

Malay-Islamic Ecotheology, Turath Literacy, and 21st-Century Skills: Strengthening Students' Cultural Resilience at MTs NU Putra 1 Buntet Pesantren Cirebon

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Abstract: This study examines the integration of Malay-Islamic ecotheology, turath literacy, and 21st-century skills as a strategy for strengthening students' cultural resilience at MTs NU Putra 1 Buntet Pesantren Cirebon. Using a qualitative field approach, data were collected through semi-structured interviews, observation, and documentation involving the madrasah principal, vice principal for curriculum, Islamic Education and NU studies teachers, turath teachers, IT/literacy teachers, student activity advisors, and students. The data were analyzed thematically through condensation, coding, theme presentation, triangulation, interpretation, and conclusion drawing. The findings show that turath literacy functions as the intellectual, moral, and epistemic foundation of santri, while 21st-century skills are developed through digital literacy, communication, collaboration, creativity, and critical thinking. The integration of these elements appears in classroom learning, religious habituation, IPNU activities, the use of madrasah facilities, teacher role modelling, and the contextual strengthening of Aswaja character. This study contributes to Islamic education by positioning turath not merely as a classical textual heritage, but as a moral ecology of education that connects pesantren tradition, Aswaja values, technology, and digital culture to strengthen students' adab, Islamic identity, and adaptive cultural resilience in the multipolar era. **Keywords:** Malay-Islamic ecotheology; turath literacy; 21st-century skills; cultural resilience; Aswaja; pesantren-based madrasah.

Introduction

Islamic education in the multipolar era faces a dual challenge. On the one hand, Islamic educational institutions are required to maintain the continuity of scientific traditions, manners, religious authority, and cultural identity that is inherited across generations. On the other hand, the same institution must also prepare learners to be able to live in a world shaped by digital technology, rapid information flow, global competition, ecological crisis, and increasingly complex cultural encounters. This condition makes pesantren-based madrasah as a strategic space because in it there is a meeting between formal curriculum, pesantren tradition, moral discipline, character formation, and modern skill demands (Azra, 2012; Banks, 2016; UNESCO, 2020).

The theme of ICON-IMAD XV 2026, namely Malay-Islamic ecotheology as cultural resilience in a multipolar era, provides an important framework for reading this reality. Ecotheology is not only understood as a concern for the natural environment, but also as a monotheistic view of man's relationship with God, knowledge, nature, society, culture, and technology. In the perspective of Islamic education, ecotheology can be extended to the moral ecology of education, which is the value system that governs how knowledge is learned, how technology is used, how humans interact, and how traditions are maintained adaptively. Thus, pesantren-based madrasah can be understood as an educational ecosystem that forms the cultural resilience of santri (Hancock, 2010; Rohman et al., 2024; Taufikin, 2025).

Cultural resilience does not only mean the ability to maintain outward forms of tradition. Cultural resilience is more properly understood as the ability of a community to maintain its identity, values, collective memory, and moral orientation while still being able to adapt to change. In the context of santri, cultural resilience is seen when students continue to hold pesantren, understand Islamic scientific traditions, have a moderate attitude, are able to filter digital influences, and remain productive in new social spaces. Therefore, cultural resilience requires integration between the roots of tradition and the prowess of the times (Banks, 2016; UNESCO, 2020).

Turath literacy becomes one of the important foundations in strengthening the cultural resilience of students. Turath refers to the intellectual treasures of classical Islam inherited through the kitab kuning, scholarly isnad, the discipline of reading texts, and learning ethics typical of pesantren. Turath literacy was not merely the technical ability to read Arabic texts without harakat. It includes the ability to understand the structure of science, respect the authority of scholars, reason gradually, and connect the teachings of Islam with everyday life. In an environment of adolescents who are familiar with social media, turath literacy can be an epistemic filter so that students do not easily accept religious information that is superficial, extreme, or disconnected from scientific traditions (Azra, 2012; Pratama & Nurhakim, 2023).

However, the preservation of turath is not enough. Students also need 21st-century skills to be able to participate meaningfully in contemporary society. Critical thinking, creativity, communication, collaboration, and digital literacy skills are essential prerequisites for learners to understand problems, produce work, communicate

across spaces, and use technology productively. Contemporary educational literature places the 4Cs as the core competencies that future learners need; meanwhile, Islamic education needs to ensure that these skills are directed by the values of *adab*, *amanah*, responsibility, and benefit (Partnership for 21st Century Skills, 2009; Thornhill-Miller et al., 2023).

The encounter between *turath* literacy and 21st-century skills demands an integrative educational model. Traditions should not be treated as burdens of the past that hinder progress. Instead, tradition needs to be placed as a source of values, epistemology, and moral orientation to interpret change. Digital modernity also does not need to be seen as a single threat, but as a new space that must be filled with Islamic ethics, creativity, and constructive communication. This is where *pesantren*-based madrasahs have a great opportunity to offer an educational model that is both rooted and adaptive (Mujahid & Fajrina, 2023; Pratama & Nurhakim, 2023).

MTs NU Putra 1 Buntet Pesantren Cirebon is a relevant location to be studied. The profile of the madrasah shows that this institution is located in the Pondok Buntet Pesantren complex of Mertapada Kulon Village, Astanajapura District, Cirebon Regency. This madrasah is a change from Muallimin Religious Teacher Education (PGA) of Buntet Pesantren which was founded by the *kiai* Buntet Pesantren in 1958, then adjusted to the regulation to MTs NU Putra 1 Buntet Pesantren in the period 1977-1978. The historical identity shows that this madrasa was not born as a formal institution separate from *pesantren*, but grew out of a strong tradition of religious education.

From the aspect of institutional quality, the profile of madrasah recorded a stable development of accreditation. The madrasah was registered in 1981, obtained Grade B accreditation in 2006, Grade A accreditation in 2013, Grade A accreditation with a value of 92 in 2019, and returned to A accredited status in 2024. In the 2025/2026 school year, the number of students was recorded at 736 people spread over classes VII, VIII, and IX. These data show that MTs NU Putra 1 Buntet Pesantren has a large student base, a long history, and strong institutional legitimacy.

Another uniqueness of this madrasah is seen in the formulation of its vision, mission, and development needs. The madrasah profile affirms the importance of 21st-century skills, namely critical thinking, creativity, communication, collaboration, and digital literacy. At the same time, *turath* literacy is understood as the readiness of graduates to read, understand and apply the values of the *kitab kuning*. The mission of the madrasah includes the development of religious and general literacy culture, writing creativity, ICT utilization, local arts, character, extracurricular, yellow book reading skills, and involvement of students in community religious activities. In other words, the institutional documents of the madrasah have explicitly linked the traditions of the boarding school with modern competencies.

