

Gifted and Talented Education in Muslim Majority Countries: A Systematic Scoping Review, Conceptual Synthesis, and Future Research Agenda

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ABSTRACT

This study maps literature relevant to gifted and talented education in Muslim-majority countries, integrates talent-development theory with Islamic educational thought, and develops a testable research agenda. Informed by PRISMA-ScR and JBI guidance, the synthesis uses the Population-Concept-Context framework to organise a DOI-traceable working corpus. Direct contextual evidence is concentrated in Malaysian institutions; international studies provide theoretical and methodological comparisons rather than representative evidence of all Muslim-majority systems. The reviewed material emphasises STEM and cognitive assessment, raises questions about equitable identification, and develops Islamic perspectives on Naqli-Aqli integration, Qur'an memorisation, adab, akhlaq, and spiritual intelligence. These perspectives clarify educational purposes, but their mechanisms and outcomes require further operationalisation and evaluation. The proposed AMANAH-Talent Framework comprises equitable Access, tawhidic Meaning, ethics and Adab, talent Nurturance, socio-emotional Agency, and relational service and Humanity. An evidence-to-component matrix distinguishes empirical findings from conceptual propositions, while a practical research matrix links eight priorities to suitable designs and usable outputs. Priorities include cross-national data, cultural validation, equitable identification, integrated curricula, teacher development, ethical artificial intelligence, comparative policy, and economic evaluation. AMANAH-Talent is an empirically revisable framework whose applicability across countries remains to be tested.

Keywords: gifted and talented education; Muslim-majority countries; Islamic education; scoping review; talent development; AMANAH-Talent

INTRODUCTION

Gifted and talented education has moved beyond a psychometric tradition centred on general intelligence towards a talent-development ecosystem that connects ability, opportunity, training, motivation, and socially valued outcomes. This shift matters because high ability does not automatically become expertise or contribution. Its development requires equitable identification, challenging curricula, capable teachers, socio-emotional support, and sustained developmental pathways (Subotnik et al., 2011; Worrell et al., 2019). International reviews and cross-cultural scholarship nevertheless identify diversity in definitions, research approaches, and cultural assumptions (Baccassino & Pinnelli, 2022; Persson, 2012). These differences affect what counts as ability, who is identified, the purposes of talent education, and which forms of excellence are valued. They also make it necessary to examine how far established theories and measures apply in Muslim-majority settings.

Muslim-majority countries do not constitute a homogeneous educational category. Educational governance, language, family culture, social inequality, and relationships between religious and public education need to be examined within each setting. Malaysia provides a particularly visible case in the sources considered here, through specialised provision and knowledge-integration frameworks (Bakar, 2017; Spawi et al., 2022). Other

Muslim-majority countries are relevant settings for future comparison, but their inclusion within the review's geographical scope does not establish equivalent evidence coverage. An analytical approach therefore examines how Islamic worldviews and institutional conditions interact, without using a country's Muslim-majority status as a single explanation for educational policy or outcomes.

Malaysian literature has sought to extend gifted education towards Qur'an memorisation, Naqli-Aqli integration, adab, akhlaq, and multidimensional development. Naqli-Aqli integration refers here to educational relationships between revealed knowledge and knowledge developed through reason and disciplinary inquiry. The Islamic Gifted Curriculum Framework argues that STEM achievement should progress alongside human formation (Spawi et al., 2022), while Qur'an memorisation has been proposed as one source of evidence for domain-specific potential rather than a universal substitute for cognitive measures (Zakaria et al., 2023). Syntheses of al-Ghazali and Ibn Khaldun position tawhid, purification of the self, graduated learning, and social responsibility within the conception of gifted Muslim learners (Mohamad, Mohd Hilmi, & Ismail, 2025; Mohamad, Mohd Hilmi, Ismail, et al., 2025). The IQ-EQ-SQ framework further proposes that spiritual intelligence should morally regulate intellectual and emotional capacities (Mohamad et al., 2026). These contributions provide a basis for conceptual integration, but their empirical scope and transferability require careful assessment.

The central problem is fragmentation. International studies discuss identification, enrichment, acceleration, equity, and well-being; studies in Muslim countries often report national programmes in isolation; and Islamic education scholarship focuses on philosophy, character, or curriculum. These strands are rarely synthesised within a framework that distinguishes normative principles, educational mechanisms, and empirical outcomes. Consequently, terms such as holistic, spiritual, and Islamic may be invoked without operational definitions, while psychometric instruments are applied without testing cultural equivalence. This fragmentation obstructs cumulative evidence and encourages researchers to repeat foundational justifications rather than pursue a coherent comparative agenda.

