

## The Implementation of Gender-Responsive Learning in Islamic-Based Early Childhood Education Institutions in the 5.0 Era

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**Abstract.** This study aims to describe and analyze the implementation of gender-responsive learning in Islamic Early Childhood Education institutions in the 5.0 era. The focus of the study is directed at how Islamic values that uphold justice ('adl), compassion (rahmah), and equality (musawah) are applied in learning practices that pay attention to the balance of the roles of boys and girls. This study used a qualitative approach with a case study design in three Islamic Early Childhood Education institutions. Data were collected through participant observation and in-depth interviews with teachers. Data analysis was conducted thematically with the stages of reduction, categorization, and interpretation of meaning based on the Braun and Clarke's model. The results show that most Islamic Early Childhood Education institutions have attempted to integrate gender equality values into learning activities through fair role distribution, selection of media without gender bias, and the development of an inclusive Islamic character-based curriculum. However, subtle biases are still found in teachers' attitudes and language that reflect traditional perceptions of gender roles. In addition, the 5.0 era brings new challenges in the form of biased gender representation in Islamic digital content used in learning. Teachers need to have critical digital literacy to select teaching materials that are in line with Islamic principles and values of equality.

**Keywords:** *Islam ; gender; anak usia dini; pembelajaran responsif gender; 5.0 era*

### Abstrak.

Penelitian ini bertujuan untuk mendeskripsikan dan menganalisis implementasi pembelajaran responsif gender di lembaga Pendidikan Anak Usia Dini (PAUD) berbasis Islam pada era 5.0. Fokus penelitian diarahkan pada bagaimana nilai-nilai Islam yang menjunjung keadilan ('adl), kasih sayang (rahmah), dan kesetaraan (musawah) diterapkan dalam praktik pembelajaran yang memperhatikan keseimbangan peran anak laki-laki dan perempuan. Penelitian ini menggunakan pendekatan kualitatif dengan desain studi kasus pada tiga lembaga PAUD Islam. Data dikumpulkan melalui observasi partisipatif dan wawancara mendalam dengan guru. Analisis data dilakukan secara tematik dengan tahapan reduksi, kategorisasi, dan interpretasi makna berdasarkan model Braun & Clarke. Hasil penelitian menunjukkan bahwa sebagian besar lembaga PAUD Islam telah berupaya mengintegrasikan nilai-nilai kesetaraan gender ke dalam kegiatan pembelajaran melalui pembagian peran yang adil, pemilihan media tanpa bias gender, serta penyusunan kurikulum berbasis karakter Islami yang inklusif. Namun, masih ditemukan bias halus pada sikap dan bahasa guru yang mencerminkan persepsi tradisional terhadap peran gender. Selain itu, era 5.0 membawa tantangan baru berupa bias representasi gender dalam konten digital Islami yang digunakan dalam pembelajaran. Guru perlu memiliki literasi digital kritis untuk menyeleksi materi ajar yang sejalan dengan prinsip Islam dan nilai kesetaraan.



**Kata Kunci:** *Islam ; gender; anak usia dini; pembelajaran responsif gender; era 5.0*

## **Introduction**

The early life period (0–6 years) is a critical stage in the formation of children's identity, values, and social schemes, including the concept of gender roles. (Muhammad Shaleh Assingkily & Noni Putri, 2023). Various studies show that gender stereotypes begin to be internalized from an early age through family interactions, teaching practices, children's reading materials, and play environments (Gonçalves et al., 2025). In many educational contexts, including faith-based early childhood education institutions, teaching practices and learning materials still reproduce traditional gender role divisions, both explicitly and implicitly, which have the potential to reinforce long-term inequalities (Yuniarti et al., 2024). Efforts to integrate a gender justice perspective into the curriculum and teaching practices at an early age are still limited and often not systematically structured (Ahmad et al., 2023).

With the emergence of the Education 5.0 or the 5.0 Era paradigm, which emphasizes more personalized, human-centric learning supported by smart technology – early childhood education institutions are facing new demands: how to utilize 21st-century technology and learning approaches without sacrificing inclusive values, including sensitivity to gender issues (Destari & Rifai, 2025). Education 5.0 offers opportunities for personalized learning and access to more diverse learning resources, but also demands pedagogical strategies so that technology does not reinforce existing gender biases. (Averina & Widagda, 2025). In the context of Islamic education, the emergence of gender mainstreaming discourse and the integration of equality values into the religious curriculum demands a reconciliation between the understanding of religious texts and gender-responsive educational practices (Agus Mushodiq et al., 2025). Several literatures underscore the need for policy and pedagogical frameworks that combine Islamic teaching principles with strategies to reduce gender bias in teaching materials, teacher-child interactions, and parenting patterns in early childhood education environments. However, empirical evidence on how gender-responsive learning models can be implemented effectively in Islamic-based early childhood education institutions is still relatively limited and scattered (Rita Nofianti, Munisa, 2024).