Starting from this background, this article is directed to answer four research questions. First, how does the madrasah community understand *turath* literacy and 21st-century skills as part of strengthening *santri*'s cultural resilience? Second, how is the integration of *turath* literacy and 21st-century skills implemented in learning, madrasah culture, and student activities? Third, how does the integration contribute to the strengthening of Islamic identity, *adab*, *santri* character, and cultural resilience in the digital era? Fourth, what factors support, hinder, and need to be strengthened in the implementation of the program?

Method

This study employed a qualitative field approach. The qualitative approach was chosen because the focus of the research concerns meaning, practice, institutional culture, the experience of the madrasah community, and the interpretation of values rather than quantitative measurement. The research was directed at understanding how *turath* literacy and 21st-century skills are understood, implemented, and interpreted as a strategy for strengthening students' cultural resilience at MTs NU Putra 1 Buntet Pesantren Cirebon (Creswell, 2015).

The research location is MTs NU Putra 1 Buntet Pesantren Cirebon. The research site was selected purposively because this madrasah has several characteristics that correspond to the theme of the study. First, it has strong historical roots in *pesantren* through the transformation of Muallimin Religious Teacher Education of Buntet Pesantren. Second, it has a clear *Nahdlatul Ulama* and *Ahlussunnah wal Jamaah* identity. Third, the madrasah profile document places *turath* literacy, 21st-century skills, digital literacy, and literacy culture as part of the institutional development direction. Fourth, the madrasah has a large number of students and supporting facilities such as libraries, computer laboratories, language laboratories, science laboratories, skills rooms, and art rooms.

Research data sources consist of primary data and secondary data. Primary data were obtained through semi-structured interviews with the madrasah principal, vice principal for curriculum, NU studies, Islamic Education, and *turath* teachers, general-subject teachers or IT/literacy teachers, student activity or IPNU advisors, and students of class VII, VIII, and IX. Primary data were also obtained through observation of the learning process, madrasah culture, student activities, use of facilities, and daily *adab* practices. Secondary data were obtained from madrasah profiles, curriculum documents, learning tools, religious activity schedules, program notes, vision and mission documents, and other relevant supporting materials.

The research instruments were arranged in the form of interview guidelines, observation sheets, and documentation study sheets. The madrasah principal interview guide explores the history of the institution, the peculiarities of pesantren-based madrasahs, Aswaja's vision, turath literacy, 21st-century skills, strategies to maintain pesantren identity, obstacles, and success indicators. The interview guide for the vice principal for curriculum explores the position of turath in the curriculum, the integration of Aswaja values, the use of teaching modules, character evaluation, and the strengthening of digital-pedagogy. The teacher interview guide explores the understanding of turath, the source texts, learning methods, the internalization of adab, the use of technology, and the contribution of the program to the character of the students. Student interview guidelines explore turath learning experience, technology utilization, understanding of adab, social media challenges, and pride of santri identity.

Observations were made on learning indicators, daily culture, teacher-student interaction, literacy activities, student activities, use of facilities, and conditions of facilities. The observation sheet contains aspects such as tadarus habituation, summary writing activities, classroom utilization, IPNU activities, use of pesantren adab, availability of facilities, and field-level constraints. Documentation studies are directed at madrasah profiles, vision and mission, curriculum, lesson plans or teaching modules, religious activity schedules, student data, teacher data, facilities, achievements, and program documents that show the integration of turath, Aswaja, digital literacy, and 21st-century skills.

Data analysis was conducted thematically. The first stage was data condensation, namely selecting information relevant to the research focus. The second stage was coding the data based on categories of understanding, learning implementation, madrasah culture, contribution to cultural resilience, supporting factors, constraints, and strengthening strategies. The third stage was presenting the data in a thematic narrative. The fourth stage was drawing conclusions through triangulation of sources and techniques. Data validity was maintained by comparing the results of interviews, observations, and documents. Interpretation was conducted by linking field findings with Islamic education theory, turath literacy, Aswaja, 21st-century skills, educational ecotheology, and cultural resilience (Miles et al., 2014).

Ethically, this research positioned informants as respected subjects. Interviews were conducted by taking into account the willingness of informants, the use of language that is easy to understand, and the avoidance of questions that are too direct. The name of the student informant can be disguised if the article is published. The data used in the article is presented academically for the benefit of scientific development and is not intended to judge individuals or institutions personally. Internal madrasah documents were used only as institutional data and were interpreted in relation to interview and observation findings.

Results and Discussion

1. Institutional context of MTs NU Putra 1 Buntet Pesantren

The first finding shows that the cultural resilience of students at MTs NU Putra 1 Buntet Pesantren cannot be separated from the institutional history of the madrasah. This institution grew out of the tradition of religious teacher education Muallimin Buntet Pesantren founded by the kiai in 1958. The change to MTs NU Putra 1 Buntet Pesantren in the period 1977-1978 was not just an administrative change, but an adjustment to the form of pesantren education with National Religious Education Regulations. This makes the identity of the madrasah stand on two legs: as a formal institution of the Ministry of Religious Affairs and as part of the ecosystem of pesantren Buntet.

Such historical contexts are important because cultural resilience always requires collective memory. Students not only learn subjects, but also are in a space that has genealogy, traditions, and religious symbols. The existence of madrasahs in the Buntet Pesantren complex strengthens the educational atmosphere that cannot be completely reduced to classroom activities. The value of piety, manners, discipline of worship, respect for teachers, and pride as students become part of the daily living environment.

The institutional profile also shows a fairly strong formal capacity. The madrasah has land, buildings, courtyards, learning facilities, large student numbers, and an increasing history of accreditation. Grade A accreditation in 2013, 2019, and 2024 shows external recognition of the quality of madrasah management. This is relevant to the study because turath and 21st-century skills integration programs require institutional carrying capacity. Without adequate management, facilities, teachers, and organizational culture, integrative ideas easily cease to exist as slogans.

In the profile of the madrasah, the direction of development also confirms the relationship between religion, literacy, technology and skills. 21st-century skills are defined as graduates' ability to think critically, creatively, communicatively, collaboratively, and be proficient in digital literacy. Turath literacy is interpreted as mastery of the kitab kuning, both reading, understanding, and applying its values. This formulation shows that the madrasah already has an institutional language that connects the heritage of pesantren with the needs of the times. Thus, the integration of turath and modern skills is not an outside agenda, but is in line with the vision and mission of the

madrasah.