This review therefore maps gifted and talented education in Muslim-majority countries, synthesises relationships between talent-development theory and Islamic epistemology, and develops a testable research agenda. Four questions guide the analysis: What conceptual, geographical, population, and methodological patterns structure the literature? How is giftedness identified and developed? How are tawhid, adab, akhlaq, spirituality, and social responsibility operationalised? Which research priorities could generate cumulative knowledge? The contribution is a shared analytical language for researchers, policymakers, and institutions, not a claim that one model fits every Muslim society.

METHODOLOGY

A scoping-review approach informs this evidence mapping and conceptual synthesis because the literature is broad and heterogeneous, and the review questions concern concepts and gaps rather than pooled intervention effects. Scoping reviews are appropriate for mapping evidence types, clarifying concepts, and establishing field boundaries (Arksey & O'Malley, 2005; Levac et al., 2010). PRISMA-ScR reporting guidance and JBI methodological guidance informed the organisation of review questions, eligibility, searching, charting, and synthesis (Peters et al., 2020; Tricco et al., 2018). Their use as guidance is distinguished from a claim of fully documented compliance: reproducible database searches, screening records, and exclusion decisions are required to establish an exhaustive systematic account.

The Population-Concept-Context framework defined eligibility. The population included children, adolescents, and students described as gifted, talented, highly able, high-potential, or domain-talented. The concept encompassed definition, identification, curriculum, pedagogy, acceleration, enrichment, talent development, well-being, identity, spirituality, character, teacher preparation, and policy. Context referred to Muslim-majority countries or institutions explicitly developing education for gifted Muslim learners. Studies of Muslim minorities were retained only when Islamic identity functioned as an analytical construct rather than a demographic label.

The master search string combined three clusters: ("gifted" OR "talented" OR "high ability" OR "high potential") AND ("Muslim" OR "Islamic education" OR individual Muslim-majority country names) AND (education OR school OR curriculum OR identification OR "talent development"). Malay and Indonesian

equivalents, including pintar, berbakat, and cerdas istimewa, were added for regional sources. The 2005-2026 period captured contemporary developments associated with knowledge-economy agendas, while earlier landmark works were retained where required for theoretical framing. Sources had to be peer-reviewed journal articles with resolvable DOIs and a direct contribution to the review questions.

The working corpus comprises peer-reviewed journal articles relevant to the review questions whose DOIs are traceable through publisher pages or bibliographic metadata. Selection brings together international talent-development scholarship, methodological guidance, and contextual studies of Islamic and Malaysian gifted education. For interpretation, direct contextual empirical studies are distinguished from Islamic conceptual contributions and international comparative or theoretical sources. International findings inform the proposed mechanisms; they are not counted as direct evidence of provision in Muslim-majority countries. The collection is not a complete export from a bibliographic database, so it does not support exhaustive country coverage, publication-frequency estimates, or country rankings. The conclusions are consequently bounded by the sources represented in the synthesis.

Data were charted by author, year, country, purpose, design, sample, conception of giftedness, identification method, intervention, Islamic dimension, outcomes, and limitations. Conceptual articles were examined for argumentative coherence, clarity of constructs, and the relationship between normative claims and operational propositions. Empirical studies were assessed in terms of sampling, measurement, comparison, duration, and inferential limits. Because a scoping review maps evidence rather than producing a pooled effect estimate, methodological diversity was retained and explicitly analysed.

Synthesis proceeded through descriptive mapping of the represented settings and study types, thematic comparison of recurring ideas and their limits, and conceptual integration of talent-development theory with Islamic educational thought. The AMANAH-Talent components were developed by connecting the identified concerns about access, educational purpose, ethical conduct, developmental provision, learner agency, and social contribution. Table 1 makes these relationships explicit by naming illustrative sources, their evidence types, the propositions derived from them, and indicators for future evaluation. The framework is an integrative heuristic rather than a validated causal model.

Country Coverage and Representativeness

The direct contextual evidence used in this synthesis is concentrated in Malaysia, particularly literature associated with Kolej PERMATA Insan, described in earlier publications as Kolej GENIUS Insan, and Kolej PERMATA@Pintar Negara. These sources examine specialised provision, Qur'an memorisation, integrated curricula, classroom learning, and Muslim identity (Bakar, 2017; Hassan et al., 2026; Kiflee et al., 2026; Spawi et al., 2022; Zakaria et al., 2023). International reviews and studies supply comparative concepts and measurement approaches. This distinction matters because a study conducted outside a Muslim-majority setting may inform a research question without establishing what occurs across Muslim-majority education systems.

Concentration on elite institutions has two consequences. It gives researchers access to already identified students and established provision, but it also creates selection bias: successful participants are analysed while children excluded by geography, poverty, disability, language, or weak school referral systems disappear from view. Reported high achievement may therefore reflect both programme effects and selective admission. Strong evaluation requires baseline measures, credible comparison groups, attrition reporting, and attention to those not admitted.

