

Synthesizing Tradition and Technology in Pesantren Curriculum: A Case Study at Pesantren Al-Falah Situbondo

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ABSTRACT

Pesantren face increasing demands to preserve Islamic traditions while equipping santri with digital literacy and global competencies. This study examines how Pesantren Al-Falah Situbondo adapts its curriculum by integrating classical learning with technological and entrepreneurial innovation. Using a qualitative case study supported by descriptive survey data, the research identifies three dynamics: the persistence of memorization-based pedagogy, fragmented adoption of digital tools, and sporadic entrepreneurship initiatives. These findings reveal that curriculum reform in pesantren is not a replacement of tradition but a negotiated synthesis that connects heritage with contemporary skills. Theoretically, the study offers a framework for integrating Islamic values with global competency models, thereby bridging domains that are often treated as separate. Practically, it provides pesantren leaders and policymakers a blueprint for embedding digital literacy and entrepreneurship into lesson plans without undermining religious identity. This model can guide other pesantren in designing adaptive curricula and inform Islamic education policy aimed at preparing graduates who are both rooted in tradition and ready for global engagement.

Keywords: Curriculum Integration, Digital Literacy, Entrepreneurship, Global Competencies, Pesantren Curriculum

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INTRODUCTION

The evolution of *pesantren* (Islamic boarding schools) in Indonesia has compelled these institutions to address not only the preservation of religious traditions but also the integration of competencies required for the 21st century. The COVID-19 pandemic and the emergence of Society 5.0 have further emphasized the urgency of equipping learners with digital literacy, creativity, collaboration, and entrepreneurship alongside religious Education. International frameworks reinforce this demand: the OECD Learning Compass 2030 identifies global competencies such as critical thinking, problem-solving, and intercultural Communication as essential for navigating an increasingly complex world (Alifah & Sukmawati, 2021), while UNESCO's ICT Competency Framework for Teachers highlights the blending of digital fluency with ethical and intercultural skills (Fatmawati, 2023).

International frameworks have recognized the necessity of these competencies. The OECD Learning Compass 2030 emphasizes the importance of global competencies, such as critical thinking, problem-solving, and intercultural Communication, which are vital for navigating the complexities of modern society (Asror et al., 2023). This perspective aligns with the challenges posed by the rise of Society 5.0, advocating for a society that effectively balances technological advancement with human and societal needs (Hikmat, 2022). In Indonesia, the role of *pesantren* is crucial in achieving this balance, as they can blend traditional religious values with contemporary educational practices, thus producing graduates equipped to engage proactively with current societal challenges (Ilyas et al., 2022; Wasehudin et al., 2023).

Despite these imperatives, many *pesantren* continue to rely on traditional pedagogical methods such as rote memorization and lecture-based instruction. While these approaches safeguard religious heritage, they often inhibit the development of higher-order skills needed in contemporary society (Ilyas et al., 2022; Yulianti et al., 2023). Previous reforms aimed at integrating technology and entrepreneurship have yielded mixed results, often remaining isolated rather than being coherently structured within the curriculum (Aimah & Nasih, 2023; Sya'bani, 2023). Studies further indicate that without a systematic curricular framework, efforts to integrate modern competencies risk fragmentation and ineffectiveness (Prasetyo & Rahmatullah, 2024; Yuli et al., 2023; Yulianti et al., 2023).

The literature reveals a significant research gap concerning the intersection of Islamic values, digital literacy, and entrepreneurship in *pesantren* Education. Most studies address these areas separately, and there is a lack of comprehensive frameworks that integrate them into a unified educational approach (Nugroho & Anam, 2023; Sya'bani, 2023). International scholarship echoes this concern: Šimić et al. (2015) highlight the challenges of embedding 21st-century competencies within traditional educational structures, while Koehler et al. (2013) emphasize the alignment of technological, pedagogical, and content knowledge to foster meaningful innovation. Similarly, Fullan et al. (2018) argue that sustainable educational change requires systemic reforms rather than sporadic initiatives (Fatmawati, 2023).

This study examines how Pesantren Al Falah Situbondo integrates digital and entrepreneurial skills with Islamic pedagogy to address these issues. This study broadens the discussion on *pesantren* Education. It offers educational leaders an insightful guide as one of the first empirical models to combine Islamic character education with global competency standards. The novelty of this approach lies in its potential to preserve tradition while facilitating contemporary global engagement (Azizah et al., 2024; Dewi & Wajdi, 2023). Ultimately, this study seeks to safeguard the cultural heritage of Islamic Education in Indonesia while responding to the pressing demands of the globalized 21st century (Bawono, 2019).

METHOD

This study employed a mixed-methods approach with a qualitative design as its dominant component. The qualitative strand served as the core to capture the depth of lived experiences, while simple quantitative data were used to enrich contextual interpretation. This design is widely recommended for educational research when exploring both cultural meaning and measurable patterns (Creswell & Poth, 2018; Schoonenboom & Johnson, 2017).