The facilities recorded in the madrasah profile reinforce these integration opportunities. Libraries can support reading culture; computer laboratories support digital literacy; language laboratories support communication; science laboratories support scientific and critical thinking; skills and arts spaces support creativity; while religious activities and IPNU support the formation of Aswaja's identity. This combination makes the madrasah an educational ecology that allows the relationship between text, practice, technology, and culture to take place.

This institutional context also shows that the term ecotheology in IMAD's theme can be read contextually. Ecotheology not only talks about nature as an object of conservation, but also about the ecosystem of values that maintain human life. In a pesantren-based madrasah, the ecosystem consists of turath texts, teachers, students, worship activities, learning facilities, organizational culture, family, pesantren, and community. If these elements work synergistically, madrasahs can form students who have a balance between faith, knowledge, adab, and skills.

In the perspective of Islamic education, the context of MTs NU Putra 1 Buntet Pesantren can be read as an example of how traditional institutions adapt without losing roots. Institutional adaptation is seen in the acceptance of formal curricula, the use of digital facilities, the strengthening of 21st-century skills, and active learning. The roots of tradition can be seen in turath, Aswaja, adab, worship habits, and relationships with pesantren. Both are not positioned dichotomously, but are developed as two complementary resources.

2. The madrasah community's understanding of turath literacy and 21st-century skills

The second finding shows that the madrasah community understands turath literacy as the intellectual and moral roots of santri. The madrasah principal explained that turath is important to be instilled since the MTs level because adolescence is a phase of identity formation. At this age, students begin to be exposed to various religious views and digital culture. If they do not have a turath foundation, they are easily receptive to unverified religious information. Turath is therefore positioned as *manhajul fikr*, that is, a way of thinking that is *bersanad*, sequential, and civilized.

The deputy head of curriculum understands turath as part of an integrated learning structure. Turath is placed through local religious content, early learning activities, and companion modules. This meaning is important because turath is not only taught in book-based learning spaces, but is also connected with the Islamic Education subject cluster, NU studies, worship habits, and character formation. Within this framework, turath literacy becomes a device for interpreting, internalizing, and practicing Islamic values in students' lives.

NU studies teachers and teachers of jurisprudence understand turath as an authoritative transmission of classical Islamic knowledge. Books such as *Safinatun Najah*, *Sulamut Taufiq*, *Taisirul Khalaq*, and *Aswaja* material are seen as relevant to form the jurisprudence of worship, morals, manners, and ways of behaving towards differences. Teachers not only emphasize textual reading, but also methodological understanding so that students have solid *sanad* roots. IT teachers view the value of *Aswaja* as a guide to digital ethics, so that technological expertise must be controlled by the morals of pesantren.

Student comprehension indicates varying degrees of mastery, but the direction of meaning is consistent. Some students understand turath as unvowelled Arabic texts used in religious learning. Other students understand it as a legacy of classical scholars that contains jurisprudential rules, morals, and ethical guidance. Higher-class students began to view turath as an intellectual treasure that distinguishes pesantren students from general students. This variation in understanding is natural because turath literacy develops gradually according to age and learning experience.

21st-century skills are understood by the madrasah community as the ability not to stutter in the face of change. The madrasah principal emphasized that students need to think critically, creatively, communicatively, collaboratively, and digitally literate. This vision shows that the pesantren tradition is not intended to keep students away from the times. Instead, tradition becomes the moral basis for students to be able to use knowledge and technology correctly. In other words, 21st-century skills must be civilized, while manners must be able to be present in the world of the 21st-century.

This understanding shows the existence of an integrative framework. Turath is placed as roots, *Aswaja* as an attitudinal orientation, and 21st-century skills as an instrument of adaptation. If one of the elements is released, the educational model becomes lame. Turath without modern skills can result in less communicative preservation. Modern skills without turath and *Aswaja* can result in technical prowess that loses moral direction. The integration of the two is the key to santri's cultural resilience.

In the perspective of cultural resilience theory, the understanding of the madrasah community confirms that identity is not static. The identity of santri is formed through the process of learning, habituation, interpretation, and encounter with a new environment. Students who study turath as well as learning technology are not leaving the identity of the boarding school, but are expanding the field of identity actualization. This understanding is important so that the madrasah program is not trapped in a simple opposition between the book and the computer, tradition and modernity, or pesantren and globalization.

3. Integration in learning, madrasah culture, and student activities

The third finding suggests that the integration of turath literacy and 21st-century skills takes place through three pathways: formal learning, madrasa culture, and student activities. In formal learning, turath and Aswaja values are integrated through the Islamic Education subject cluster, jurisprudence, moral beliefs, Islamic Cultural History, NU studies, and book reading activities. Teachers are directed to not only convey the material textually, but also to associate religious values with contemporary issues such as hoaxes, cyberbullying, digital ethics, tolerance, and social responsibility.

Active learning models are beginning to be used to strengthen 21st-century skills. The vice principal for curriculum mentions the use of problem-based learning and project-based learning so that students discuss, analyze socio-religious problems, and present the results in front of the class. This pattern shows that students are not only recipients of information, but also trained to reason, argue, cooperate, and communicate. In the pesantren tradition, this process can be enriched with bahtsul masail students, discussion of the book, and writing summaries of the material.

Madrasah culture strengthens such integration through daily habituation. Tadarus Al-Qur'an activities, memorization of worship prayers, congregational worship practices, reverent attitudes to teachers, discipline, and the habituation of polite language become a means of internalizing values. This kind of culture is important because character is not formed only through lectures. Character is born from the repetition of actions, exemplification, supervision, and a consistent institutional atmosphere. Thus, madrasah culture serves as a laboratory of adab.

Student activities also play an important role. IPNU, scouting, religious activities, local arts, extracurricular, and short article writing programs provide space for students to develop communication, collaboration, leadership, creativity, and responsibility. Observations indicate the existence of activities to write a summary of the book material or short articles for class making. This activity linked turath literacy to modern written literacy. Students learn to read classical heritage, and then process it into works that can be communicated to peers.

The integration of digital literacy is seen in the utilization of computer laboratories and ICT-based assignments. Informatics teachers emphasize that technology must be escorted by the value of tawazun and Islamic boarding school ethics. This is important because digital literacy is not just the ability to operate devices, but the ability to assess information, maintain a digital footprint, communicate politely, and use media for good. In the context of Aswaja, the value of tabayyun becomes very relevant to deal with hoaxes and digital polarization.