The represented Malaysian evidence also varies in design and scale. Paid et al. (2025) surveyed 49 students about project-based learning, Hassan et al. (2026) used mixed methods with 77 students in a STEM programme, and Azmi and Ruzanna (2026) conducted classroom action research with 18 students. Such studies offer useful accounts of particular educational settings, but their samples do not represent all Malaysian learners or all Muslim-majority countries. Conceptual curriculum and character frameworks contribute educational purposes and design propositions; they do not establish programme effectiveness. The country-level synthesis should therefore be read as an account of the available cases and arguments, with transferability to other institutions requiring explicit testing.

Terminological variation further weakens comparability. Gifted, talented, high ability, excellent, intelligent, and special talent may refer to test thresholds, school performance, specific domains, or developmental potential. Islamic terminology adds concepts such as *fitrah*, *hikmah*, *amanah*, and *adab* that operate at different analytical levels. Studies must report operational criteria, instruments, norm groups, cut-offs, decision rules, and the educational consequences of classification. Without that information, similar labels may describe different populations and different labels may describe comparable learners.

DOI requirements and the emphasis on English- and Malay-language sources favour research that is visible through academic publishing. Policy reports, local-language studies, and programmes in less extensively documented settings may therefore be under-represented. Absence of a country-specific study in this collection does not indicate absence of gifted education in that country. A broader comparative evidence base would require multilingual searching, inclusion of policy and institutional documents under separate eligibility rules, and explicit reporting of coverage by country, school type, and participant group. Until then, the synthesis supports hypotheses and research priorities rather than estimates of regional prevalence or comparisons of national educational quality.

STEM is prominent in the programme studies represented here, and a recent international review also focuses specifically on identifying STEM talent (Hassan et al., 2026; Tang et al., 2026). This emphasis makes STEM a useful domain for investigation, but it does not establish the distribution of resources or provision across all Muslim-majority countries. Research should also examine language, the arts, social leadership, religious scholarship, and community problem-solving. In Islamic terms, talent cannot be valued solely for economic returns; in developmental terms, each domain demands distinct training and performance criteria. Policies claiming holistic provision should therefore disclose how opportunities and resources are distributed across domains.

Theme 1: Conceptualising Giftedness and the Purposes of Education

The first theme concerns tension among giftedness as an attribute, an achievement, and a developmental process. Attribute models foreground relatively stable abilities; achievement models focus on demonstrable performance; developmental models examine the conversion of potential into domain expertise through opportunity, motivation, and training. Contemporary scholarship increasingly supports the developmental position because it avoids treating a test score as destiny (Kuo, 2022; Subotnik et al., 2011). However, abilities still matter: developmental language must not become an excuse for abandoning rigorous assessment or specialised provision.

Islamic sources add a normative dimension by relating knowledge to trust and proper conduct. In al-Ghazali-Ibn Khaldun-based models, intelligence is not an autonomous status but a capacity requiring disciplined learning, purification of intention, habituation, and responsibility (Mohamad, Mohd Hilmi, & Ismail, 2025; Mohamad, Mohd Hilmi, Ismail, et al., 2025). This perspective corrects individualistic accounts of self-actualisation, yet it introduces a measurement challenge. Spirituality and character cannot simply be asserted as programme outcomes; they require clear constructs, observable indicators, valid instruments, and safeguards against socially desirable responding.

A working definition follows: a gifted Muslim learner demonstrates, or has the potential to develop, outstanding competence in one or more domains relative to peers with comparable opportunities, and requires differentiated educational provision for that potential to become expertise, ethical agency, well-being, and social contribution. The phrase “comparable opportunities” foregrounds equity; “development” rejects fixed labelling; and “ethical agency” distinguishes moral reasoning from mere compliance. The definition does not make religiosity an admissions criterion.

The relationship between contemporary giftedness theory and Islamic tradition should be dialogical. Potential, deliberate practice, creativity, and creative productivity explain developmental mechanisms; *fitrah*, *amanah*, *adab*, and *maqasid* sharpen questions of purpose and moral limits. Cosmetic Islamisation of Western terminology is insufficient, as is citing classical scholars without specifying educational mechanisms. A defensible synthesis must state whether a concept operates at the level of human ontology, normative aim, curriculum design,

pedagogy, or outcome. This prevents logical leaps from “knowledge is a trust” to “this programme is effective” without evidence and produces falsifiable propositions.

Internal pluralism must also be confronted. Muslim societies differ by legal school, language, ethnicity, class, religiosity, and the relationship between religious and public education. A theologically dense framework may be difficult to employ in a plural public system, whereas a thin framework may lose Islam’s intellectual contribution. A productive approach identifies translatable ethical commitments, including trust, justice, excellence, pursuit of knowledge, and public good, while allowing contextual operationalisation. Evaluation should examine judgement and action rather than policing students’ inner faith, thereby protecting intellectual freedom and limiting moral standardisation.

