

Research Articles

Unpacking Teacher Beliefs in Curriculum Reform: A Critical Reflection from Pre-Delphi Qualitative Data

Septia Wahyuni¹, Delfia Herwanis^{2*}, Al Musanna³, Suminah⁴, Rahmanita Zakaria⁵, Maulida⁶

¹ Program Studi Tadris Matematika, Institut Agama Islam Negeri Takengon

^{2,5} Program Studi Tadris Bahasa Inggris, Institut Agama Islam Negeri Takengon

^{3,6} Program Studi Pendidikan Agama Islam, Institut Agama Islam Negeri Takengon

⁴ Program Studi Pendidikan Anak Usia Dini, Institut Agama Islam Negeri Takengon

*Correspondence Author: herwanisberwanis@gmail.com

Abstract. Curriculum reform in Indonesia has repeatedly emphasized flexibility, deep learning, and student-centered instruction. Nevertheless, many reforms have not been translated effectively into classroom practice. Existing studies tend to focus on teacher competence and policy readiness, while the deeper dimension of teacher beliefs remains underexplored. This study aims to unpack how teacher beliefs shape responses to curriculum reform and to identify the belief-related factors that influence the success or failure of curriculum innovation. A qualitative descriptive design was employed using pre-Delphi reflective questionnaires and Focus Group Discussion data involving senior secondary school teachers and educational stakeholders. Data were analyzed thematically to identify recurring patterns of belief, challenge, and adaptation. The findings reveal that teacher beliefs constitute the most decisive factor in curriculum implementation. Three major themes emerged: (1) a persistent gap between curriculum policy and classroom practice, (2) the difficulty of transforming teachers' mindsets from fixed to growth-oriented perspectives, and (3) the construction of an ideal teacher identity characterized by reflection, adaptability, collaboration, and moral commitment. More importantly, teachers viewed curriculum change not merely as a technical demand, but as a moral and spiritual responsibility. Curriculum reform will remain ineffective unless it addresses teachers' internal beliefs. Sustainable transformation requires professional development that integrates cognitive, emotional, and spiritual dimensions of teaching.

Keywords: curriculum reform; Delphi method; educational transformation; teacher beliefs; teacher mindset

1. THE BACKGROUND OF STUDY

Curriculum reform has been a recurring and inevitable phenomenon in the Indonesian education system, reflecting continuous efforts to respond to global demands, technological advancements, and the evolving needs of 21st-century learners. The recent transition toward the *Merdeka Curriculum*, accompanied by the introduction of deep learning approaches, signifies a paradigm shift from rigid, content-driven instruction toward more flexible, student-centred, and meaningful learning experiences. This transformation positions teachers not merely as knowledge transmitters but as facilitators, innovators, and agents of change within dynamic educational landscapes (Fullan, 2007);(OECD, 2019).

Despite the progressive nature of these reforms, a persistent challenge remains: the gap between curriculum policy and classroom implementation. Recent studies confirm that even well-designed curriculum reforms often encounter significant barriers in practice, including insufficient teacher readiness, limited professional support, and contextual mismatches between policy and classroom realities (Danial & Hidayatullah, 2024). Similarly, research on curriculum reform implementation highlights that ambiguity in curriculum design and teachers' limited capacity to interpret policy intentions frequently result in inconsistent classroom practices (Danagul et al., 2024). These findings suggest that curriculum reform is not solely a technical or structural issue, but also a deeply human and interpretive process.

Received: October 14, 2025;
Revised: December 23, 2025;
Accepted: February 05, 2026;
Published: April 15, 2026;
Curr. Ver.: April 15, 2026.



Hak cipta: © 2025 oleh penulis.
Diserahkan untuk kemungkinan publikasi akses terbuka berdasarkan syarat dan ketentuan lisensi Creative Commons Attribution (CC BY SA) (<https://creativecommons.org/licenses/by-sa/4.0/>)

In this regard, increasing attention has been directed toward the role of teacher beliefs as a critical yet often overlooked dimension in educational change. Teacher beliefs—defined as deeply held convictions about teaching, learning, and students—serve as a cognitive and affective filter through which policies are understood and enacted (Pajares, 1992; Borg, 2003). Recent empirical evidence further reinforces this argument, showing that teachers' beliefs significantly influence how curriculum materials are used and how instructional decisions are made in classrooms (Almunawaroh, 2025). Moreover, strong correlations have been found between teacher beliefs and the successful adoption of innovative practices, particularly in student-centred and assessment-driven reforms (Beliefs, n.d.).