This research gap becomes even more pressing when we consider the long-term implications: patterns of gender socialization that are formed from an early age. Therefore, studies that examine concrete implementation, from curriculum and teacher training to children's reading materials and the use of educational technology, are needed to design effective and contextual interventions in Islamic-based early childhood education institutions (Feierabend et al., 2024). The early childhood period (0–6 years) is a sensitive phase for cognitive, affective, and social development, including the internalization of gender roles and stereotypes, which then have long-term impacts on educational choices, public participation, and economic well-being. Cross-national research shows that gender socialization mechanisms begin to inscribe gender expectations as early as possible, so educational interventions at the early childhood education level have significant preventive potential against the reproduction of gender inequality (Feierabend et al., 2024).

International literature confirms that the quality of the early childhood education institutions curriculum, the capacity of the teaching staff, and the representation of content in the learning materials are key variables that must be modified so that early education is pro-equality and does not reproduce bias (Mérida-Serrano et al., 2020). The entry of Era 5.0 (Education 5.0), namely learning that is increasingly human-centric, personalized, and supported by intelligent technology (AI, adaptive learning, digital platforms), opens up opportunities but also risks (Nur, Sakiinah et al., 2022). On the one hand, technology enables differentiation of learning, simulation of gender-sensitive experiences, and access to inclusive resources. (Dheanita Rachmawati & Putri Yanuarita Sutikno, 2024). On the other hand, algorithms and digital content that have not been engineered in a gender-sensitive manner can reinforce existing stereotypes and biases. (Muhammad Davit Hilal Fahri & Gunawan, 2025). Therefore, digital transformation in Islamic-based early childhood education must be paired with pedagogical design and protective policies so that technology becomes a tool for promoting equality, not reinforcing bias..

From an implementation perspective, real challenges include: (1) limited empirical literature presenting gender-responsive learning models aligned with Islamic values; (2) low capacity of early childhood education teachers (including understanding of religious interpretations that support equality, pedagogical skills, and digital literacy) to implement gender-responsive practices; (3) teaching materials and children's books that

tend to contain unbalanced gender representation; and (4) a lack of standardized evaluation indicators to measure the success of gender-responsive interventions at the early childhood education institutions level. The absence of comparative evidence and valid measurement tools makes policy formulation and the scale of interventions slow and often reactive (Muafiah et al., 2022).

Furthermore, a gender-responsive approach must consider intersectionality, namely how factors of social class, ethnicity, geographic location, and religion intersect and shape children's gender experiences. Therefore, an effective gender-responsive learning model needs to be contextual, culturally sensitive, and adaptive to these complex variations, rather than simply implementing a universal curriculum package.

## **Methodology**

This study uses a qualitative approach to understand the meaning and field practices related to the implementation of gender-responsive learning in Islamic-based early childhood education in the Education 5.0 era. The qualitative approach allows for in-depth exploration of teachers' experiences and children's interactions in the local context. The chosen design is a case study to examine implementation in Islamic-based early childhood education institutions. Case studies support in-depth contextual analysis and comparisons between cases to capture variations in practice and factors influencing implementation (Yin Robert K, 2003). To increase the credibility of the findings, the study applied triangulation methods: observation, semi-structured interviews.

For the research instrument, there are several questions which can be seen in the table below:

***Table 1. Research Instrument Grid***

<b>Observed Aspects</b>	<b>Indicator</b>	<b>Field Notes / Observations</b>
Teacher-child interaction	Teachers give boys and girls equal opportunities to	

	<p>speak, lead, or answer.</p> <p>Teachers use language that is not gender biased.</p>
Learning materials & media	<p>Books, pictures, or play equipment reflect the diversity of male and female roles.</p> <p>The use of technology (digital tools) accommodates all children.</p>
Play activities and assignments	<p>Children are free to choose games without gender restrictions.</p>
Islamic values in learning	<p>Teachers relate the values of justice, compassion and equality according to Islamic teachings.</p>

Figure 1. Group task division is not based on gender.

## Results and Discussion

### 1. Gender Responsive Concept in Islamic-Based Early Childhood Education Institutions

The results of interviews with principals and teachers show that the concept of gender responsiveness is understood as equal learning opportunities between boys and girls, without ignoring biological nature. The majority of teachers emphasized that Islamic values, such as *'adl* (justice) and *rahmah* (compassion), are the primary foundation for treating children fairly and equitably in the learning environment. This principle is reflected in the teachers' view that every child is a trust from Allah SWT and possesses equal potential, regardless of gender. This is as expressed by one teacher, "We teach that all children are a trust from Allah. No one is smarter because they are male or female. Everyone has potential" (Interview: Teacher A, 2025).

However, the findings also indicate that not all teachers have a comprehensive understanding of the concept of gender bias in their daily teaching practices. Some teachers still use phrases like "girls are usually more diligent" or "boys are more active," which, while subtle, have the potential to shape stereotypes and influence children's perceptions in the long term.