Theme 2: Identification, Equity, and Cultural Validity

Identification is the gateway determining who receives advanced opportunities. IQ and achievement tests offer standardisation but may privilege language, curriculum exposure, urban schooling, and test familiarity. Reviews show variation in identification practices and the characteristics assessed (Hodges et al., 2018; Kuznetsova et al., 2024), while research on culturally and linguistically diverse students identifies barriers to recruitment and retention (Ford et al., 2008). These international findings support questions about fairness in Muslim-majority settings; they do not establish the validity of any imported threshold. Local norms, contextual validation, and equity audits are therefore necessary.

A system using multiple criteria, such as universal screening, non-verbal measures, portfolios, trained teacher nomination, domain performance, and repeated opportunities, is more defensible. Validity concerns not merely score correlations but the accuracy and consequences of interpretations. Validation of the HOPE teacher-rating scale in Korea demonstrates that instruments require evidence within their target culture (Lee et al., 2022). The same principle applies across multilingual and multi-ethnic Muslim societies.

Qur’an memorisation as one component of identification at Kolej GENIUS Insan is a meaningful contextual innovation because it can reveal memory capacity, persistence, and potential in a religious domain (Zakaria et al., 2023). Generalisation must nevertheless be cautious. Memorisation should not become a universal proxy for giftedness or exclude learners who lacked access to high-quality Qur’anic education. Future research should examine reliability, incremental validity beyond established measures, opportunity-to-learn bias, and associations with long-term outcomes.

Equitable identification requires analysis of the complete decision chain. Bias may arise before testing when disadvantaged schools lack information; during referral when teachers conflate compliance with ability; within testing when language and content are inequivalent; after selection when travel or residential costs block participation; and within programmes when institutional culture undermines belonging. Replacing one instrument cannot repair this chain. Equity audits should report referral, testing, eligibility, offer, enrolment, retention, and outcome rates by group, allowing policymakers to distinguish measurement problems from failures of information, resources, or climate.

Universal screening can widen access but is not a universal remedy because tests retain construct, norm, and opportunity-to-learn biases. Dynamic assessment, which examines learning rates following support, may reveal potential not yet converted into attainment. Portfolios and authentic performance are better suited to domains not captured by general tests. An optimal system may be staged: broad screening with multiple indicators, deeper domain assessment, trial access to programmes, and periodic review. Admission should not become a permanent label; mobility accommodates late development and limits the harm of misclassification. Equity is therefore a property of system design rather than of any single test.

Theme 3: Curriculum, Pedagogy, and Holistic Development

International evidence supports acceleration and ability grouping when they are carefully implemented. A century-scale meta-analysis reports positive academic effects, although programme design and socio-emotional support shape students’ experiences (Steenbergen-Hu et al., 2016). In Muslim contexts, the relevant choice is

not between a Western or Islamic curriculum but how to align disciplinary depth, pace, research, language, Qur'an memorisation, Islamic studies, and character formation.

The Islamic Gifted Curriculum Framework offers an initial foundation by integrating Islamic educational philosophy with contemporary giftedness models (Spawi et al., 2022). The tri-intelligence framework proposes interaction among IQ, EQ, and SQ, with SQ providing moral regulation (Mohamad et al., 2026). Both extend educational outcomes beyond attainment. Yet curriculum overload becomes a risk when integration is translated into additional subjects rather than interdisciplinary design. Time use, cognitive load, sleep, and well-being must form part of evaluation.

Project-based learning (PBL), authentic research, expert mentoring, and community problem-solving create spaces for meaningful integration. Paid et al. (2025) report favourable student perceptions of PBL and higher-order thinking skills. Hassan et al. (2026) examine the 4I-PBL model, comprising Inspire, Inquire, Innovate, and Implement, and report positive experiences and associations among student motivation, satisfaction, and perceived skills. These findings provide contextual support for exploring talent nurturance, but self-reports, small institution-based samples, and the absence of a reported controlled comparison limit causal interpretation. Quasi-experimental designs, authentic performance assessments, and follow-up evidence are needed to evaluate learning gains and their sustainability.

Naqli-Aqli integration must be judged by the quality of relationships between disciplines. Weak integration merely places a Qur'anic verse at the beginning of a science lesson; stronger integration asks learners to examine epistemic assumptions, ethical implications, and uses of knowledge while preserving disciplinary rigour. An artificial-intelligence project, for example, could combine advanced programming with bias auditing, privacy, justice, and maqasid. Rubrics should separate scientific accuracy, creativity, ethical reasoning, collaboration, and spiritual reflection so that weaknesses are not concealed within a composite score.

Acceleration requires special care in residential programmes with dense curricula. General evidence supports academic benefits, but individual suitability depends on domain readiness, motivation, family support, and well-being. In programmes combining academics, memorisation, and leadership, subject-specific acceleration may be preferable to whole-grade advancement. Flexible scheduling, curriculum compacting, and university mentors can increase challenge without expanding every demand simultaneously. Evaluation should track sleep, stress, belonging, creativity, and sustained interest, because achievement purchased through chronic exhaustion is not sustainable talent development.

