that quality assurance in pesantren requires a balance between formal management systems and the preservation of institutional values. Ahmadi and Khozin specifically identify the need for context-sensitive quality assurance that integrates formal educational governance with pesantren identity.[27]

Human Resource Sustainability

Sustainability also depends on the continuous development of teachers and other educational personnel. Training related to global curricula, research, international assessment, quality management, and bilingual pedagogy builds institutional capacity that endures beyond specific programs or leaders.

This finding is important because internationalization is frequently conceptualized in terms of visible outputs such as international examinations, foreign partnerships, or student mobility. In contrast, the less visible organizational capability required to sustain these activities receives less attention. The present findings suggest that human resource capacity

[26] Shea N. Kerkhoff and Megan E. Cloud, 'Equipping Teachers with Globally Competent Practices: A Mixed Methods Study on Integrating Global Competence and Teacher Education', *International Journal of Educational Research* 103 (2020): 101629, https://doi.org/10.1016/j.ijer.2020.101629.

[27] Ahmadi and Khozin, 'Implementing Contextualized Quality Assurance in Islamic Boarding Schools', 7050.

is an intermediary mechanism linking internationalization strategy and long-term institutional sustainability.

Global Network Sustainability

International networks provide another mechanism for maintaining access to global knowledge, assessment systems, research opportunities, and academic communities. At Darul Ulum 2, documented relationships and programs include Cambridge, DELF, ICAS, international research, and international competitions. At Trensains, international orientation is more strongly connected to scientific networks, curriculum development, research, and global academic preparation. Institutional documentation identifies a collaboration involving the school, the initiator of the Trensains concept, and FMIPA UNESA in curriculum development.

These networks should not be understood simply as mechanisms for importing external educational models. Within pesantren settings, networks can function as channels for reciprocal knowledge exchange while maintaining local institutional identity. This interpretation corresponds with contemporary scholarship that emphasizes the need to move beyond one-directional understandings of internationalization toward more inclusive and mutually beneficial forms of global engagement.[28]

Cross-Case Analysis

The cross-case analysis identifies both convergence and divergence between the two institutions. Their convergence lies primarily in the attempt to integrate global educational competencies with pesantren identity, while their divergence is most evident in the mechanisms used to achieve internationalization.

Table 2. Cross-Case Comparison of Internationalization and Quality Assurance

Dimension	SMA Trensains Tebuireng	SMA Darul Ulum 2 Unggulan BPPT Jombang	Cross-Case Interpretation
Internationalization orientation	Science-based global educational orientation	Comprehensive international academic orientation	Both seek global competence
Primary strategy	Semesta Curriculum and Science Integration	International programs and quality-system institutionalization	Curricular vs. managerial emphasis
Curriculum	National + international + pesantren-sains	National + pesantren + Cambridge + DELF + ICAS	A hybrid curriculum in both cases
Quality assurance	Curriculum and governance mechanisms	ISO 9001, SOPs, audits, PDCA	Formalization is stronger in Darul Ulum 2

[28] Moch Tolchah and Muhammad Arfan Muammar, 'Islamic Education In The Globalization Era; Challenges, Opportunities, and Contribution of Islamic Education in Indonesia', *Humanities & Social Sciences Reviews* 7, no. 4 (2019): 1031, https://doi.org/10.18510/hssr.2019.74141.

Scientific orientation	Qur'an–science interaction and natural science	Research, technology, innovation, international programs	Science functions as a global-competence pathway
International certification	International curriculum/competency orientation	Cambridge, DELF, ICAS, and other assessments	Darul Ulum 2 has more explicitly documented certification
Pesantren values	Qur'anic epistemology, akhlaq, pesantren identity	Adab, worship, Qur'anic literacy, discipline	Values are foundational in both cases
Teacher role	Science-pesantren pedagogical integration	Global curriculum, quality management, international pedagogy	Teachers act as mediators
International networking	Academic and scientific collaboration	Certification, research, competitions, and global partnerships	Networks expand access to global knowledge
Sustainability	Curriculum institutionalization and governance	SOPs, audits, HR development, PDCA	Institutionalization supports continuity
Dominant pathway	Epistemological-curricular internationalization	Managerial-quality internationalization	Two complementary models

Table 2 demonstrates that the two schools should not be treated as identical examples of internationalization. SMA Trensains Tebuireng represents a model in which global orientation is strongly mediated by scientific and epistemological reconstruction. In contrast, SMA Darul Ulum 2 represents a model in which internationalization is strongly institutionalized through quality-management systems. The comparison consequently broadens the conceptual understanding of internationalization in pesantren by showing that internationalization can operate simultaneously as a curricular project, an epistemological project, and an organizational quality project.