Madrasah's strategy towards social media is not anti-technology. The madrasah educates students to have adab in using social media. Pesantren culture such as guarding speech, respecting teachers, not spreading slander, and clarifying information is contextualized to the cyber world. This strategy demonstrates an adaptive form of cultural resilience. Students are not isolated from the digital world, but are guided to bring the ethics of pesantren into the digital space.

The implementation of integration is also supported by learning documents. The research instruments recorded the existence of lesson plans or teaching modules PAI, NU studies, and the book / turath that contain morning tadarus habituation, group discussion assignments, and the inclusion of the value of the character of students. This kind of document is important because it ensures that integration does not depend on the teacher's personal initiative alone, but rather begins to be institutionalized in the learning toolkit. However, reinforcement is still needed so that all teachers have an even understanding and capacity.

Pedagogically, this integration demonstrates the principle that turath learning can be developed contextually without losing authenticity. The book remains read as an authoritative source, but its values are linked to the reality of adolescents, schools, the media and society. This approach is in line with the needs of contemporary Islamic education which demands continuity between text, context, and action. If done consistently, learning turath can be the basis for strengthening critical literacy, not just rote tradition (Mujahid & Fajrina, 2023; Pratama & Nurhakim, 2023).

In the context of educational ecotheology, learning that connects turath, adab, and digital literacy shows that the educational environment is not just a physical space. The educational environment is an ecosystem of values. Classes, laboratories, libraries, mosques, dormitories, social media, and communities are part of the santri learning field. Therefore, educational strategies are not enough done in the classroom, but need to be designed as the formation of a moral ecology that touches the habits, relationships, and media used by students (Hancock, 2010; Rohman et al., 2024; Taufikin, 2025).

4. Contribution to students' cultural resilience

The fourth finding shows that the integration of turath and 21st-century skills contributes to the cultural resilience of santri in three main dimensions: Islamic identity, social adab, and digital adaptation. On the identity dimension, turath provides epistemic roots that distinguish the way students learn from a completely instant way of learning. Students are invited to understand that the science of religion has sanad, discipline, authority, and adab. This understanding is a bulwark against the flow of digital information that often cuts the learning process

into short pieces without context.

In the Aswaja dimension, the values of tawassuth, tawazun, ta'adul, and tasamuh help students face differences. The multipolar era is marked by many centers of influence, whether political, cultural, economic, or religious. Students who do not have a moderation framework are easily trapped in a reactive attitude. Aswaja values provide a balanced frame of mind: firm in principles, but not easily rejecting differences; preserving identity, but not closing dialogue; critical of outside cultures, but not anti-new knowledge.

On the dimension of social manners, madrasas form habits that appear in daily behavior. Observations noted the use of polite language, respect for teachers, participation in classroom activities, and pride as students. This shows that cultural resilience is not just an abstract idea, but is reflected in the way of speaking, how to interact, how to complete tasks, and how to deal with authority. Adab becomes a tangible form of cultural resilience because it maintains the quality of social relations.

In the digital adaptation dimension, students are trained so that technology does not erase the identity of pesantren. The ability to use a computer, write short articles, create visual works, or utilize social media needs to be directed to productive and educational value. When students are able to create soothing Islamic content, write a summary of the book, or discuss politely in the digital space, the pesantren tradition acquires a new medium. It is this form of cultural transformation that is relevant to the multipolar era.

The contribution of integration is also seen in the establishment of a balance between cognitive, affective and psychomotor. Character assessment does not rely enough on a written exam. The vice principal for curriculum mentions behavior observation, teacher journal notes, peer assessment, and performance. This evaluation pattern is in accordance with the character of pesantren education that emphasizes charity, manners, and habits, not just mastery of concepts. In the context of the 21st-century, this kind of evaluation can be further developed through a digital portfolio of student work.

Santri's cultural resilience is also supported by the relationship between madrasas, pesantren/foundations, parents, and the community. The madrasah principal explained the existence of tripartite synergy to monitor discipline and harmonize character habits. This support is very important because students live in several environments at once. The values taught in the classroom should be reinforced in dormitories, homes, and communities. If the environment does not support each other, the process of culture formation will be interrupted.

From the point of view of educational theory, these findings show that cultural resilience is formed through a combination of values, structures, practices, and participation. Values give orientation; structure gives rules; practice gives habituation; participation gives experience. In MTs NU Putra 1 Buntet Pesantren, these four elements appear in the vision of the madrasah, curriculum, daily habits, student activities, and institutional collaboration. Therefore, cultural resilience is not the result of a single subject, but the result of an entire educational ecosystem.

This article also suggests that Malay-Islamic ecotheology can be extended to the realm of cultural education. If ecotheology emphasizes the balance of human relations with God, nature, and society, then pesantren-based madrasah education can be an ecotheological practice when it forms civilized humans, does not damage the socio-digital environment, and is able to maintain harmony. The values of tabayyun, amanah, mizan, and maslahah can be translated into ethics of learning, ethics of media, ethics of organization, and ethics of living together.

5. Supporting factors, constraints, and strengthening strategies

The first supporting factor is institutional heritage. A long history as part of Buntet Pesantren provides cultural legitimacy for the development of turath literacy. Students, teachers, and parents understand that this madrasah has strong pesantren roots. This kind of inheritance cannot be created instantly, so it becomes an important symbolic capital. This heritage makes the turath and Aswaja programs more easily accepted because they were in line with the identity of the institution.

The second supporting factor is the formulation of an explicit vision and mission. The profile of the madrasah clearly mentions 21st-century skills and turath literacy as the orientation of graduates. The mission of the madrasah also includes literacy culture, writing creativity, ICT utilization, local arts, character, extracurricular activities, yellow book reading skills, and community religious activities. A clear formulation makes it easier for institutions to compile indicators of program achievement and avoid fragmentation between religious education and general education.

The third supporting factor is the facilities. Computer laboratory, language laboratory, science laboratory, library, skills room, and art room open space for learning integration. Computer labs support digital literacy; language labs support communication; science labs support critical thinking; art spaces support creativity; while libraries support religious and general literacy. These facilities are an important capital to connect the tradition of the book with modern learning practices.