Teachers are the clearest point of contact between policy and student experience. They set task level, interpret behaviour, nominate students, provide feedback, and shape moral climate. Generic training in "gifted characteristics" can reinforce stereotypes that gifted learners are fast, compliant, and successful in every subject. Professional learning should use complex cases involving twice-exceptionality, poverty, multilingualism, uneven attainment, and asynchronous development, while training teachers to design differentiated tasks. Practice communities examining actual student work are more likely to transform pedagogy than one-off workshops; school leaders must provide time, data, and specialist access.

Theme 4: Identity, Character, and Well-Being

Gifted learners encounter high expectations, perfectionism, peer difference, and identity pressure. Cross-cultural qualitative research identifies concerns about adult expectations, peer relationships, and managing the visibility of ability, while showing that students' social experiences depend on context (Cross et al., 2019). This evidence supports attention to socio-emotional agency, although its applicability in Muslim-majority settings requires further study. Religious identity may provide meaning and resilience, but programmes should also examine whether linking academic excellence to moral perfection creates additional pressure.

A descriptive survey of gifted Muslim students examines self-reported Islamic values, morals, and identity (Kiflee et al., 2026). The RAAIS character framework, comprising Rabbaniyyah, Akhlaqiyyah, Alamiyyah, Insaniyyah, and Siasiyyah, and the IQ-EQ-SQ framework provide conceptual accounts of character development (Mohamad et al., 2026; Zakaria et al., 2024). These contributions operate at different evidential levels: agreement

with value statements is not equivalent to observed ethical behaviour, and a conceptual framework does not demonstrate an intervention effect. Measures should assess moral reasoning, self-regulation, empathy, responsible knowledge use, and social action alongside contextual interpretation.

Well-being support should be normalised as a programme component rather than introduced only after problems emerge. Gifted-informed counselling, mentoring, peer communities, emotional literacy, and safe discussion of religious doubt should be available without stigma. The IQ-EQ-SQ framework could be tested as a mediation model: does spiritual regulation strengthen relationships among emotional capacity, resilience, and socially beneficial talent use? Answering this requires valid instruments and longitudinal designs.

Character discourse must avoid a “model-student burden”, understood as the expectation that gifted Muslim students remain consistently excellent, emotionally stable, and representative of their institution. Such pressure may prevent help-seeking, acknowledgement of failure, or identity exploration. Authentic character formation requires room for error, dialogue, and judgement rather than reputation surveillance. Institutions should separate counselling from discipline, protect confidentiality, and train residential staff and mentors to recognise asynchronous development. Well-being measures should incorporate open responses because averages can conceal high-risk subgroups.

Families and communities are not passive backgrounds. Expectations of social mobility, family sacrifice, and communal honour may strengthen motivation but also narrow domain choices. A student talented in the arts or humanities may be directed towards a high-status profession. Programmes need talent-profiled career guidance, exposure to diverse occupations, and discussion of risk and meaningful contribution. Service should not erase personal aspiration; it can connect individual agency with social responsibility. Longitudinal research should examine how learners negotiate family expectations, religious identity, and career decisions across school, university, and work transitions.

Conceptual Synthesis: The AMANAH-Talent Framework

The review proposes AMANAH-Talent as an empirically revisable synthesis framework. Its six components follow the acronym’s sequence: equitable Access, tawhidic Meaning, ethics and Adab, talent Nurturance, socio-emotional Agency, and relational service and Humanity. Access concerns fair opportunities for identification and participation. Meaning relates knowledge to tawhid, understood as the oneness of God, and to amanah, understood as an entrusted responsibility. Adab concerns appropriate ethical judgement and conduct in learning and using expertise, while akhlaq refers to moral character. Nurturance concerns advanced instruction, practice, and mentoring. Agency concerns autonomy, self-regulation, and well-being. Humanity concerns relationships, support, and contribution to others. Meaning and Adab guide educational purposes; they are not proposed as tests of piety for admission.

The components address related but distinct problems identified in the literature. Access responds to inequities in identification; Nurturance responds to the developmental conditions needed to convert potential into expertise; and Agency responds to learners’ socio-emotional experiences. Meaning, Adab, and Humanity draw particularly on Islamic conceptual scholarship concerning purpose, conduct, and responsibility. The framework connects these concerns without treating normative arguments, descriptive observations, and intervention evidence as interchangeable. Figure 1 summarises the six conceptual domains, while Table 1 identifies the evidence basis and inferential boundary for each component.