Figure 1. Research Design Flowchart

The research was conducted at Pesantren Al-Falah Situbondo, East Java, which has actively engaged in curriculum innovation while maintaining strong traditional practices. A total of 23 participants were purposively selected, consisting of eight teachers, twelve *santri*, and three curriculum coordinators. Purposive sampling is appropriate for case studies that require diverse perspectives from implementers, learners, and decision-makers (Etikan, 2016; Palinkas et al., 2015).

Qualitative data were gathered through semi-structured interviews, focus group discussions, classroom observations, and document analysis of syllabi and lesson plans. Quantitative data were drawn from institutional records and short surveys to provide descriptive support. The use of multiple instruments allowed for triangulation and a more comprehensive understanding of curriculum integration (Cohen et al., 2017; Flick, 2018). All qualitative data were transcribed and analyzed thematically using NVivo software, guided by the framework of Nowell et al. (2017). Coding was conducted collaboratively by two researchers to ensure consistency and depth. Quantitative data were analyzed descriptively to highlight patterns in digital tool usage and exposure to entrepreneurship (Miles et al., 2020).

To enhance credibility, the study employed triangulation across data sources, member checking with selected participants, and peer debriefing with independent reviewers. Dependability was supported by maintaining an audit trail of coding decisions, while confirmability was ensured through collaborative analysis and review. These strategies are consistent with established criteria for qualitative rigor (Nowell et al., 2017). Ethical approval was obtained from the institutional ethics committee before data collection. All participants provided informed consent and were assured of confidentiality and anonymity. Data were stored securely, and participants were free to withdraw at any stage without consequence.

RESULTS AND DISCUSSION

RESULTS

Dominance of Textual and Memorization Methods

The survey and interview responses highlight a clear preference for lecture-based teaching and rote memorization of classical texts among the majority of participants. Out of 23 respondents, 78% emphasized that classroom sessions overwhelmingly focus on delivering content through oral lectures and the systematic memorization of the *Kitab Kuning*. During interviews, teachers repeatedly emphasized the "memorization system" as the primary learning outcome, measuring student success by the volume and accuracy of passages committed to memory. Several instructors noted that classroom activities often fail to venture beyond recitation drills, which they view as essential for preserving religious orthodoxy. *Santri* interviews confirmed that peer discussions and student-led reflections are occasional at best and often omitted altogether. Field observations corroborated these accounts, showing that nearly all lessons followed a unidirectional pattern from teacher to student. In most sessions, the whiteboard or *kitab kuning* text occupied the central focus, leaving little room for dialogic exchange. When opportunities for critical questioning arose, they were usually confined to verifying pronunciation or textual accuracy, rather than exploring deeper meaning. Informal classroom interactions appeared structured to minimize student initiative, channeling attention toward repetition rather than exploration. The dominance of this instructional style was consistent across different subjects and grade levels. Even in elective sessions, where one might expect greater flexibility, memorization remained the core objective. This uniformity underscores the entrenched role of textual authority in the *pesantren's* pedagogical culture.

Several underlying factors contribute to the sustained prominence of memorization as a teaching method. First, the *pesantren's* long-standing tradition venerates the *kitab kuning* as the unassailable foundation of Islamic scholarship, instilling a collective sense of duty to conserve its contents verbatim. Teachers, often trained through similar lineage-based systems, are deeply anchored in the belief that authentic understanding emerges only after faithful rote repetition. This pedagogical heritage is reinforced by institutional norms and community expectations that equate memorization proficiency with religious devotion. Furthermore, limited access to supplementary teaching resources and a paucity of professional development in alternative methodologies reinforce the status quo. Infrastructural constraints, such as large class sizes and inadequate classroom technology, further inhibit the adoption of more interactive approaches. Administrative emphasis on maintaining scriptural accuracy often takes precedence over integrating reflective or critical-thinking activities. As a result, curricular designs remain relatively static, with little incentive for teachers to trial new instructional strategies. While a handful of educators have expressed interest in dialogic and problem-based learning, their efforts often encounter logistical and cultural barriers. These intertwined factors create a self-reinforcing cycle that privileges textual transmission above all else. Breaking this cycle demands not only pedagogical training but also a shift in institutional priorities and resource allocation.

The heavy reliance on textual and memorization methods carries significant implications for *santri*'s cognitive and affective development. By privileging recall over reasoning, students have limited opportunities to engage in analytical thinking or to connect scriptural passages with real-world contexts. The absence of structured debate or reflective dialogue curtails the development of critical questioning skills essential for navigating complex social and ethical dilemmas. Moreover, this teaching approach hinders the development of collaborative learning habits, as peer interaction remains peripheral to the learning process. Consequently, *santri* may excel at recitation but struggle to apply their knowledge creatively or to communicate nuanced interpretations. This misalignment with global competency frameworks, such as those advocating for problem-solving and intercultural communication, poses a challenge for *pesantren* graduates entering higher Education or the workforce. It also risks reinforcing a narrow conception of religious learning that overlooks broader societal needs. Addressing these limitations requires integrating reflective questioning and dialogic methods into existing memorization routines. For instance, brief critical discussions following recitation drills could prompt students to articulate underlying concepts or ethical implications. Embedding structured reflection tasks, even in small cohorts, can gradually shift classroom dynamics toward active learning. Such incremental reforms can honor the *pesantren*'s textual heritage while fostering the higher-order skills necessary for student preparedness in a rapidly changing world.