The fourth supporting factor is the culture of pesantren and religious activities. Tadarus habituation, prayer memorization, congregational prayers, worship practices, NU studies, and IPNU activities strengthen the identity of students. This culture provides a space of repetition of values. In character building, repetition is very important because values that are only taught cognitively often do not last long. Through habituation, values become habits

and habits become character.

Nevertheless, the study identified several constraints. The first obstacle is santri's time management. The schedule of santri is tight because they attend formal school in the morning and pesantren activities at other times. This density can cause physical fatigue and reduce the time of deepening the book or creative project. Madrasahs need to organize the rhythm of activities so that the integration of turath and skills of the 21st-century does not mechanically increase students' workload, but unites several activities in an effective design.

The second obstacle is the diversity of students' initial abilities. There are students who are already able to read the basic book, but there are also those who need initial guidance. Diversity also occurs in digital literacy. This condition demands differentiated learning. Teachers cannot use one single standard for all students. Early ability mapping, mentoring groups, graded modules, and peer tutoring strategies are needed so that stronger students can help friends who still need support.

The third obstacle is uneven infrastructure. Observation notes indicate the presence of several constraints in classroom facilities, such as a non-functioning power outlet and a fragile desk. Constraints such as these seem simple, but can affect the comfort of learning and utilization of digital devices. Because digital literacy requires electrical support, devices, the internet, and safe spaces, facility improvement becomes part of academic strategy, not just a technical affair.

The first strengthening strategy is the preparation of a written integration model. Madrasah needs to formulate an integration map between turath, Aswaja, Rahmatan Lil Alamin student profile, 21st-century skills, and digital literacy. This map can contain the achievements of each level, books or materials used, learning activities, project forms, adab indicators, and student work portfolios. With a written model, the program becomes more systematic and easy to evaluate.

The second strengthening strategy is the development of an interactive e-module turath. Digitization does not mean replacing books with instant content, but making access and understanding easier for the digital generation. The e-module can contain texts, vocabulary, guided translations, teacher explanations, reading exercises, short videos, examples of the application of adab, and reflective tasks. This model can maintain teacher authority while utilizing digital media to expand learning time.

The third strengthening strategy is teacher capacity building. Teachers need to get training on active learning, digital pedagogy, authentic assessment, media literacy, and contextualization of turath. Training can be done through MGMP, internal workshops, collaboration with pesantren, and mentoring between teachers. Turath teachers can learn using digital media, while general-subject teachers can deepen the value of Aswaja and pesantren adab. Thus, integration does not only occur in religious subjects, but becomes a culture of cross-disciplinary learning.

The fourth strengthening strategy is strengthening the portfolio of santri's works. Works in the form of book summaries, short articles, digital posters, educational videos, bahtsul masail notes, and reflections on media adab can be collected as evidence of cultural resilience. This portfolio is not only an assessment tool, but also documentation of the development of santri. If published in a targeted manner, santri's work can be a positive counter-narrative in the digital space.

The fifth strengthening strategy is strengthening family and community collaboration. Because students' cultural resilience is not only formed in madrasahs, parents need to be involved in digital media supervision, worship habits, and character communication. The community can also be a practice space for students through local religious, social, and cultural activities. With the collaboration, santri learned that turath and 21st-century skills are not just school materials, but the provisions of community life.

6. Theoretical analysis: turath, ecotheology, and cultural resilience

Theoretically, turath literacy can be placed as the cultural capital of pesantren. This cultural capital is not only in the form of mastery of classical texts, but also a learning habitus that includes patience in reading, respect for teachers, regularity in understanding problems, and caution in drawing conclusions. In a digital society that often encourages speed, fragmented information, and emotional reactions, this kind of habitus becomes an important resource. Students who are accustomed to reading turath are trained to move gradually from text to meaning, from meaning to context, and from context to ethical action (Azra, 2012; Pratama & Nurhakim, 2023).

Within the framework of Malay-Islamic ecotheology, turath can be read as a legacy of knowledge that maintains the balance of life. Many classical texts teach not only laws, but also morals, intentions, cleanliness, responsibility, manners to one's neighbor, as well as human relations with other creatures. These values are in line with the principles of monotheism, amanah, caliph, mizan, and maslahah which are often discussed in the study of Islamic ecotheology. Therefore, turath learning in pesantren-based madrasahs can be understood as an effort to maintain moral ecology, namely the inner and social environment that prevents students from self-destructive behavior, damaging relationships, and damaging the digital environment (Hancock, 2010; Helfaya et al., 2018; Rohman et al., 2024).

Cultural resilience can also be read as the ability to carry out cultural selection. It is impossible for students to live apart from popular culture, devices, social media, global languages, and changing ways of learning. What

is needed is not total isolation, but the ability to choose, assess, and use new elements in a civilized manner. This is where the value of Aswaja becomes a cultural selection mechanism. Tawassuth prevents extremes, tawazun maintains a balance between religion and social life, ta'adul fosters justice in judging, and tasamuh trains respect for diversity (Banks, 2016; UNESCO, 2020).

21st-century skills in research findings do not present as a Western concept taken for granted, but rather reinterpreted in the context of pesantren. Critical thinking is not directed at undermining manners to teachers, but at building the ability to question and reason responsibly. Creativity is not directed to unlimited freedom, but to the production of useful works. Communication is not interpreted as mere courage to speak, but as the ability to express opinions politely. Collaboration not only means group work, but also the exercise of Brotherhood, leadership, and responsibility. Digital literacy not only means technical skills, but also media manners (Partnership for 21st Century Skills, 2009; Thornhill-Miller et al., 2023).

The Integrative Model that emerges from this research can be formulated as a synthesis between roots, directions, tools, and actions. The roots of education are turath and the history of pesantren. The direction of education is Aswaja, manners, and benefit. Educational tools are 21st-century skills, digital literacy, active methods, and learning facilities. Educational actions are daily habituation, student work, IPNU activities, contextual learning, and community participation. If these four elements work together, the madrasah not only maintains the culture, but also produces a new form of santri culture that is relevant to the times.

The synthesis shows the position of madrasah as a creative negotiation arena. In it, teachers negotiate classic texts with contemporary issues; students negotiate santri identity with digital culture; institutions negotiate the national curriculum with pesantren traditions; and parents negotiate home habits with educational demands. This negotiation is not always easy, but it is precisely there that cultural resilience is tested. A strong culture is not one that never changes, but one that is able to change without losing the center of values.