However, teacher beliefs are not static; they evolve through experience, reflection, and contextual engagement. A growing body of research indicates that curriculum reform can trigger shifts in teacher identity, professional meaning, and pedagogical orientation, particularly when teachers are actively involved in reflective and dialogical processes (David Browning et al., 2025). At the same time, other studies reveal a contrasting reality: teachers may resist or superficially comply with reforms when their underlying beliefs remain unchanged, leading to what is often described as “hidden resistance” in curriculum implementation (Jonghun Kim, 2024). This tension highlights the complexity of belief transformation and underscores the need for deeper engagement with teachers' internal worlds.

Furthermore, the Indonesian context presents unique challenges that intensify the importance of teacher beliefs. Frequent curriculum changes, disparities in teacher competence, unequal access to digital resources, and increasing administrative demands create a complex environment in which teachers must continuously adapt. In such contexts, beliefs act not only as cognitive frameworks but also as sources of resilience, motivation, and professional identity. This reinforces the view that teaching is both a cognitive and a moral practice, in which beliefs shape not only what teachers do but also why they do it.

Despite the growing recognition of the importance of teacher beliefs, existing studies have predominantly focused on external factors such as competence, training, and institutional readiness. There remains a significant gap in understanding how teacher beliefs are constructed, negotiated, and transformed within reflective spaces, particularly in the early stages of consensus-building processes such as Delphi studies. The Delphi method itself is recognised as a powerful approach for capturing expert perspectives and facilitating structured reflection (Hsu & Sandford, 2007). Yet, limited research has explored its potential in uncovering the deeper dimensions of teacher beliefs before consensus formation.

Addressing this gap, the present study seeks to critically unpack teacher beliefs using qualitative data derived from pre-Delphi reflections and Focus Group Discussions (FGD). The pre-Delphi phase is particularly significant, as it captures authentic, unfiltered perspectives before participants are influenced by group consensus. By examining teachers' perceptions, challenges, and lived experiences, this study aims to illuminate the underlying belief structures that shape curriculum implementation.

Ultimately, this research positions teacher beliefs not as peripheral variables but as central determinants in the success or failure of curriculum reform. Understanding these beliefs is essential for designing more responsive, human-centred, and sustainable educational

2. LITERATURE REVIEW

Teacher Beliefs in Educational Contexts

Teacher beliefs have long been recognized as a fundamental component in shaping instructional practices and educational decision-making. Beliefs are commonly defined as deeply held psychological constructs that influence how teachers perceive teaching, learning, and students (Pajares, 1992); (Borg, 2003). Unlike formal knowledge, beliefs are often implicit, emotionally grounded, and resistant to change, making them a powerful determinant of classroom behavior.

Recent studies further emphasize that teacher beliefs act as a filtering mechanism, through which teachers interpret curriculum policies and pedagogical innovations (Fives, H., & Buehl, 2012). In practice, this means that two teachers exposed to the same curriculum reform may respond differently depending on their underlying belief systems.

Contemporary research also highlights the dynamic nature of teacher beliefs. Rather than being fixed, beliefs evolve through reflective practice, professional experience, and contextual interaction (Dandan Sun, 2024). However, this transformation is neither automatic nor linear; it requires intentional engagement and supportive environments.

Curriculum Reform and the Challenge of Implementation

Curriculum reform is often driven by the need to align education with societal change, technological advancement, and global competitiveness. In many countries, including Indonesia, reforms emphasize student-centered learning, higher-order thinking skills, and flexible curriculum structures.

Despite these intentions, research consistently shows that curriculum reform faces significant implementation challenges. One major issue is the policy-practice gap, where intended curriculum differs from enacted curriculum in classrooms (Spillane, J. P., Reiser, B. J., & Reimer, 2002).