Fragmented Digital Literacy Integration

Approximately 22% of teachers at Pesantren Al-Falah reported regularly incorporating digital resources into their instructional practices. These resources include multimedia slide decks, short video lectures, interactive online quizzes, and basic learning management systems for distributing materials. In most instances, however, the digital content serves primarily as a repository, a one-way channel through which teachers upload lecture notes, reading assignments, or recorded tutorials. Classroom observations revealed that students seldom engage with these tools beyond passive consumption: they download files, complete multiple-choice tests in isolation, and return to traditional *kitab kuning* recitation in the next session. Even where school leadership has invested in campus-wide Wi-Fi or provided a shared computer lab, usage policies and limited teacher training constrain more advanced applications of technology. As a result, digital platforms function largely as supplementary filing cabinets rather than dynamic learning environments that promote collaboration or self-directed exploration.

A closer analysis of 40 lesson plans underscores the superficial integration of digital literacy into the formal curriculum. In 78% of cases where multimedia is mentioned, it appears in a single "Tech Resources" section, detached from core learning objectives and assessment criteria. Teachers note that digital assignments are optional extras, often completed at home without structured feedback mechanisms built into class time. There is no consistent rubric for evaluating online participation, peer interaction remains unmonitored, and student proficiency in navigating digital tools is never formally assessed. Moreover, many instructors cite technical barriers, intermittent internet, lack of personal devices, and crowded

classrooms as justification for maintaining a hands-on, text-centered approach. Institutional norms reinforce this fragmented model, as administrative guidelines prioritize preserving the integrity of religious texts over piloting new pedagogies, and professional development in educational technology is sporadic and underfunded.

This fragmented adoption of digital tools has significant repercussions for *santri*'s development of higher-order skills. Without meaningful opportunities for online discussion, peer review, or collaborative problem solving, students miss out on cultivating digital citizenship, virtual Communication, and critical inquiry in mediated environments. The current pattern fails to leverage technology's potential to simulate real-world contexts such as managing virtual portfolios or engaging in intercultural dialogue via moderated forums. To move beyond transactional use, *pesantren* need to embed digital activities directly into lesson objectives: for instance, assigning small-group projects using shared cloud documents, facilitating teacher-guided online debates, or integrating formative e-portfolios that track students' evolving competencies. By aligning digital tasks with clear global-competency benchmarks and providing structured feedback loops, the *pesantren* can transform isolated digital interactions into a coherent framework that advances both religious scholarship and 21st-century skills.

Sporadic Entrepreneurship Initiatives

Santri and alumni of Pesantren Al-Falah Situbondo have demonstrated enthusiasm for entrepreneurship through a range of micro-business simulations coordinated by informal student committees and alums networks. These simulations often involve role-playing scenarios where *santri* develop product prototypes, manage small capital budgets, and negotiate mock sales within the *pesantren* community. In parallel, some alumni organize online marketplace projects, listing halal food products, handcrafted items, and digital services on social media platforms. Participation in these ventures remains entirely voluntary, attracting students driven by personal interest rather than institutional mandate. Despite their energy, these projects operate largely as extracurricular pursuits, lacking formal scheduling or integration into the *pesantren*'s official calendar.

A review of 40 lesson plans and institutional documents revealed no explicit alignment between these entrepreneurship activities and curricular outcomes. Teachers and curriculum coordinators confirmed that business simulations and marketplace projects are not mapped to specific learning objectives, assessment criteria, or competency frameworks. As a result, students do not receive structured guidance on skill development, including financial literacy, market analysis, and ethical decision-making. There is no standardized rubric to evaluate *santri*'s performance in planning, execution, or reflection phases of their entrepreneurial endeavors. Without formal benchmarks, facilitators rely on anecdotal observations and self-reported feedback, which makes it difficult to compare performance across cohorts or to assess long-term skill acquisition.

The absence of entrepreneurship in formal assessment frameworks carries significant implications for both learners and the *pesantren* institution. *Santri* who invest time and creativity into simulated ventures may perceive these experiences as extracurricular hobbies rather than integral components of their Education. This

perception undermines the potential for deeper engagement and skill internalization, such as collaboration, problem-solving, and initiative. Moreover, the ad hoc nature of these initiatives limits opportunities for peer learning and mentorship, as each project follows its own informal trajectory without engaging in cross-case reflection or sharing best practices. Institutional memory remains fragmented, and successful models fail to scale beyond the small groups that originated them.