In terms of madrasah education policy, these findings support the importance of the Rahmatan lil Alamin student profile. The value of rahmatan lil alamin requires students to be religious, moderate, civilized, caring, and able to live together. The integration of turath and 21st-century skills can be a concrete form of strengthening such profiles. Turath provides the basis of knowledge and adab, Aswaja provides moderation, while modern skills help students convey the value of rahmah in a wider social space (Ministry of Religious Affairs of the Republic of Indonesia, 2022).

In the study of contemporary pesantren, this finding also shows that pesantren is not monolithic. Pesantren-based schools and madrasahs can undertake pedagogical renewal without having to renounce salaf pesantren identity or the traditions of the kitab kuning. The use of computer laboratories, language laboratories, science laboratories, digital media, and project-based learning does not automatically eliminate the spirit of pesantren. What matters is the value orientation and institutional design. If technology is placed as an instrument of adab and benefit, then modernization can strengthen rather than weaken pesantren identity (Mujahid & Fajrina, 2023; Pratama & Nurhakim, 2023).

It is also important to note that the resilience of santri culture is not the same as the romanticization of the past. The romanticization of tradition can make institutions resist evaluation and innovation. On the contrary, healthy cultural resilience actually requires institutions to dare to read internal weaknesses. Findings on time constraints, differences in initial capabilities, and classroom facilities indicate that madrasahs need to strengthen program management. In other words, love for tradition must be accompanied by professional governance so that traditions can be passed on effectively to new generations.

This analysis places MTs NU Putra 1 Buntet Pesantren as an example of a case that shows the close relationship between institutional culture and learning strategies. The success of integration is determined not only by the written curriculum, but also by the quality of the teacher-student relationship, continuity of habituation, family support, and readiness of facilities. Therefore, strengthening interventions should be comprehensive. Improving modules without strengthening teachers is not enough; strengthening teachers without improving facilities is also not enough; improving facilities without reviving adab culture will also not produce deep cultural resilience.

7. Academic and practical implications

Academically, this study enriches the study of Islamic education by offering an integrative reading between turath literacy, ecotheology, 21st-century skills, and cultural resilience. The study of turath often stops at the preservation of the book or the sorogan and bandungan methods, while the study of 21st-century skills often moves within the framework of general education. This article brings the two together in the context of pesantren-based madrasahs. Thus, turath literacy can be read as a source of critical cultural literacy, which is literacy that gives learners the ability to understand tradition while filtering change.

Methodologically, this study shows the importance of triangulation between interviews, observations, and documents. Madrasah profile documents provide a formal description of history, vision, mission, student data, facilities, and programs. Interviews provide insight into the meaning constructed by the madrasah community. Observations provide evidence of practice and field-level constraints. All three sources complement each other.

Without documents, research easily becomes a subjective impression; without interviews, documents may remain administrative texts; and without observation, research may fail to capture the living practice of education (Creswell, 2015; Miles et al., 2014).

In practical terms, madrasah can use the results of this study to develop a road map for strengthening the program. The road map can be started from the mapping of books and competencies of each class. class VII can be directed to the introduction of manners, basic vocabulary of the book, and simple reading habits. class VIII can be directed to understanding concepts, thematic discussions, and writing summaries. class IX can be directed to work projects, simple bahtsul masail, presentations, and the production of polite Islamic digital content. With stages like this, turath literacy develops gradually and measurably.

Teachers can also develop an integrative assessment rubric. The rubric not only assesses the right and wrong answers, but also the accuracy of reading, understanding of meaning, the ability to relate to context, discussion manners, the quality of cooperation, and the ethics of using digital resources. This kind of assessment is more in line with the character of the program because its main purpose is not only cognitive, but also the formation of attitudes and skills. Rubrics also help teachers provide clear feedback to students.

For madrasah managers, the results of this study remind that digital literacy needs to be managed safely. Strengthening the healthy internet, content surveillance, digital ethics training, and the provision of decent devices are becoming urgent needs. Madrasahs need to make rules for the use of devices or digital media that are not repressive, but educational. Students need to be taught the moral reasoning behind the rules, not just the prohibitions. Thus, digital discipline will be more easily accepted as part of adab santri.

For pesantren and foundations, the results of this study can be the basis for strengthening collaboration with madrasahs. Night boarding school activities and morning formal learning need to be harmonized so as not to burden each other. Integration of schedules, communication between caregivers, evaluation forums, and mentoring students can reduce fatigue and increase learning effectiveness. Collaboration can also be done in the preparation of turath material that is appropriate to the age of MTs, so that students not only learn a lot, but learn appropriately.

For parents, the results of this study confirm the importance of the continuity of home and madrasah education. Social media monitoring, worship habits, reading Support, and polite communication at home largely determine the success of the program. If parents allow children to use the device without instructions, then the madrasah will work harder. Conversely, if the family supports the values of tabayyun, adab, and literacy, then the resilience of the santri culture will be stronger.

For the IMAD forum, this article shows that the theme of Malay-Islamic ecotheology can be developed in broader educational studies. Ecotheology not only leads people to take care of nature, but also to take care of the cultural environment, the digital environment, and the moral environment. Pesantren-based madrasahs are one of the concrete spaces to see how Islamic values work in forming this balance. This kind of study is relevant to the Malay-Islamic world because pesantren, madrasah, kitab kuning, Aswaja, and local culture are an important part of the history of Islamic education in this region (Hancock, 2010; UNESCO, 2020).

8. Program strengthening model in pesantren-based madrasah

Based on the overall findings, the program reinforcement model can be directed at four levels. The first level is the vision level, which equalizes the understanding of all the madrasah community that turath literacy, Aswaja, adab, and 21st-century skills are not separate programs. All four should be read as one educational system. If this vision is not agreed, then the program will run sectoral: religious teachers take care of the book, general-subject teachers take care of technology, and student coaches take care of discipline. The required Model actually requires inter-teacher and Inter-program meetings so that students experience education as a whole.

The second level is the level of curriculum and teaching tools. The madrasah needs to draw up a map of the integration of turath materials with contemporary issues that are appropriate to the age of MTs students. For example, adab learning materials can be linked to the ethics of searching for information on the internet; oral care materials can be linked to comments on social media; tabayyun materials can be linked to news verification; and responsibility materials can be linked to group-based project tasks. In this way, turath is not understood as a text far removed from student life, but as a source of values that help them read everyday reality.

The third level is the level of pedagogy. Teachers need to be given space to develop learning methods that still respect tradition but do not lose appeal to the digital generation. Sorogan, bandungan, memorization, and habituation are still important, but they can be combined with case discussions, short presentations, literacy projects, concept maps, digital posters, educational videos, and reflective assignments. This combination must be maintained so that technology does not become the goal. Technology serves as an instrument to clarify meaning, broaden communication, and strengthen adab.