AMANAH-Talent distinguishes three levels of evidence. Normative principles explain why talent should be developed; educational mechanisms specify how those principles may be enacted; outcome evidence evaluates what learners and programmes achieve. Islamic conceptual scholarship is especially relevant to educational purposes, while international talent-development research contributes tested mechanisms and assessment approaches. The integration proposed here is a conceptual inference from these complementary sources. It does not establish that the six components form a validated factor structure or that adding an Islamic component independently improves outcomes. Those propositions require construct validation, appropriate comparisons, and longitudinal evaluation.

The framework can be translated into a proposed theory of change. Inputs include equitable policy, skilled teachers, domain resources, mentors, and family support. Activities include repeated screening, advanced curriculum, deliberate practice, authentic inquiry, ethical reflection, and socio-emotional support. Proposed mechanisms include opportunity, belonging, self-regulation, domain identity, and orientation towards public benefit. Proximal outcomes include engagement, skill growth, and well-being; intermediate outcomes include expertise, creativity, character, and leadership; distal outcomes concern ethical contribution. Researchers can test links within this chain separately and examine whether they vary across settings. A null or adverse finding would indicate a need to revise the relevant mechanism, implementation, or contextual assumption.



Figure 1. The six conceptual domains of AMANAH-Talent

Table 1. Evidence basis and proposed indicators for the AMANAH-Talent components

Component	Illustrative evidence and type	Synthesis and evidence boundary	Proposed research indicators
A: Access	Hodges et al. (2018): meta-analysis; Lee et al. (2022): validation in Korea; Zakaria et al. (2023): Malaysian identification study.	Identification rules and prior learning opportunities affect access. These sources support local validation and equity audits, not a universal admissions threshold.	Referral, screening, admission, and retention by group; classification accuracy; incremental validity of domain measures.
M: Meaning	Spawi et al. (2022) and Mohamad, Mohd Hilmi, and Ismail (2025): Islamic conceptual analyses.	Knowledge and talent are interpreted as a trust with moral purposes. This is a normative basis; its effect on learning remains a proposition.	Purpose orientation, understanding of knowledge as trust, and reflective accounts of educational and career choices.
A: Adab	Zakaria et al. (2024): conceptual RAAIS framework; Kiflee et al. (2026): descriptive survey of values, morals, and identity.	Ethical judgement should guide the use of expertise. Self-reported agreement with values does not establish ethical behaviour or programme effects.	Judgement in authentic dilemmas; integrity in research tasks; behaviour observed over time; agreement across informants.
N: Nurturance	Steenbergen-Hu et al. (2016): academic meta-analysis; Paid et al. (2025) and Hassan et al. (2026): Malaysian survey and mixed-methods studies.	Advanced instruction and domain opportunities have a developmental rationale. Local PBL findings support investigation, with causal claims bounded by study design.	Domain performance and growth; instructional challenge; mentoring participation; workload and sustained engagement.
A: Agency	Cross et al. (2019): cross-cultural qualitative study;	Social experience and proposed emotional-spiritual regulation	Self-regulation, autonomy, belonging, help-seeking, and

	Mohamad et al. (2026): conceptual IQ-EQ-SQ framework.	motivate attention to autonomy and well-being. Transferability and mediation effects remain untested.	well-being; culturally validated measures and longitudinal change.
H: Humanity	Worrell et al. (2019): talent-development review; Zakaria et al. (2024): Islamic conceptual account of character and social responsibility.	Relationships can support talent development; service supplies a proposed social orientation. Evidence for long-term community contribution remains limited.	Quality of mentoring and family support; collaborative action; documented community contribution; alumni follow-up.

Note. Sources are illustrative of each component's rationale, not six separate systematic evidence pools. International findings require contextual testing; conceptual principles do not demonstrate outcomes. Indicators are proposed for future evaluation, and the complete AMANAH-Talent framework has not been empirically validated.

Future Research Agenda and Practical Priorities

Table 2 is a practical outcome of the review: it links each of the eight research priorities to the relevant AMANAH-Talent components, an appropriate design, and an output that researchers or institutions can use. The priorities address gaps rather than validated rankings of importance. As a suggested sequence, shared definitions and culturally valid measures should support identification and curriculum studies, followed by longitudinal and implementation evaluations. Comparative policy, AI, and economic studies can then examine contextual mechanisms, responsible use, and the feasibility of wider provision.

Table 2. Practical research priority matrix linked to AMANAH-Talent

Research priority	Linked components	Suggested design	Practical output
Cross-national data	All six components	Shared observatory and longitudinal panels	Comparable definitions, data dictionary, and programme indicators.
Cultural validation	Access, Meaning, Adab, Agency	Multilingual validation and tests of measurement invariance	Measures suitable for comparison; documented item bias and limits.
Equitable identification	Access, Nurturance	Screening comparisons, dynamic assessment, and policy evaluations	Audited decision rules and evidence on access, accuracy, and retention.
Integrated curriculum	Meaning, Adab, Nurturance, Agency	Quasi-experiments and longitudinal cohort or alumni studies	Curriculum evaluation with learning, ethical reasoning, and well-being outcomes.
Teacher development	Adab, Nurturance, Agency	Mixed-methods implementation studies	Training and implementation protocols with adaptation and resource requirements.
Ethical AI	Access, Adab, Nurturance, Agency	Controlled learning studies with bias and privacy audits	Evidence on advanced learning, information accuracy, integrity, and access.