Several factors contribute to the sporadic nature of entrepreneurship initiatives. First, *pesantren* leadership tends to prioritize religious studies and routine memorization schedules over experimental business activities. Second, limited teacher training in entrepreneurship pedagogy means that few instructors feel prepared to guide project-based ventures or to design coherent modules that chart skill progression. Third, resource constraints such as the absence of seed funds or dedicated workshop spaces further restrict the scale and regularity of simulated enterprises. Finally, cultural attitudes that separate spiritual formation from worldly pursuits can discourage formal endorsement of entrepreneurial curricula. These intertwined constraints solidify the peripheral status of business initiatives within the broader educational program.

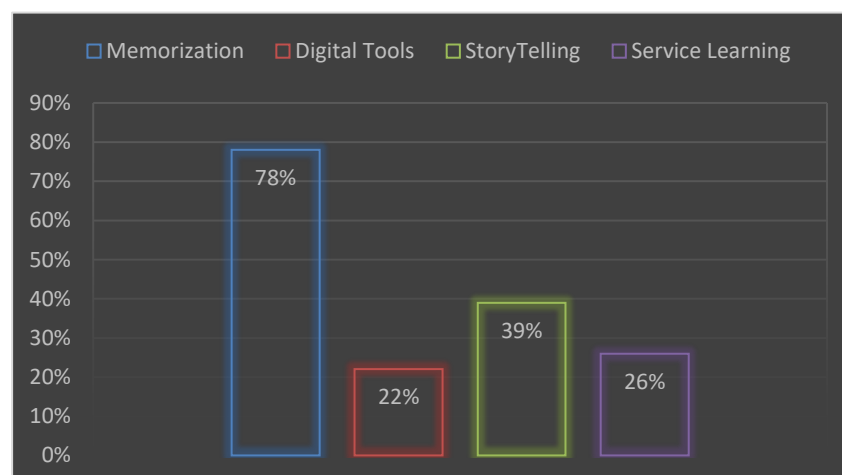


Figure 2. Distribution of Teaching Methods at Pesantren Al-Falah

Figure 2 illustrates the proportional use of five distinct teaching methods at Pesantren Al-Falah Situbondo, with textual and memorization approaches accounting for 78 % of instructional time. Digital tools are used at 22%, indicating that technology remains secondary to traditional practices. Digital storytelling and service-learning activities occupy intermediate positions, with participation rates of 39% and 26%, respectively. Entrepreneurship simulations appear only peripherally and are not reflected in this distribution. The dominance of rote learning underscores the *pesantren's* commitment to preserving classical scholarship through the memorization of *kitab kuning*. At the same time, the relative prevalence of multimedia storytelling and service projects signals emerging interest in interactive and experiential pedagogies.

Despite these nascent innovations, the overall imbalance suggests that digital and entrepreneurial methods have yet to be systematically integrated. Storytelling through digital platforms and community engagement initiatives presents valuable opportunities to foster critical thinking, collaboration, and practical problem-solving in the real world. However, their current status as supplemental activities limits their impact on overall learning outcomes. To enhance curriculum coherence, it is essential to map digital storytelling and service-learning exercises to specific competencies and embed them within core lesson objectives. By doing so, the *pesantren* can maintain its textual heritage while progressively expanding the role of interactive and technology-mediated instruction.

Table 1. Summary of Key Findings

Theme	Main Finding	Percentage / Indicator
Textual / Memorization Methods	Teacher-centered instruction dominated by rote memorization of <i>Kitab Kuning</i> .	78% of respondents
Digital Literacy	Limited and fragmented use of digital tools, mainly for material distribution.	22% of teachers use LMS
Storytelling	Innovative practice through digital storytelling, but not systematically applied.	39% participation
Service Learning	Community-based/service-learning projects exist but remain isolated initiatives.	26% participation
Entrepreneurship	Micro-business simulations and online marketplace projects remain peripheral to the core of the business.	No standardized indicators
Global Competencies	Only a small portion of lesson plans explicitly references global competencies.	10% of 40 lesson plans

Table 1 provides a concise overview of the various pedagogical approaches represented within the curriculum at Pesantren Al-Falah Situbondo. The overwhelmingly dominant mode remains textual and memorization methods, which are embraced by 78% of respondents, underscoring the *pesantren*'s enduring commitment to rote mastery of *the kitab kuning*. In contrast, digital literacy tools appear in just 22 % of teaching plans, indicating that technology is still largely relegated to minor, supportive functions. Digital storytelling (39%) and service-learning (26%) occupy intermediate positions, suggesting that experiential and narrative practices have gained some traction but remain far from widespread. Entrepreneurship initiatives, meanwhile, are entirely peripheral, lacking standardized indicators or formal assessment, and global competencies are explicitly addressed in only 10% of lesson plans.

The disparity among these themes highlights a curricular tension between tradition and innovation. Rote memorization secures scriptural fidelity but leaves

little room for interactive or technology-mediated learning, which can foster critical thinking, collaboration, and ethical problem-solving. The modest uptake of digital storytelling and service-learning indicates educators' nascent efforts to diversify instructional strategies; however, the absence of systematic integration prevents these methods from significantly influencing the curriculum's overall coherence. Similarly, entrepreneurship exercises operate outside formal frameworks, depriving *santri* of structured opportunities to develop financial literacy, market analysis skills, or ethical decision-making within the academic program.