The fourth level is the evaluation and sustainability level. Turath literacy programs and 21st-century skills need to be periodically evaluated through clear indicators. Turath indicators may include the ability to read basic text, understand meaning, infer moral messages, and relate to context. Indicators of 21st-century skills can include the ability to ask questions, collaborate, convey ideas, produce work, and use digital media ethically. Indicators

of cultural resilience can include adab consistency, attitude moderation, tabayyun ability, pride in the identity of students, and involvement in madrasah and community activities.

The model also requires transformative madrasah leadership. The head of the madrasah is not enough to ensure administrative activities run, but needs to be the driving force of academic culture and culture of adab. Transformative leadership is seen in the ability to connect the vision of pesantren with the demands of the times, move teachers to innovate, build communication with foundations and parents, and ensure learning facilities support the program. In the context of MTs NU Putra 1 Buntet Pesantren, the history of the institution and the support of pesantren are important capital to develop this kind of leadership.

The sustainability of the program also depends on documentation of good practices. Every successful activity, such as tadarus habituation, book discussion, digital projects, IPNU coaching, or student work, needs to be documented as an institutional portfolio. This documentation can be used for internal evaluation, accreditation, academic publication, and strengthening the identity of the madrasah. Without documentation, many good practices may remain as daily routines that are not legible as educational achievements.

Another implication to consider is the training of teachers on an ongoing basis. Turath teachers need to be strengthened in digital pedagogy and active learning, while general-subject teachers need to be strengthened in understanding the value of Aswaja and pesantren culture. The meeting of these two competencies is important so that there is no separation between religion and general science. Training can be conducted through internal MGMP, module preparation workshops, learning supervision, and good practice sharing forums. Thus, integration becomes not just a term in the document, but a real competence that the teacher Masters in the classroom.

Finally, this reinforcement model affirms that the cultural resilience of santri must be built through ecosystems, not just through specific subjects. The ecosystem includes the history of the institution, madrasah vision, curriculum, teachers, students, facilities, student activities, pesantren, family, and community. When all the elements work together, madrasahs are able to produce students who are rooted in turath, civilized in social interaction, moderate in addressing differences, skilled in using technology, and ready to contribute to a multipolar society without being uprooted from their Islamic and kepesantrenannya identity.

9. Theoretical and practical implications

Theoretically, this study extends the meaning of Malay-Islamic ecotheology from environmental concern to the moral ecology of Islamic education. In this sense, ecology is not limited to trees, waste, or physical cleanliness, but also includes the relationships among texts, teachers, students, technology, institutional culture, and local religious traditions. Such a perspective makes ecotheology relevant to madrasah management and curriculum practice.

Practically, the findings indicate that pesantren-based madrasahs can strengthen cultural resilience by integrating three layers of learning. The first layer is epistemic, namely the transmission of turath and Aswaja values through authoritative learning. The second layer is ethical, namely the habituation of adab, discipline, tabayyun, and responsibility. The third layer is adaptive, namely the use of digital literacy, collaboration, and student creativity to communicate Islamic values in contemporary spaces.

For policy and institutional development, the article recommends a written integration map that connects turath literacy, Aswaja, the Rahmatan lil Alamin student profile, and 21st-century skills. The map should be translated into teaching modules, assessment rubrics, student portfolios, teacher training, and supervised digital projects. With this design, integration will not depend only on individual teachers, but will become part of the madrasah quality assurance cycle.

The study also recommends that madrasah leaders document good practices more systematically. Existing activities such as tadarus, kitab learning, IPNU mentoring, classroom discussion, digital assignments, and student writing should be recorded as evidence of cultural resilience. Documentation will help the madrasah evaluate program continuity, support accreditation, and communicate its distinctive contribution to Islamic education in the multipolar era.

10. Research limitations and future research agenda

This study has limitations that need to be stated openly. First, this article focuses on a qualitative approach so it is not intended to statistically measure the influence of programs. Second, the research data emphasizes the meaning of the madrasah community, institutional documents, and observed practices, so it has not described changes in the behavior of students in the long term. Third, the location of the study focused on one pesantren-based madrasah so the results need to be read as contextual understanding, not a mechanical generalization for all madrasahs.

These limitations do not reduce the academic value of research, but instead open the agenda for further research. The next research can use longitudinal design to see the sustainability of adab formation, digital literacy, and cultural resilience of students from class VII to class IX. Quantitative research can also be developed to develop instruments for measuring the cultural resilience of students based on indicators of turath, Aswaja, 21st-

century skills, and digital adab. In addition, comparative studies between pesantren in Cirebon, West Java, or the Malay-Islamic region can enrich the understanding of the various models of integration of tradition and modernity.

Another important research Agenda is the development of teaching materials. Researchers and teachers can work together to develop contextual turath e-modules that contain basic texts, vocabulary meanings, value explanations, digital case studies, reflection exercises, and student work projects. This kind of module can be tested through development research or design-based research. Thus, the results of the study do not stop as descriptions, but continue to be learning products that can be used, evaluated, and refined continuously in madrasah educational practices.

In the long run, studies on turath literacy and 21st-century skills need to continue to be placed in the larger conversation about the future of Islamic education. The multipolar world presents both opportunities and risks: the opportunity to expand the network of knowledge, and the risk of losing the center of value. Pesantren-based madrasahs have historical capital to answer these challenges because they have a tradition of science, adab, community, and spirituality. The challenge is to manage the capital systematically in order to stay alive, communicative, and relevant to today's generation of students.

Conclusion

This article concludes that turath literacy and 21st-century skills can be integrated as a strategy to strengthen the cultural resilience of students at MTs NU Putra 1 Buntet Pesantren Cirebon. The integration is rooted in the institutional history of madrasah as part of Buntet Pesantren, Ahlussunnah wal Jamaah identity, turath literacy vision, culture of habituation, and the need to prepare students to face the digital and multipolar era. Turath gives epistemic roots, Aswaja gives moderation orientation, adab gives moral quality, and 21st-century skills gives adaptive capacity.