The cross-case comparison also reveals that quality assurance and internationalization are mutually reinforcing rather than sequential processes. International programs create new quality requirements, while quality systems provide mechanisms for sustaining those programs. Pesantren values provide the normative direction, while teachers and organizational networks provide the human and relational capacity required for implementation.[29]

[29] Muhaemin Latif and Erwin Hafid, 'Multicultural Attitudes in an Islamic Boarding School of South Sulawesi – Indonesia', *Cogent Education* 8, no. 1 (2021): 16, https://doi.org/10.1080/2331186X.2021.1968736.; Ahmad Royani et al., 'Curriculum Innovation for the Excellent Madrasah Aliyah Program Based on Pesantren', *Cendekia: Jurnal Kependidikan dan Kemasyarakatan* 22, no. 2 (2024): 22, https://doi.org/10.21154/cendekia.v22i2.9715.

Development of the Sustainable Value-Based Internationalization (SVI) Model

The Sustainable Value-Based Internationalization (SVI) Model is derived from the convergence of the four analytical dimensions identified through the comparative findings: internationalization orientation, quality-system institutionalization, pesantren-value integration, and sustainability capacity. The model is therefore presented as a conceptual synthesis of the cases rather than as a statistically validated causal model or a universally generalizable framework.

Internationalization Orientation represents the institutional decision to incorporate global competencies into educational purposes, curriculum, research, assessment, language development, and academic networking.[30] At Trensains, this orientation is expressed primarily through science-oriented global education and the Semesta Curriculum. In contrast, at Darul Ulum 2, it is expressed through international curricula, certification, bilingual education, research, and global academic activities.

Quality-System Institutionalization represents the transformation of internationalization from individual initiatives into formal organizational processes. The strongest evidence for this dimension is found at Darul Ulum 2, where ISO 9001 is linked to SOPs, audits, quality manuals, performance indicators, and PDCA. Recent research on quality assurance in pesantren supports the importance of institutional systems that remain contextually compatible with religious and organizational identities.

Pesantren-Value Integration ensures that global educational practices remain consistent with the institution's moral and spiritual identity.[31] This dimension includes adab, Qur'anic literacy, religious discipline, ethical conduct, Islamic epistemology, and pesantren traditions. The evidence from Trensains demonstrates that Qur'anic epistemology is embedded in science education, while the findings from Darul Ulum 2 show that spiritual and ethical indicators are incorporated into quality systems and learning processes.

Sustainability Capacity encompasses teacher development, organizational memory, leadership continuity, documentation, quality monitoring, and international networks, the last dimension. This dimension explains how internationalization can continue beyond individual leaders or temporary programs. The evidence indicates that institutionalized procedures and human-resource development are central to this sustainability process. These four dimensions are synthesized in Figure 3.

[30] S. Y. Lopez-Rocha, 'Refocusing the Development of Critical Intercultural Competence in Higher Education: Challenges and Opportunities', *Language and Intercultural Communication* 21, no. 1 (2021): 118, https://doi.org/10.1080/14708477.2020.1833900.; Abd Aziz et al., 'Islamic Integrated Curriculum Model to Strengthen Santri's Religious Character: A Case Study at Islamic Boarding School in Blitar', *Cendekia: Jurnal Kependidikan Dan Kemasyarakatan* 21, no. 1 (2023): 63, https://doi.org/10.21154/cendekia.v21i1.6082.

[31] Ahmad Fahrudin and Muhammad Khoirul Malik, 'A Pesantren Cultural Value-Based Learning Model: Integrating Islamic Values and 21st-Century Skills', *Cendekia: Jurnal Kependidikan dan Kemasyarakatan* 23, no. 1 (2025): 89, https://doi.org/10.21154/cendekia.v23i1.10646.; Hawwin Muzakki et al., 'Integration of Islamic Education Values and Fiqh Al-Bi'ah in Cultivating Environmentally Responsible Character', *Cendekia: Jurnal Kependidikan dan Kemasyarakatan* 23, no. 1 (2025): 55, https://doi.org/10.21154/cendekia.v23i1.10272.