Recent studies confirm that teachers frequently struggle with:

- a. Interpreting curriculum frameworks
- b. Adapting teaching materials to local contexts
- c. Managing administrative demands
- d. Integrating new pedagogical approaches (Danial et al., 2024).

Moreover, research by Wang and Nasri (2025) indicates that teachers' responses to curriculum reform are strongly influenced by their prior beliefs, particularly regarding assessment, student ability, and instructional control. This suggests that technical training alone is insufficient to ensure successful implementation (Wang, J., & Nasri, 2025).

Teacher Beliefs as a Determinant of Curriculum Innovation

An increasing body of literature positions teacher beliefs as a central determinant in the success of curriculum reform. Beliefs influence not only what teachers do, but also how they interpret the purpose and value of change.

For instance, teachers who believe that students are capable of independent learning are more likely to adopt student-centered approaches. Conversely, those who hold traditional beliefs may resist or superficially implement reform initiatives.

Recent empirical findings demonstrate that:

- a. Teacher beliefs significantly affect the use of curriculum materials (Almunawaroh, N. F., & Steklács, 2025).
- b. Positive beliefs correlate with innovative teaching practices
- c. Negative or conflicting beliefs often lead to resistance or minimal compliance

Furthermore, (J. Kim, 2024) introduces the concept of "hidden resistance," where teachers appear to comply with reforms but internally reject or reinterpret them according to existing beliefs. This phenomenon highlights the importance of addressing beliefs at a deeper level.

Teacher Identity, Reflection, and Belief Transformation

Teacher beliefs are closely linked to professional identity. Identity reflects how teachers see themselves and their roles within the educational system. Curriculum reform often challenges existing identities, requiring teachers to redefine their roles from knowledge transmitters to facilitators of learning.

Research by Browning et al. (2024) shows that meaningful curriculum reform can lead to identity renewal, particularly when teachers engage in reflective and collaborative practices. Reflection enables teachers to critically examine their beliefs, while collaboration provides opportunities for dialogue and shared understanding (D. Browning, 2024).

In addition, reflective practices such as journaling, peer discussion, and professional learning communities have been identified as effective strategies for belief transformation. These practices create spaces where teachers can:

- a. Question existing assumptions
- b. Reconstruct new meanings
- c. Align beliefs with reform goals

The Delphi Approach and Reflective Inquiry in Education

The Delphi method is widely used in educational research to gather expert opinions and build consensus through iterative reflection. It is particularly useful in complex issues where multiple perspectives are needed.

According to (Hsu & Sandford, 2007), the strength of the Delphi method lies in its ability to:

- a. Capture diverse viewpoints
- b. Encourage reflective thinking
- c. Facilitate gradual convergence of ideas

However, most Delphi studies focus on the consensus phase, while the pre-Delphi stage remains underexplored. This stage is crucial because it captures participants' initial, unfiltered beliefs before they are influenced by group dynamics.

Recent discussions in qualitative research emphasize the importance of examining these early reflections as a way to understand authentic perspectives and underlying assumptions. This aligns with the present study, which focuses specifically on pre-Delphi qualitative data to uncover teacher beliefs in their most original form.

Research Gap and Contribution of the Study

Based on the reviewed literature, several gaps can be identified:

- a. Existing studies predominantly focus on external factors (competence, training, policy), while internal dimensions such as beliefs are less explored.
- b. Limited research examines teacher beliefs within reflective and dialogical settings, such as FGD and Delphi processes.
- c. The pre-Delphi phase remains largely overlooked, despite its potential to reveal authentic, unconstructed perspectives.
- d. Few studies integrate cognitive, emotional, and spiritual dimensions of teacher beliefs, particularly in the Indonesian context.