To realign instructional practices with broader educational goals, Pesantren Al-Falah must move beyond ad hoc implementation and embed these emerging methods into core curricular objectives. This entails devising clear competency-based rubrics for digital literacy and entrepreneurial projects, ensuring their outcomes are assessed alongside traditional recital benchmarks. By mapping global competencies onto lesson activities and evaluations, the institution can preserve its textual heritage while equipping *santri* with the multifaceted skill set required in a digitally connected, globalized society.

Limited Incorporation of Global Competencies

A systematic review of 40 lesson plans at Pesantren Al-Falah revealed that only 10% explicitly reference global competencies, such as cross-cultural critical thinking, virtual collaboration, or digital citizenship. In these few instances, competency labels appear in isolated "Learning Outcomes" sections without further elaboration in the activity design or assessment criteria. Teachers who included global skills often did so by appending a single bullet point, for example, "students will discuss social implications of text in small online groups" rather than weaving intercultural dialogue or problem-solving exercises throughout the lesson. Consequently, competency language remains ornamental: it signals aspirational goals but fails to shape teaching strategies or student expectations. Observations confirmed that when global skills are mentioned, they are seldom activated in class discussions or assignments. This superficial incorporation limits *the santri's* awareness of how religious texts connect to broader global contexts and reduces opportunities for them to engage in critical inquiry in a digitally mediated environment.

Despite the emergence of experimental practices such as digital storytelling (with 39% participation) and service-learning projects (with 26% participation), these initiatives operate on the curricular margins and lack coherent alignment with the stated competencies. In many cases, *santri* complete multimedia narratives or community outreach tasks as optional modules, with no referential link to lesson objectives or formal evaluation. As a result, educators struggle to track progress in areas like intercultural Communication or collaborative problem solving, and *santri* receive little feedback on their ability to apply reflective or ethical reasoning in real-world scenarios. The absence of structured rubrics and mapped competency checkpoints further prevents these activities from generating cumulative evidence of skill development. To transform isolated innovations into integral learning experiences, the curriculum must explicitly map each activity to a global-competency framework, embed relevant tasks within core lesson

sequences, and assess outcomes with concise, criterion-referenced instruments. Such a redesign would ensure that digital storytelling and service-learning become sustained pathways for *santri* to internalize the higher-order skills necessary for global engagement.

DISCUSSION

Textual Dominance and the Limits of Higher-Order Thinking

The persistence of rote memorization within *pesantren* reflects a profound cultural alignment with Salafi traditions that prioritize mastery of classical texts as the ultimate marker of scholarly achievement (Abduh & Taqwa, 2022; Riza, 2023). In daily practice, instructors allocate extensive classroom hours to recitation drills, viewing the accurate reproduction of *kitab kuning* passages not merely as an instructional technique but as a spiritual obligation and rite of passage. Institutional schedules, often rigidly structured around memorization targets, leave scant opportunity for dialogic engagement or student-initiated inquiry. Physical learning environments, limited to narrow study halls or informal reading circles, reinforce unidirectional teaching, with the teacher's voice dominating and student agency confined to repetitive tasks. This configuration, while safeguarding textual fidelity, inadvertently narrows the intellectual terrain available to *santri*, constraining their ability to interrogate, contextualize, or apply religious knowledge in broader social or ethical contexts.

This overwhelming reliance on textual transmission carries significant ramifications for the cognitive and affective development of *santri*. By privileging recall over analysis, students receive limited exposure to higher-order thinking skills, such as synthesis, evaluation, and creative problem-solving. Without structured opportunities for debate, reflective dialogue, or problem-based learning, learners lack the habit of questioning underlying assumptions or exploring multiple interpretations (Jayanegara et al., 2024). Consequently, despite exceptional proficiency in recitation, *santri* often struggle to exercise critical reasoning or to connect scriptural insights with contemporary challenges. The absence of collaborative inquiry further constrains the development of intercultural Communication and ethical decision-making competencies that are increasingly indispensable in academic and professional arenas.

Fragmented Digital Literacy Integration

The integration of digital literacy within Pesantren Al-Falah remains deeply fragmented, with technology predominantly serving as a channel for distributing lecture notes and reading materials rather than fostering interactive learning (Putera et al., 2021). Only 22% of teachers reported regular use of multimedia modules, online quizzes, and basic LMS functions; yet, even these applications are confined to uploading documents and ungraded assessments (Reynolds, 2024). Classroom observations revealed that students typically download files for individual review and revert to traditional *kitab kuning* recitation in subsequent lessons. Instructors seldom design activities that require synchronous or asynchronous peer interaction through digital platforms. Where Wi-Fi and computer labs exist, strict usage policies and minimal pedagogical training limit teachers to transactional practices. Consequently, the educational potential of

collaborative note-taking, peer feedback, and guided online discussions goes untapped. Digital devices are often treated as digital filing cabinets, rather than as transformative tools for student engagement. Infrastructural constraints, unstable connectivity, insufficient devices, and overcrowded classrooms reinforce this perception. Teachers often cite these barriers to justify maintaining a text-centered pedagogy without exploring more dynamic uses of educational technology. Institutional guidelines prioritize preservation of religious texts over experimentation with digital methodologies. Professional development in edtech remains infrequent and narrowly focused on software operation rather than instructional design. As a result, digital literacy activities are largely peripheral and fail to disrupt the entrenched routine of memorization.