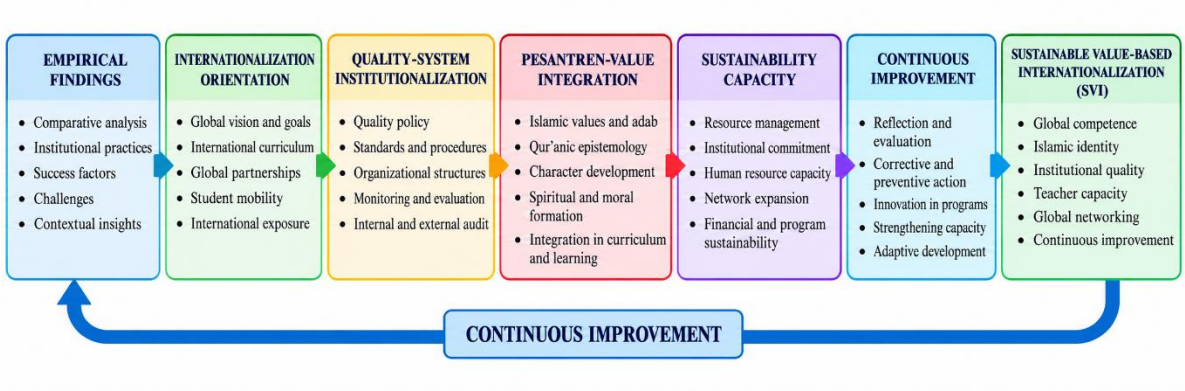


Figure 3. Sustainable Value-Based Internationalization (SVI) Model

Figure 3 illustrates the Sustainable Value-Based Internationalization (SVI) framework, which conceptualizes internationalization as an integrated, value-oriented, and continuously improving institutional process. The framework consists of seven interconnected components: (1) empirical findings, which provide evidence regarding institutional practices, success factors, challenges, and contextual conditions; (2) internationalization orientation, which establishes global vision, international curricula, partnerships, student mobility, and international exposure; (3) quality-system institutionalization, which embeds quality policies, standards, organizational structures, monitoring, evaluation, and auditing into institutional operations; (4) pesantren-value integration, which incorporates Islamic values, Qur'anic epistemology, character development, spiritual and moral formation, and value-based learning; (5) sustainability capacity, which strengthens resource management, institutional commitment, human resource capacity, networking, and financial sustainability; (6) continuous improvement, which facilitates reflection, evaluation, corrective and preventive action, innovation, capacity building, and adaptive development; and (7) sustainable value-based internationalization (SVI), which represents the intended institutional outcomes, including global competence, Islamic identity, institutional quality, teacher capacity, global networking, and continuous improvement. The cyclical arrows indicate that the framework is not a linear sequence but an iterative process in which empirical evidence informs institutional development, while evaluation and continuous improvement feed back into subsequent internationalization strategies. Accordingly, the framework emphasizes integrating global engagement, quality assurance, Islamic values, and institutional sustainability as mutually reinforcing dimensions of internationalization in pesantren-based education.

The SVI Model contributes to the literature by integrating dimensions that are often examined separately. Internationalization research commonly focuses on global engagement, mobility, curriculum, intercultural learning, or institutional partnerships, while quality-assurance research focuses on standards, processes, monitoring, and continuous improvement. Research on pesantren tends to emphasize religious identity, character formation, leadership, and educational modernization. The present model connects these domains by proposing that sustainable internationalization in pesantren-based education

requires the simultaneous presence of global orientation, institutional quality mechanisms, value integration, and organizational sustainability. [32]

The model also offers a more context-sensitive interpretation of internationalization. Knight's influential framework conceptualizes internationalization as the integration of international, intercultural, or global dimensions into educational purposes and functions. The present study extends this conceptualization to pesantren-based secondary education by emphasizing that internationalization is mediated by institutional identity and quality systems. The global dimension is not simply added to an existing educational structure; it is interpreted, adapted, and institutionalized in line with the values and organizational characteristics of the pesantren.[33]

Recent scholarship reinforces the need for such contextualization because internationalization has increasingly been examined through questions of inclusion, reciprocity, local epistemologies, and the unequal distribution of global educational power. In this context, the SVI Model positions pesantren not merely as recipients of international educational standards but as institutions capable of interpreting and reconstructing global education in accordance with their own epistemological and moral foundations.

The findings, therefore, suggest that sustainable internationalization should not be assessed only through the number of international programs, foreign examinations, overseas partnerships, or international student activities. A more context-sensitive assessment should also examine whether internationalization is embedded within institutional quality systems, whether teachers possess the capacity to mediate global and local knowledge, whether institutional values remain visible in educational practice, and whether international programs can survive leadership and personnel changes.

The two cases provide complementary illustrations of this proposition. SMA Trensains Tebuireng demonstrates how an institution can construct global educational orientation through a distinctive science-pesantren curriculum, while SMA Darul Ulum 2 demonstrates how international programs can be institutionalized through a formal quality-management system. Their differences are analytically productive because they reveal that sustainable internationalization does not require a single institutional pathway.