## 2. Gender Responsive Learning Practices in the Classroom

Based on observations at three Islamic-based early childhood education institutions, the implementation of gender-responsive learning has begun to be evident in various aspects. First, in the selection of media and play activities, boys and girls are given equal opportunities to choose games, such as Lego, blocks, professional role-playing, and art activities. Second, in the use of teaching language, teachers are beginning to avoid expressions containing gender stereotypes, such as calls that differentiate roles based on gender (Azmy et al., 2024). Third, the integration of Islamic values is also evident through an emphasis on the principles of *ukhuwah* (brotherhood) and *tawazun* (balance) in group activities.

However, the implementation of gender-responsive learning still faces several obstacles. Some institutions experience limited specialized training on gender issues in early childhood education. Furthermore, the availability of gender-neutral digital materials on Islamic-based early childhood education platforms is still relatively limited (Agus Mushodiq et al., 2025).

## 3. The Role of Technology in the 5.0 Era

In the context of the 5.0 era, all of the early childhood education institutions studied have utilized simple digital media, such as children's learning apps, interactive Islamic videos, and communication platforms between teachers and parents (Fadhillah et al., 2024). Interviews indicate that the use of technology is seen as enabling greater collaboration between teachers, parents, and children, while also facilitating access to Islamic-based learning, such as prayer videos, Islamic songs, and moral stories.

However, despite these benefits, challenges also arise, as some digital content still contains visual gender bias. Representations of men as leaders and women as caregivers are still common, potentially reinforcing stereotypes that contradict the principle of equality.

#### **4. Parents' Perceptions of Gender-Responsive Learning**

From a parental perspective, gender-responsive learning implemented in Islamic-based early childhood education institutions has generally been positively appreciated. The majority of parents believe that these practices do not conflict with religious teachings and even reinforce Islamic values of justice and compassion (Rita Nofianti, Munisa, 2024). However, a small number of parents still show resistance, particularly when boys engage in activities culturally considered feminine, such as cooking.

#### **5. Integration of Islamic Values and the Principle of Gender Equality**

Research findings indicate that Islamic-based early childhood education institutions have strived to internalize the values of justice and mercy as the foundation of gender-responsive learning. From an Islamic perspective, equality is not defined as uniformity, but rather as the provision of proportional rights and opportunities in accordance with human nature. In the context of early childhood education, teachers act as primary mediators, transforming these values into daily learning practices, through language use, role allocation, and the use of technology (Ilham et al., 2023; Rahman et al., 2025).

#### **6. Implementation Challenges in the 5.0 Era**

In line with the demands of the 5.0 era, early childhood education institutions are required not only to adapt to developments in digital technology but also to reflect the values of equality. The main challenges faced include the

low level of digital gender literacy among teachers, which continues to permeate learning content. Furthermore, the lack of explicit guidelines on gender-responsive learning within the Islamic-based early childhood education curriculum also hinders more systematic implementation (Muafiah, Mujib & Arif, 2022).

#### 7. Relevance to the Era of Education 5.0

The concept of Society 5.0 emphasizes the importance of human-centered technology. In the context of Islamic-based early childhood education, this means that technology is used not only as a learning tool but also as a means to strengthen moral and spiritual values, as well as the principles of gender equality from an early age (Fadhillah et al., 2024).

### Conclusion and Suggestions

This research shows that the implementation of gender-responsive learning in Islamic-based early childhood education institutions in the 5.0 era has developed in a positive direction, although it still faces a number of structural and cultural challenges. In general, Islamic-based early childhood education institutions have instilled the values of justice (*'adl*), compassion (*rahmah*), and equality (*musawah*) in the teaching-learning process. These values are reflected in relatively equal opportunities for boys and girls to participate in various activities, both in structured learning and free play.

Teachers play a crucial role as agents of gender change, transforming Islamic values into equitable and inclusive classroom practices. However, some teachers still exhibit subtle biases in their language and perceptions of children's behavior based on gender. This indicates that conceptual understanding of gender responsiveness is not yet fully comprehensive. The integration of digital technology in the context of the 5.0 era has expanded children's learning space, but also opens up new challenges in the form of biased gender representation in Islamic digital media. Some content still depicts the traditional roles of men and women unequally. Therefore, critical digital literacy and the selection of equitable content based on Islamic values are urgently needed.

Furthermore, this study found tension between religious values, patriarchal culture, and modern demands for equality, particularly in the views of some parents regarding the roles of boys and girls. This situation demonstrates the importance of

collaboration between early childhood education institutions, families, and the community in instilling values of equality that align with Islamic principles.

Therefore, it can be concluded that Islamic-based gender-responsive learning in early childhood education in the 5.0 era is a transformative process – a paradigm shift from traditional learning to a humanistic, digital, and gender-equitable educational model. Teachers play a crucial role as agents of gender change, transforming Islamic values into equitable and inclusive classroom practices. However, some teachers still exhibit subtle biases in their language and perceptions of children's behavior based on gender. This indicates that conceptual understanding of gender responsiveness is not yet fully comprehensive. The integration of digital technology in the context of the 5.0 era has expanded children's learning space, but also opens up new challenges in the form of biased gender representation in Islamic digital media. Some content still depicts the traditional roles of men and women unequally. Therefore, critical digital literacy and the selection of equitable content based on Islamic values are urgently needed.

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