A detailed review of 40 lesson plans underscores the superficial incorporation of digital tools into formal curriculum documents. In 78% of plans that mention multimedia resources, digital tasks appear only in optional "Supplemental Materials" sections, which are separate from the core learning objectives. None of the reviewed RPPs include explicit rubrics for assessing online collaboration, peer review, or digital communication skills (Putera et al., 2021).

The absence of assignments such as recorded reflections or participatory webinars in assessment frameworks highlights a critical gap in online Education, particularly within programs like *pesantren* that aim to integrate traditional educational practices with modern competencies. Teachers often lack a robust monitoring system for student contributions in online forums, which hinders their ability to provide structured feedback necessary for fostering skills such as digital citizenship and collaborative problem-solving (Cleofas & Labayo, 2024). Consequently, lesson plans often do not include defined milestones that link tool usage to global competency benchmarks, resulting in a scenario where student participation in digital tasks is perceived as an optional, minor aspect of their educational journey rather than a vital component (Wang, 2024). Furthermore, students often receive inadequate guidance on online etiquette and collaborative workflows, which exacerbates the situation by allowing them to regard digital assignments as supplementary rather than integral to their learning trajectory (Brunton et al., 2022). Ultimately, this curricular design, which nominally incorporates technology, fails to leverage its full potential in developing higher-order skills, as the framework lacks a cohesive integration of digital tools with targeted competency objectives necessary for contemporary learners (Castillo et al., 2024).

To overcome transactional uses of technology, Pesantren Al-Falah must embed lightweight, asynchronous activities that thrive despite infrastructural limitations. Peer review exercises conducted via shared cloud documents can cultivate cooperative problem-solving and accountability (Şahin, 2018). Online discussion boards, moderated by teachers, can simulate intercultural dialogue and facilitate virtual collaboration. Structured e-portfolios, updated regularly with digital storytelling artifacts, enable both self-reflection and teacher-guided assessment. Clear competency criteria, such as benchmarks for timely contributions, respectful feedback, and technical proficiency, must be integrated into rubrics. Professional development should shift from basic tool operation to

designing learner-centered digital tasks aligned with curriculum goals. Administrative policies need revision to recognize digital participation as a graded component of student achievement. Ultimately, incremental pilot programs can document successes, foster institutional support, and establish a repository of best practices. By matching each digital activity with defined global-competency outcomes, the *pesantren* can convert isolated technological interactions into a coherent framework for 21st-century skill development. This approach maintains respect for traditional scholarship while unlocking the collaborative and critical potential of educational technology.

Entrepreneurship as a Peripheral Practice

Entrepreneurial initiatives in Pesantren Al-Falah are diverse but intermittent, reflecting strong student enthusiasm without systemic endorsement (Suparjo & Hidayah, 2023). Micro-business simulations introduce students to product prototyping, small-capital budgeting, and customer negotiations; however, these exercises are often initiated on an ad hoc basis by student committees or alums groups, rather than being integrated into formal coursework (Wiratama & Safitri, 2023). Informal online marketplace projects see *santri* listing halal food items, crafted goods, and digital services on social media, but participation remains voluntary and unmonitored. These ventures yield valuable insights into entrepreneurial mindsets but lack institutional scaffolding to transform experiential learning into documented competency growth. Observations show that each project unfolds and concludes within narrow time frames, curtailing opportunities for reflection or iterative improvement. Student feedback highlights both excitement for real-world business challenges and frustration over the absence of structured guidance or assessment. Facilitators, often without formal entrepreneurship training pedagogy rely on informal mentoring rather than documented instructional plans. Consequently, every new cohort must reinvent the process, and promising models fail to accumulate institutional memory. This sporadic pattern underscores how entrepreneurship remains peripheral to the *pesantren's* core educational mission.

A review of existing lesson plans confirms the disconnect between entrepreneurial practice and the formal curriculum (Wiratama & Safitri, 2023). Micro-business simulations and online marketplace projects are conspicuously absent from official RPP documents, with no designated learning outcomes or competency benchmarks in place. Teachers report that these activities occur outside regular class hours and do not feature in any assessment rubrics or formal evaluations. Without standardized indicators for opportunity recognition, financial literacy, or ethical decision-making, facilitators cannot systematically gauge individual or cohort progress. The lack of checkpoint mechanisms also impedes longitudinal tracking of *santri's* entrepreneurial skill development across academic terms. As a result, institutional leaders remain unaware of cumulative impacts and struggle to allocate resources or scale successful pilots. For *santri*, this relegation to extracurricular status undermines the perceived value of their efforts and limits deep engagement with business concepts. The bifurcation of religious and entrepreneurial instruction perpetuates a compartmentalized view of

Education, hindering the integrated skill sets demanded in contemporary global contexts.