The SVI Model should consequently be interpreted within the boundaries of the two cases examined in this study. It is an interpretive model generated from the comparative evidence rather than a universal prescription for all pesantren. Further research involving additional pesantren, different geographical settings, longitudinal data, and quantitative validation would be necessary to determine whether the four dimensions identified here operate similarly across different institutional contexts. This limitation is particularly

[32] Yusuf Hanafi et al., 'The New Identity of Indonesian Islamic Boarding Schools in the "New Normal": The Education Leadership Response to COVID-19', *Heliyon* 7, no. 3 (2021): e06549, https://doi.org/10.1016/j.heliyon.2021.e06549.; M. Syafiq Humaisi et al., 'Pesantren Education and Charismatic Leadership: A Qualitative Analysis Study on Quality Improvement of Islamic Education in Pondok Pesantren Nurul Jadid Paiton, Probolinggo', *Universal Journal of Educational Research* 7, no. 7 (2019): 1509, https://doi.org/10.13189/ujer.2019.070704.

[33] Knight, 'Internationalization Remodeled: Definition, Approaches, and Rationales', 5.; M. Syafiq Humaisi et al., 'Pesantren-Based Vocational Curriculum Management in Improving The Quality of Madrasa Education in Indonesia', *Cendekia: Jurnal Kependidikan dan Kemasyarakatan* 20, no. 2 (2022): 288, https://doi.org/10.21154/cendekia.v20i2.5002.

important because the available empirical documentation is substantially more detailed for SMA Darul Ulum 2. In contrast, evidence concerning SMA Trensains Tebuireng is supplemented by institutional documents and previous studies rather than by an equivalent set of interview data in the current manuscript.

Taken together, the findings demonstrate that internationalization in pesantren-based secondary education can be understood as a process of global engagement without displacing institutional values. The central mechanism is not the replacement of pesantren identity with international standards, but rather the institutional capacity to integrate global competence, quality assurance, scientific development, teacher capacity, and Islamic values into a coherent educational system. This interpretation provides the empirical foundation for the Sustainable Value-Based Internationalization model. It offers a conceptual contribution to discussions of internationalization, educational quality assurance, and the modernization of pesantren education.

CONCLUSION

This study demonstrates that educational internationalization in pesantren-based secondary education develops through institutional pathways that combine global educational orientation with the preservation of Islamic identity. The comparative analysis of SMA Trensains Tebuireng and SMA Darul Ulum 2 Unggulan BPPT Jombang indicates that the two institutions share an orientation toward developing students' global competencies while maintaining pesantren values. However, they operationalize internationalization through different institutional mechanisms. SMA Trensains Tebuireng emphasizes integrating Qur'anic epistemology, scientific inquiry, and international curricula through its Semesta Curriculum. In contrast, SMA Darul Ulum 2 emphasizes international curricula, bilingual learning, international certification, scientific programs, and formal quality management practices. These findings indicate that internationalization within pesantren should not be interpreted simply as the adoption of foreign educational standards, but as a contextual institutional process shaped by educational philosophy, organizational culture, and Islamic values.

The study further identifies four interconnected dimensions that characterize the development and sustainability of internationalization: internationalization orientation, quality-system institutionalization, pesantren-value integration, and sustainability capacity. At SMA Darul Ulum 2, ISO 9001 provides an organizational mechanism through which internationalization is connected with quality policies, SOPs, monitoring, internal and external audits, corrective actions, and continuous improvement. At SMA Trensains Tebuireng, international orientation is more strongly reflected in the integration of Islamic and scientific knowledge within the Semesta Curriculum. Across the two cases, teachers serve as important mediators between global educational expectations and pesantren values. At the same time, curriculum integration, institutional governance, human resource development, and academic networks contribute to the continuity of internationalization programs. Based on these findings, the study develops the Sustainable Value-Based Internationalization (SVI) Model, which conceptualizes sustainable internationalization as an interaction among global competence, institutional quality, pesantren values, teacher capacity, international

networking, and continuous improvement. The model is an interpretive framework derived from comparative evidence and is not presented as universally generalizable or statistically validated. Its applicability, therefore, remains bounded by the institutional contexts examined in this study. Further research involving additional pesantren, longitudinal evidence, broader geographical settings, and quantitative validation is needed to examine the transferability and explanatory capacity of the SVI Model across diverse Islamic educational institutions.

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DISCLOSURE STATEMENT

Moh. Arif contributed to the conceptualization of the study, research design, and data collection, and Hawwin Muzakki contributed to data analysis and development of the manuscript. Muh Ibnu Sholah and Habulloh Nadaraining contributed to the conceptual framework, the interpretation of the findings, the critical revision of the manuscript, and the refinement of the theoretical and methodological arguments.

USE OF ARTIFICIAL INTELLIGENCE (AI)

The authors declare that generative artificial intelligence (AI) tools were used exclusively to support language refinement, grammatical improvement, and structural editing during the preparation of this manuscript. AI assistance was not used to develop the study design, generate or analyze research data, interpret the findings, or formulate the scientific conclusions. All conceptual decisions, methodological procedures, analysis, interpretation, and conclusions remain the responsibility of the authors.

CONFLICT OF INTEREST

The authors declare no conflict of interest related to the research, authorship, or publication of this manuscript.

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