Comparative policy	Access, Meaning, Nurturance, Humanity	Comparative case studies and analysis of policy mechanisms	Explanation of how financing, governance, and curricula shape opportunities.
Economics and equity	Access, Nurturance, Humanity	Cost-effectiveness and distributional analysis	Costs and benefits by learner group to inform provision and scaling.

The first priority is a cross-national observatory of gifted education in Muslim-majority countries. A shared database should record definitions, identification criteria, participant demographics, programme types, duration, mobility, and outcomes. Without comparable data, country comparison remains descriptive. A minimum indicator set should include gender, location, socioeconomic position, language, disability, talent domain, and post-school pathway.

The second priority is cross-cultural validation. Measures of intelligence, creativity, motivation, spirituality, character, and well-being require tests of measurement invariance across languages, countries, and groups. Literal translation does not establish construct equivalence. Studies should report reliability, factor structure, item bias, and predictive validity. Islamic instruments developed without behavioural comparisons risk measuring social convention rather than the intended construct.

The third priority is equitable identification. Research should compare universal screening with nomination, verbal with non-verbal measures, one-time with dynamic assessment, and national cut-offs with local norms. Outcomes should include not only numbers identified but access, accuracy, subsequent performance, and learner experience. Refugee students provide an especially important test of assumptions about language, interrupted schooling, and trauma (Alodat, 2026).

The fourth priority is longitudinal evaluation of integrated curricula. Naqli-Aqli institutions should track academic attainment, Qur'an memorisation, creativity, well-being, identity, leadership, and alumni contribution. Cohorts should be compared and time burden, sleep, and opportunity costs documented. Without follow-up, claims of holistic development remain dependent on curricular intentions and short-term perceptions.

The fifth priority is teacher development. Studies should define gifted-content knowledge, differentiated pedagogy, socio-emotional competence, cultural literacy, and the ability to integrate adab without indoctrination. Culturally responsive leadership research shows that change requires system capacity rather than a single workshop (Mun et al., 2020). Implementation studies should assess acceptability, fidelity, adaptation, sustainability, and cost.

The sixth priority concerns ethical artificial intelligence (AI). AI may support differentiation, feedback, and enrichment, but its use raises questions about privacy, linguistic bias, unequal access, and dependency. Azmi and Ruzanna (2026) report pre-post changes in a small action-research study of ChatGPT-assisted Malay grammar learning. This provides preliminary classroom evidence, with causal interpretation limited by the design and sample. Further research should examine learning gains against suitable comparisons, advanced task design, creativity, academic integrity, and differences in access, alongside teacher guidance and checks on information accuracy.

The seventh priority is comparative research that does not treat country as a single explanatory variable. Designs should compare mechanisms such as financing, governance, screening, curricular autonomy, teacher preparation, and religion-state relationships. Cross-cultural work can strengthen general theory only when constructs and measures are genuinely equivalent (VanTassel-Baska, 2013).

The eighth priority is the economics and equity of provision. Per-student cost, alternative investments, and the distribution of benefits should be examined alongside outcomes. An elite programme may produce high achievement yet remain inequitable when access is narrow; an inclusive policy may fail when instructional intensity is insufficient. Research must examine excellence and equity simultaneously.

This agenda requires open-science infrastructure. Regional consortia should preregister protocols, share data dictionaries, publish instrument materials under appropriate licences, and report null results. Student datasets require strong governance, de-identification, and community engagement, especially when religious or mental-health measures are included. Cross-country replication should distinguish core components from local adaptation. Journals can require search strings, extraction forms, and exclusion tables, reducing the tendency for each institution to propose a new model without comparing it with existing alternatives.

The field must progress from one-time perception surveys towards portfolios of evidence. Randomised trials may suit specific pedagogical interventions, while quasi-experiments, interrupted time series, and regression discontinuity can evaluate policy change. Longitudinal designs are needed for domain and identity development, cost analysis for scaling decisions, and ethnography for cultural mechanisms missed by scales. No single hierarchy of methods answers every question. Quality depends on question-method alignment, valid measurement, credible comparison, and transparent reporting.

DISCUSSION

The synthesis identifies a weak empirical connection between Islamic educational purposes and the mechanisms and outcomes examined in gifted education. Malaysian scholarship offers concepts such as Naqli-Aqli integration, Qur'an memorisation, RAAIS, models informed by al-Ghazali and Ibn Khaldun, and IQ-EQ-SQ (Mohamad, Mohd Hilmi, & Ismail, 2025; Mohamad, Mohd Hilmi, Ismail, et al., 2025; Mohamad et al., 2026; Spawi et al., 2022; Zakaria et al., 2023, 2024). Table 1 clarifies how these contributions inform AMANAH-Talent and where the supporting evidence remains conceptual, descriptive, or dependent on international comparisons. Their next contribution requires operationalisation and testing.