Several interrelated factors perpetuate the peripheral status of entrepreneurship in the *pesantren* setting. First, institutional priorities prioritize religious studies and memorization targets over vocational competencies, reflecting historical legacies and community expectations (Suparjo & Hidayah, 2023). Second, most teachers lack professional development in entrepreneurship education, leaving them ill-equipped to design project-based modules or assess multifaceted business skills (Wiratama & Safitri, 2023). Third, resource constraints such as the absence of seed funding, dedicated workspaces, or a digital platform limit both the scale and regularity of simulations and market experiments. Fourth, cultural attitudes that separate spiritual cultivation from worldly pursuits discourage formal endorsement of business learning. Finally, variable leadership commitment and frequent turnover hinder the continuity of pilot programs and the institutionalization of emerging best practices. These factors interact in a self-reinforcing cycle, ensuring that entrepreneurship remains marginal rather than central to *santri's* pedagogical experience.

To reposition entrepreneurship as an integral curricular domain, Pesantren Al-Falah must adopt a coherent framework that articulates clear learning outcomes and embeds assessment criteria in lesson plans (Anshori et al., 2022). Core competence domains should include opportunity recognition, basic financial literacy, ethical decision-making, and an innovation mindset. Each domain can be operationalized through specific tasks such as market research briefs, budgeting simulations, and moral dilemma debates sequenced across the academic term. Structured rubrics must outline performance indicators for these tasks, enabling facilitators to monitor *santri's* progression and deliver targeted feedback. Scheduled checkpoints within the curriculum ensure that entrepreneurial skills are revisited and reinforced throughout the curriculum. Professional development workshops should equip teachers with strategies for designing experiential learning and competency-based assessments. Complementary resource support micro-grants, dedicated workspaces, and digital marketplaces, can sustain project execution and foster community partnerships. By aligning these elements with international competency frameworks, the *pesantren* can transform motivational pilot projects into scalable, sustainable learning pathways that honor religious heritage while preparing graduates for a dynamic socio-economic landscape.

Limited Incorporation of Global Competencies

Integrations of service-learning and digital storytelling at Pesantren Al-Falah illustrate early efforts to develop global competencies, but remain largely peripheral to formal curriculum documents (Ulum & Perdana, 2022). In the 40 lesson plans reviewed, references to these practices appear in isolated activity descriptions without linkage to overarching course objectives. Educators may list a "community outreach project" or "multimedia narrative assignment" under supplemental exercises; however, these initiatives often lack explicit statements of desired skills, such as intercultural Communication or digital citizenship. As a result, *santri* engage in valuable experiential tasks, but neither their performance nor the impact of these activities is systematically recorded. Classroom

observations confirm that service-learning and storytelling sessions often conclude without debriefing or reflective evaluation tied back to stated competencies. This disconnect prevents the accumulation of evidence on which pedagogical approaches are most effective for fostering 21st-century skills.

The disjunction between aspirational competency references and pedagogical implementation reveals a critical design gap. Competencies are frequently mentioned in vision statements or introductory remarks of syllabi, yet they do not translate into measurable learning outcomes or assessment criteria. Without clear operational definitions, terms like "critical thinking" or "virtual collaboration" remain abstract aspirations rather than concrete targets for instruction and learning. Teachers accustomed to text-centered pedagogy lack structured guidance for transforming these competencies into classroom tasks and evaluation rubrics. Consequently, *santri* may complete digital storytelling projects or facilitate local service events but graduate without a clear sense of their proficiency in framing problems, negotiating cultural differences, or upholding digital ethics. This fragmentation undermines institutional capacity to track progress and hinders iterative refinement of teaching methods.

Assignments such as recorded reflections or participatory webinars are absent from assessment frameworks. Even when teachers propose online forums, there is no mechanism for monitoring student contributions or providing structured feedback. This detachment prevents alignment between digital activities and desired competencies, such as digital citizenship and cooperative problem-solving. Lesson plans lack milestones that map tool use to specific global-competency benchmarks, leaving participation unquantified. *Santri* receive little to no guidance on best practices for online etiquette or collaborative workflows. Consequently, students may view digital assignments as discretionary side tasks rather than integral components of their learning trajectory. The result is a curricular design that nominally acknowledges technology but does not leverage it to build higher-order skills.