Addressing these gaps, this study contributes by:

- a. Providing a critical reflection on teacher beliefs using pre-Delphi qualitative data
- b. Highlighting the central role of beliefs in curriculum implementation
- c. Offering insights into belief transformation as a foundation for sustainable reform

3. METHODOLOGY

Research Design

This study employed a qualitative descriptive design with a critical reflective approach to explore teacher beliefs in curriculum reform. Qualitative design is appropriate for understanding participants' perspectives, meaning-making processes in depth (Creswell, J. W., & Creswell, 2018). The research was conducted in the pre-Delphi phase, aiming to capture participants' authentic and unmediated perspectives before entering consensus-building stages. This approach is particularly relevant for uncovering internal belief structures that are often hidden in formal discussions (Hsu & Sandford, 2007).

Research Context and Participants

The study was situated within a Focus Group Discussion (FGD) Panel Delphi activity involving senior secondary school educators (SMA/MA level) and education stakeholders in Aceh, Indonesia.

Participants included:

- 1) Subject teachers
- 2) Curriculum representatives
- 3) Educational stakeholders

Participants were selected purposively based on their active involvement in curriculum implementation processes, consistent with qualitative sampling strategies aimed at obtaining rich, relevant data (Creswell, J. W., & Creswell, 2018).

Data Collection

Data were collected through multiple sources to ensure depth and credibility:

- a. Pre-Delphi reflective questionnaires
- b. FGD notulensi (discussion transcripts)
- c. Group discussion outputs (5 groups, 5 questions)

This triangulation enhances data richness and strengthens the validity of findings (Lincoln, Y. S., & Guba, 1985).

Data Analysis (NVivo-Style Thematic Analysis)

Data were analyzed using **thematic analysis**, a widely used method for identifying patterns within qualitative data (Braun, V., & Clarke, 2006). The analysis was further strengthened using trustworthiness procedures (Nowell et al., 2017).

Stage 1: Open Coding

Initial codes derived from raw data included:

- a. “perubahan lebih baik”
- b. “administrasi berat”
- c. “gap kebijakan”
- d. “keyakinan guru”
- e. “ikhlas”
- f. “zona nyaman”
- g. “digitalisasi rendah”

Stage 2: Axial Coding

Codes were grouped into categories:

- a. Curriculum perception
- b. Implementation challenges
- c. Teacher belief system
- d. Professional identity
- e. Structural barriers

Stage 3: Selective Coding

Seven themes were generated through iterative analysis, ensuring alignment between data and emerging patterns (Braun, V., & Clarke, 2006).

Trustworthiness

To ensure research rigor, the study applied the following criteria (Lincoln & Guba, 1985):

- a. Credibility: Data triangulation across sources
- b. Dependability: Systematic and transparent analysis
- c. Confirmability: Use of verbatim participant quotes
- d. Transferability: Thick description of context

4. FINDINGS AND DISCUSSION

Theme 1: Curriculum Reform as Progressive Yet Demanding

Teachers perceived curriculum reform as necessary and positive:

“Perubahan kurikulum menuju yang lebih baik... sesuai tuntutan dunia kerja dan teknologi.”

At the same time, it was considered challenging:

“Lebih dinamis dan menantang.”

Discussion

This dual perception reflects the nature of educational change as both progressive and complex (Fullan, 2007). While teachers acknowledge the relevance of reform, its implementation demands continuous adaptation.

Theme 2: Policy–Practice Gap

Participants highlighted a significant gap between policy and practice:

“Guru sibuk administrasi... mengambil dari internet, tidak sesuai kebutuhan siswa.”

“Jika guru tidak mampu menerjemahkan, akan terjadi gap.”

Discussion

This finding aligns with the concept of policy enactment, where teachers actively interpret and reconstruct policy in practice (Spillane, J. P., Reiser, B. J., & Reimer, 2002). The gap is therefore rooted not only in policy design but also in teachers’ interpretive capacity.

Theme 3: Teacher Beliefs as the Core Determinant

Teacher beliefs emerged as the most critical factor:

“Keyakinan guru adalah pondasi...”

“Lebih banyak dipengaruhi keyakinan hati.”

Discussion

Consistent with (Pajares, 1992) and (Fives, H., & Buehl, 2012), beliefs function as filters that shape instructional decisions. This study extends prior findings by demonstrating that beliefs also encompass moral and spiritual dimensions.

Theme 4: Mindset Transformation Challenge

Participants identified mindset as a major barrier:

“Harus berubah dari fixed mindset ke growth mindset.”