The study findings suggest four mechanisms for strengthening cultural resilience. First, the institutionalization of turath literacy through book learning, local content, the Islamic Education subject cluster, NU studies, and daily habituation. Second, the internalization of Aswaja values such as tawassuth, tawazun, ta'adul, adab, and tabayyun in madrasah learning and culture. Third, the development of critical thinking skills, creativity, communication, collaboration, and digital literacy through active learning, writing activities, IPNU, the use of facilities, and the use of technology. Fourth, the collaboration of madrasah, pesantren / foundation, parents, and the community to maintain the continuity of the character of santri.

The main contribution of this article is to affirm that cultural resilience in Islamic education is not sufficiently understood as passive preservation of tradition. Cultural resilience is an active process to cultivate intellectual heritage, shape adab, develop modern skills, and present the identity of pesantren in the digital space. Thus, pesantren-based madrasah can be a moral ecology of Islamic education that prepares students to be rooted, open-minded, ethical, and productive.

In practical terms, madrasahs need to strengthen the written integration model between turath, Aswaja, digital literacy, and 21st-century skills; develop interactive turath e-modules; improve teacher competence through digital pedagogy training; improve basic facilities that support learning; and document student work as a portfolio of cultural resilience. Further research can be carried out comparatively on several pesantren-based madrasahs or using a mixed design to measure changes in turath Literacy, digital Ethics, and cultural identity of students more measurably.

References

- Amin, M. R., & Kamarudin. (2020). Muhammadiyah social movement in the reform era. *Indonesian Journal of Social Sciences*, 1(1), 36-45. <https://doi.org/10.15408/jisi.v1i1.17108>
- Azra, A. (2012). *Islamic education: tradition and modernization amid the challenges of the third millennium*. Kencana.
- Banks, J. A. (2016). *Cultural diversity and education: Foundations, curriculum, and teaching*. Routledge.
- Creswell, J. W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Pearson.
- Fanan, M. A. (2024). integrating Islamic ecotheology through participatory education in pesantren communities. *Tafkir: Interdisciplinary Journal of Islamic Education*, 5(4), 1-18.
- Hancock, R. (2010). Islam and the environment: Ethics and practice an assessment. *Religion Compass*, 4(11), 707-716. <https://doi.org/10.1111/j.1749-8171.2010.00249.x>
- Helfaya, A., Kotb, A., & Hanafi, R. (2018). Qur'anic ethics for environmental responsibility: Implications for business practice. *Journal of Business Ethics*, 150(4), 1105-1128. <https://doi.org/10.1007/s10551-016-3195-6>
- Hershey, H., Jokopitoyo, T., & Munir, A. (2018). Eco-pesantren as a basis for environmental morality and theology. *Kalam*, 12(2), 303-326.

- Karman, K., Anwar, R., & Hakim, L. (2023). The Qur'anic learning based on Islamic eco-theology at pesantren. *Journal of Islamic Education*, 9 (2), 169-186. <https://doi.org/10.15575/jpi.v9i2.24933>
- Ministry of Religious Affairs of the Republic of Indonesia. (2022). Decree of the Minister of Religious Affairs number 347 of 2022 on guidelines for the implementation of the Independent Curriculum in madrasahs. Ministry of Religious Affairs.
- Ministry of Religious Affairs of the Republic of Indonesia. (2022). Project development guide for strengthening Pancasila student profile and Rahmatan Lil Alamin student profile. Directorate of KSKK Madrasah.
- Madjid, N. (2019). *Islam, modernity, and Indonesia*. Mizan.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook*. SAGE.
- Mujahid, M., & Fajrina, K. N. (2023). Integrating traditional and modern educational methods: An analysis of Islamic values in Aqidatu Al-Awam and the application of problem-based learning. *Journal of Islamic Religious Education*, 20 (1), 98-118.
- Partnership for 21st Century Skills. (2009). P21 framework definitions. Partnership for 21st Century Skills.
- Pratama, D. A., & Nurhakim, A. (2023). Turath studies development within today's Indonesian pesantren: Possibilities and challenges. *Al-Mada: Journal of Religion, Social, and culture*, 6(4), 655-670.
- Rice, G. (2006). Pro-environmental behavior in Egypt: Is there a role for Islamic environmental ethics? *Journal of Business Ethics*, 65(4), 373-390. <https://doi.org/10.1007/s10551-006-0010-9>
- Rohman, A., Kurniawan, E., Syifaiddin, M., Muhtamiroh, S., & Muthohar, A. (2024). Religious education for the environment: Integrating eco-theology in the curriculum of Islamic Religious and Character Education to enhance environmental education in Indonesia. *Nadwa: Jurnal Pendidikan Islam*, 18(2), 201-226. <https://doi.org/10.21580/nw.2024.18.2.21094>
- Shukri, S., Amir, S. M., Fitriani, F., & Pane, S. (2024). Integration of Islamic values with environmental ethics in pesantren education: A case study at Darularafah Raya Pesantren. *Jurnal Pendidikan Islam*, 13(1), 1-12. <https://doi.org/10.14421/jpi.2024.131.1-12>
- Taufikin, T. (2025). Integrating eco-theology in Islamic education: A case study on fostering ecological awareness through religious pedagogy. *El-Tarbawi*, 18(1), 1-32. <https://doi.org/10.20885/tarbawi.vol18.iss1.art1>
- Thornhill-Miller, B., Camarda, A., Mercier, M., Burkhardt, J. M., Morisseau, T., Bourgeois-Bougrine, S., Vinchon, F., El Hayek, S., Augereau-Landais, M., Mourey, F., Feybesse, C., Sundquist, D., & Lubart, T. (2023). Creativity, critical thinking, communication, and collaboration: Assessment, certification, and promotion of 21st-century skills for the future of work and education. *Journal of Intelligence*, 11(3), 54. <https://doi.org/10.3390/jintelligence11030054>
- UNESCO. (2020). *Education for sustainable development: A roadmap*. UNESCO.
- Wakhidah, N., & Erman, E. (2022). Examining environmental education content on Indonesian Islamic religious curriculum and its implementation in life. *Cogent Education*, 9(1), Article 2034244. <https://doi.org/10.1080/2331186X.2022.2034244>
- Zuhri, S. (2017). Muhammadiyah as the power of civil society in Indonesia. *Maarif Journal*, 12 (1), 65-82.
- MTs NU Putra 1 Buntet Pesantren. (2025). *Madrasah profile of MTs NU Putra 1 Buntet Pesantren Cirebon*. Internal institutional document.
- Najikh, M. (2026). *Field research instruments for MTs NU Putra 1 Buntet Pesantren Cirebon: Turath literacy and 21st-century skills as a strategy for strengthening students' cultural resilience*. Unpublished research document.