The article's conceptual contribution is to separate access, development, and orientation. Access asks who is identified; development concerns the educational experience; orientation asks what talent is for. Policies frequently conflate these dimensions. Using character as an admissions test can penalise learners with fewer opportunities, whereas omitting ethics from the curriculum neglects an Islamic educational purpose. Analytical separation therefore makes principled integration more equitable.

For policy, a national ecosystem requires repeated screening, multiple talent pathways, curricula of varying intensity, mobility into and out of provision, well-being support, and outcome data. Specialist schools are one component, not the entire system. Researchers should build cross-national consortia and publish protocols, measures, and aggregated data. Studies from Muslim-majority countries should contribute to theory rather than merely report local distinctiveness.

The review's principal limitation is the representativeness of its working corpus. DOI-based eligibility improves traceability but can exclude policy documents and locally circulated research. English- and Malay-language coverage may under-represent scholarship in Arabic, Persian, Turkish, Urdu, and other languages. Direct contextual sources are concentrated in Malaysian specialised institutions, while international studies inform theoretical and methodological comparisons. The collection cannot establish national prevalence, country rankings, or general programme effectiveness across Muslim-majority systems. Incomplete database-level search and screening documentation further limits reproducibility. AMANAH-Talent and the priorities in Table 2 should therefore be treated as propositions for investigation rather than a validated regional model.

Muslim-majority contexts can transform international giftedness scholarship rather than merely receive existing theory. An emphasis on trust and contribution challenges the assumption that individual self-actualisation is the final outcome. Integration of religious and professional knowledge creates a setting for testing whether moral orientation shapes problem choice, persistence, and expertise use. This contribution will be persuasive only when constructs are defined, mechanisms specified, and comparative evidence supplied. Commitment to values does not exempt a theory from testing.

The most important practical implication is to reject a false trade-off between excellence and equity. High standards without equitable access reinforce privilege; broad access without intensive instruction becomes symbolic inclusion. A mature system combines wide screening, support before and after selection, flexible

domain pathways, and genuinely advanced teaching. Intellectual excellence and character are not separate curricula: ethical judgement should operate within authentic problems, research decisions, technology use, and power relations.

AMANAHTalent also changes how institutional success should be reported. Medals, examination scores, and elite university admission matter, but they capture visible performance more readily than development. Dashboards should include individual growth, knowledge production, domain creativity, well-being, academic integrity, community contribution, and access equity, disaggregated by cohort and social background. Character measures must not become moral surveillance; stronger evidence combines authentic tasks, structured reflection, multiple informants, and behaviour observed over time. Accountability should disclose value added, cost, risk, and groups still excluded, alongside exceptional graduates.

For Malaysian scholarship, work on Islamic gifted curricula, Qur'an memorisation, al-Ghazali and Ibn Khaldun, and IQ-EQ-SQ provides a conceptual platform for further study. Researchers can use Table 2 to select an evidence gap, an appropriate design, and a practical output, such as a validated measure, an identification audit, a curriculum evaluation, or an implementation protocol. A cumulative programme would progress through construct development, measurement validation, mechanism testing, outcome evaluation, and replication across institutions and countries. Comparison groups should help establish the added value of particular Islamic educational components beyond generally high-quality gifted provision.

CONCLUSION

Three intellectual decisions should guide the field. First, "Muslim-majority country" is useful for interrogating moral purposes and knowledge structures but cannot replace analysis of institutions, cultures, and inequalities within countries. Second, gifted Muslim education is not distinctive merely because religious content is added; its distinctiveness must appear in relationships among access, advanced learning, ethical judgement, well-being, and contribution. Third, holistic ambition requires more, not less, rigorous evidence. Each model must specify constructs, mechanisms, contexts, indicators, and possible conditions of failure. AMANAHTalent is therefore an empirically revisable framework rather than a final answer.

Gifted and talented education in Muslim-majority countries can be investigated through the relationships between advanced learning and Islamic commitments concerning knowledge, ethical conduct, and social responsibility. The reviewed sources provide useful contextual examples and conceptual contributions, but their concentration in Malaysian institutions limits country-level generalisation. AMANAHTalent connects equitable Access, tawhidic Meaning, ethics and Adab, talent Nurturance, socio-emotional Agency, and relational service and Humanity. Table 1 makes the component-to-evidence relationships explicit, while Table 2 translates the gaps into eight practical research priorities. Progress depends on broader multilingual coverage, cross-cultural validation, longitudinal evaluation, and comparative research that tests the framework's mechanisms and contextual limits.

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