An iterative approach to curriculum design will enable Pesantren Al-Falah to honor its rich textual heritage while systematically preparing *santri* for global engagement. Initial pilot implementations can focus on a single competency strand, such as digital citizenship, refining activities and assessment criteria through educator feedback and student reflections. Subsequent phases can layer additional competencies, gradually expanding the framework to encompass a full suite of 21st-century skills. Continuous monitoring of student artifacts, e-portfolios, project reports, and reflective journals will yield data to inform instructional adjustments and resource allocation. Over time, this structured, competency-based approach can transform service-learning and digital storytelling from peripheral experiments into core pedagogical pillars that bridge tradition and innovation.

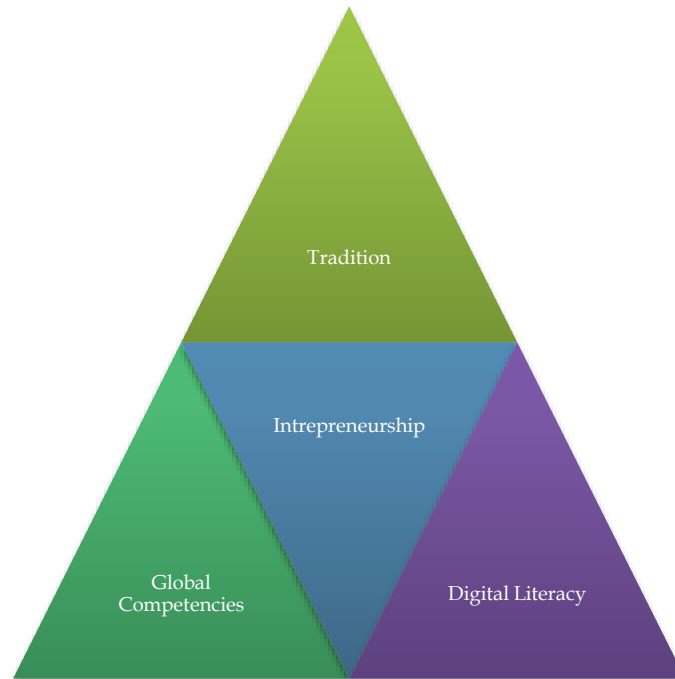


Figure 3. Conceptual model of curriculum synthesis

Figure 3 presents a four-pillar framework in which the *pesantren's* textual traditions form the resilient foundation upon which digital literacy, entrepreneurship, and global competencies are systematically layered. Tradition occupies the central axis, anchoring curriculum content in the memorization and interpretation of classical texts. Branching outward, digital literacy introduces tools and practices that enable *santri* to navigate, create, and critique knowledge in virtual environments. At the same time, entrepreneurship embeds real-world problem-solving and ethical decision-making into everyday learning. Global competencies encompassing critical thinking, intercultural Communication, and collaborative inquiry capstone the model by ensuring that all activities, whether text-based or technology-mediated, are explicitly aligned with the skills required for global engagement.

The intersecting zones in the model emphasize that none of these domains stands alone; rather, each informs and energizes the others. For instance, rote learning of *kitab kuning* can be enriched through digital storytelling projects that prompt reflective questioning, or through micro-enterprise simulations that task *santri* with applying scriptural ethics to market scenarios. By articulating clear linkage points, such as mapping digital tasks to intercultural dialogue or embedding entrepreneurship rubrics within memorization routines, the model conveys a negotiated synthesis — one that preserves the *pesantren's* heritage while progressively cultivating the higher-order capacities essential for life in a digitally connected, globalized world.

CONCLUSION

This study reveals that digital literacy and entrepreneurship are only partially integrated into the curricular practices at Pesantren Al Falah Situbondo, which are still heavily influenced by traditional textual and memorization methods. These methods preserve cultural history, but they also hinder the methodical development of global skills, such as creativity, teamwork, and critical thinking. The results emphasize the necessity of a curriculum plan that purposefully blends modern skills with Islamic beliefs. Theoretically, this research contributes by extending the discourse on *pesantren* Education beyond descriptive accounts of tradition. It offers an empirical model that bridges Islamic pedagogy with international frameworks on 21st-century competencies, particularly those emphasized by OECD (2019) and UNESCO (2021). Practically, the model provides *pesantren* leaders with a blueprint for integrating digital and entrepreneurial elements into lesson plans without compromising their religious identity. It also offers policymakers a framework for aligning *pesantren* curricula with national education reforms and global competency agendas.

This study has limitations. Its single-site case design restricts generalizability, and the absence of longitudinal data limits the ability to assess the long-term impacts of curriculum integration. Future research should therefore examine multiple *pesantren* across diverse regions, employ mixed methods with stronger quantitative measures, and explore longitudinal outcomes to capture the sustainability of curriculum reforms. Despite these limitations, the proposed curriculum model has strong potential for replication in other *pesantren*. By embedding global competencies into Islamic Education, *pesantren* can remain faithful to their heritage while equipping *santri* with the skills needed to thrive in a globalized, digital society. This alignment not only strengthens the relevance of *pesantren* in contemporary Indonesia but also supports broader Islamic education policy aimed at producing graduates who are both rooted in tradition and prepared for global engagement.

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