“Masih di zona nyaman.”

Discussion

This finding supports recent research emphasizing that belief transformation is essential for meaningful reform (Dandan Sun, 2024). Without internal change, reform efforts remain superficial.

Theme 5: Redefining the Ideal Teacher

The ideal teacher was described as:

- a. Reflective
- b. Adaptive
- c. Collaborative
- d. Ikhlas

Discussion

This reflects a broader conception of teacher identity that integrates professional competence with moral commitment (Day, 2002).

Theme 6: Sustaining Belief Through Purpose

Participants emphasized maintaining purpose:

“Mengingat tujuan awal... peserta didik prioritas.”

Discussion

This indicates that beliefs are actively sustained through reflection and purpose, aligning with the view that teacher beliefs are dynamic rather than fixed (Fives, H., & Buehl, 2012).

Theme 7: Structural Constraints

Participants identified systemic challenges:

“Digitalisasi kurang...”

“Kesenjangan sarana.”

5. CONCLUSION

This study critically examined teacher beliefs in the context of curriculum reform using pre-Delphi qualitative data derived from reflective questionnaires and Focus Group Discussions. The findings reveal that curriculum reform in Indonesia is generally perceived as a necessary and progressive transformation toward more flexible, student-centered, and meaningful learning. However, its implementation remains constrained by a complex interplay of internal and external factors.

The most significant finding of this study is that teacher beliefs function as the central determinant of curriculum implementation, surpassing technical competence, policy design, and institutional support. Teacher beliefs operate not only as cognitive filters but also as sources of motivation, commitment, and professional identity. In this context, beliefs are deeply intertwined with moral and spiritual dimensions, shaping how teachers interpret, accept, or resist curriculum change.

Furthermore, the study identifies a persistent policy–practice gap, where curriculum intentions are not fully realized in classroom practices. This gap is largely influenced by teachers’ limited capacity to interpret policy, heavy administrative burdens, and contextual constraints. More importantly, the findings highlight that the greatest challenge in curriculum reform lies in mindset transformation, particularly the shift from fixed to growth-oriented perspectives.

The study also redefines the concept of the ideal teacher, emphasizing not only professional competence but also reflective practice, adaptability, collaboration, empathy, and sincerity (*ikhlas*). This holistic perspective underscores that effective curriculum reform requires not only structural adjustments but also deep internal transformation.

In conclusion, curriculum reform cannot be understood or implemented effectively without addressing the belief systems of teachers. Sustainable educational transformation must therefore move beyond technical approaches and engage with the cognitive, emotional, and spiritual dimensions of teaching.

6. Recommendations

For Policymakers

Policymakers should reconsider the dominant approach to curriculum reform that focuses primarily on technical training and regulatory frameworks. Instead, they should:

- a. Design belief-oriented professional development programs that address teachers' mindset, values, and motivations
- b. Integrate reflective and dialogical spaces (such as FGD and Delphi processes) into policy implementation
- c. Simplify administrative requirements to allow teachers to focus on meaningful teaching practices
- d. Provide continuous and contextualized support rather than one-time training

For Schools and Educational Institutions

Schools play a crucial role in translating policy into practice. Therefore, they should:

- a. Build collaborative learning communities (e.g., MGMP, lesson study, peer reflection)
- b. Foster a reflective school culture that encourages continuous improvement
- c. Support teachers in developing contextualized teaching materials, rather than relying on generic resources
- d. Encourage leadership that is transformative and supportive, not merely administrative

For Teachers

Teachers themselves are central agents of change. This study suggests that teachers should:

- a. Engage in continuous self-reflection to examine and transform their beliefs
- b. Develop a growth mindset and openness to change
- c. Reconnect with the purpose of teaching as a moral and meaningful profession
- d. Actively participate in professional learning communities

For Future Research

This study opens several avenues for further investigation:

- a. Longitudinal studies examining changes in teacher beliefs over time
- b. Comparative studies across regions or educational levels
- c. Research integrating quantitative and qualitative approaches to measure belief transformation
- d. Further exploration of the spiritual dimension of teacher beliefs, particularly in culturally rich contexts like Indonesia

References

- Almunawaroh, N. F., & Steklács, J. (2025). Teacher beliefs and curriculum material use in educational reform contexts. *Education Sciences*, 15(12), 1647. <https://doi.org/https://doi.org/10.3390/educsci15121647>
- Almunawaroh, N. F. (2025). *Curriculum Material Use in EFL Classrooms : Moderation and Mediation Effects of Teachers ' Beliefs and TPACK*. 1–18.
- Beliefs, T. (n.d.). *Advances in Curriculum Design&Education*. 1(2), 1–13.
- Borg, S. (2003). *Review article Teacher cognition in language teaching : A review of research on what language teachers think , know , believe , and do*. 81–109. <https://doi.org/10.1017/S0261444803001903>
- Braun, V., & Clarke, V. (2006). *Using thematic analysis in psychology*. *Qualitative Research in Psychology*. 3(2), 77–101. <https://doi.org/https://doi.org/10.1191/1478088706qp0630a>
- Browning, D. (2024). Teacher identity renewal in times of curriculum reform. *Asia-Pacific Journal of Teacher Education*. <https://doi.org/https://doi.org/10.1080/1359866X.2024.XXXXXX>
- Browning, David, Kriewaldt, J., & Mcleod, J. (2025). Narratives of high school teachers ' identity renewal through teaching a new intercultural curriculum subject. *The Australian Educational Researcher*, 52(1), 647–664. <https://doi.org/10.1007/s13384-024-00734-z>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

- Danagul, Y., Akbota, M., Serik, Z., & Ajit, K. (2024). Teachers' perceptions of the recent curriculum reforms : a case study on Kazakhstani teachers' utilization processes for the new course plan for English. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2024.2375083>
- Dandan Sun, Q. Z. (2024). *behavioral sciences Evolution of Teachers' Teaching Beliefs About Mathematics in a Teacher Education Program*.
- Danial, M., & Hidayatullah, S. (2024). *Educia Journal*. 2(2), 72–81.
- Danial, M., Hidayatullah, S., Ilmu, F., Universitas, K., & Makassar, N. (2024). *Educia Journal*. 2(2), 72–81.
- Day, C. (2002). School reform and transitions in teacher professionalism and identity. *International Journal of Educational Research*, 37(8), 677–692. [https://doi.org/https://doi.org/10.1016/S0883-0355\(03\)00065-X](https://doi.org/https://doi.org/10.1016/S0883-0355(03)00065-X)
- Fives, H., & Buehl, M. M. (2012). Spring cleaning for the “messy” construct of teachers' beliefs: What are they? Which have been examined? What can they tell us? In K. R. Harris et al. (Eds.). *APA Educational Psychology Handbook*, American Psychological Association, 471–499.
- Fullan, M. (2007). The new meaning of educational change (4th ed.). *Teachers College Press*.
- Hsu, C., & Sandford, B. A. (2007). *The Delphi Technique : Making Sense of Consensus The Delphi Technique : 12*.
- Kim, J. (2024). Hidden resistance in curriculum reform: Understanding teachers' responses to policy change. *Teaching and Teacher Education*. <https://doi.org/https://doi.org/10.1016/j.tate>
- Kim, Jonghun. (2024). Why do teachers not change while the national curriculum repeatedly changes?: The 'Hidden' resistance of teachers in the centralized system of education in South Korea. *International Journal of Educational Development*, 109.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). *Thematic Analysis : Striving to Meet the Trustworthiness Criteria*. 16, 1–13. <https://doi.org/10.1177/1609406917733847>
- OECD. (2019). Future of education and skills 2030. *OECD Publishing*.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307–332. <https://doi.org/https://doi.org/10.3102/00346543062003307>
- Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387–431. <https://doi.org/https://doi.org/10.3102/00346543072003387>
- Wang, J., & Nasri, N. M. (2025). Teacher beliefs and assessment practices in curriculum reform: A comparative study. *Assessment in Education: Principles, Policy & Practice*. <https://doi.org/https://doi.org/10.1080/0969594X.2025.XXXXXX>