



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

### INTEGRATION OF PEGON ARABIC ORTHOGRAPHIC LEARNING IN GORONTALO'S LOCAL WISDOM-BASED CURRICULUM: A NEEDS ANALYSIS

Ibnu Rawandhy N. Hula<sup>1</sup>, Ana Mariana<sup>2</sup>

<sup>1</sup>IAIN Sultan Amai Gorontalo

<sup>2</sup> Universitas Muhammadiyah Gorontalo

Email: [ibnurawandi@iaingorontalo.ac.id](mailto:ibnurawandi@iaingorontalo.ac.id)

#### ABSTRAK

Ortografi Arab Pegon Gorontalo sangat penting dipelajari, namun belum dilakukan integrasi dalam kurikulum berbasis kearifan budaya lokal. Tujuan penelitian untuk menjawab tiga pertanyaan (1) Bagaimana analisis kebutuhan siswa terkait kesulitan pembelajaran Ortografi Arab Pegon dalam konteks kearifan lokal, (2) Bagaimana evaluasi kesiapan lembaga pendidikan dalam mengimplementasikan Ortografi Arab Pegon dalam kurikulum berbasis kearifan lokal, (3) Bagaimana pengembangan dan rekomendasi strategis untuk pengintegrasian Ortografi Arab Pegon dalam kurikulum lembaga pendidikan di Gorontalo. Metode penelitian menggunakan metode campuran, data dikumpul melalui angket, wawancara dan observasi. Jumlah sampel terdiri 50 siswa, 20 guru, dan 5 Pengelola pesantren di Gorontalo. Hasil penelitian menunjukkan bahwa data evaluasi kesulitan pengajaran Ortografi Arab Pegon di Gorontalo, tidak terdistribusi normal, sehingga memerlukan metode statistik non-parametrik melalui uji Kruskal-Wallis, yang menunjukkan tidak ada perbedaan signifikan antara indikator Kelancaran, Pengucapan, Penulisan, dan Pemahaman, menandakan kinerja antar kelompok relatif serupa. Pada uji Mann-Whitney U Test menghasilkan data perbandingan bahwa Hubulo unggul jika terdapat perbedaan signifikan. Evaluasi kesiapan lembaga menunjukkan infrastruktur 60% akses sarana prasarana memadai 40%, dan 60% lembaga memiliki kompetensi guru baik. Rekomendasi strategis meliputi (1) integrasi kurikulum dengan kearifan lokal, (2) pelatihan rutin bagi guru, (3) kemitraan dengan lembaga pendidikan High, dan (4) penggunaan teknologi dalam pembelajaran, yang bertujuan untuk mengatasi tantangan dan meningkatkan kecintaan siswa terhadap budaya membaca, menulis dan memahami ortografi Arab Pegon Gorontalo.

**Kata kunci** : Integrasi; Arab Pegon Gorontalo; Kurikulum; Kearifan Lokal; Analisis Kebutuhan



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

### ABSTRACT

*The Orthography of Arab Pegon in Gorontalo is very important to study, but it has not yet been integrated into the curriculum based on local cultural wisdom. This research aims to answer three questions: (1) How is the analysis of students' needs related to difficulties in learning Arab Pegon Orthography in the context of local wisdom? (2) How is the evaluation of educational institutions' readiness to implement Arab Pegon Orthography in a curriculum based on local wisdom? (3) What are the strategic recommendations for integrating Arab Pegon Orthography into the curriculum of educational institutions in Gorontalo? The research method uses a mixed approach, with data collected through surveys, interviews, and observations. The sample consists of 50 students, 20 teachers, and 5 managers of pesantren in Gorontalo. The results of the study show that the evaluation data on the difficulties of teaching Arab Pegon Orthography in Gorontalo are not normally distributed, necessitating non-parametric statistical methods through the Kruskal-Wallis test, which indicates no significant differences among the indicators of Fluency, Pronunciation, Writing, and Comprehension, suggesting that the performance among groups is relatively similar. The Mann-Whitney U Test comparison shows that Hubulo excels if there are significant differences. The evaluation of institutional readiness shows that 60% have adequate infrastructure, while 40% need improvement and 60% of institutions have competent teachers. Strategic recommendations include (1) curriculum integration with local wisdom, (2) regular training for teachers, (3) partnerships with higher education institutions, and (4) the use of technology in learning, aimed at addressing challenges and enhancing students' love for reading, writing, and understanding the Orthography of Arab Pegon in Gorontalo.*

**Keywords:** *Integration; Arab Pegon Gorontalo; Curriculum; Local Wisdom; Needs Analysis.*

### INTRODUCTION

Pegon Arabic Orthography is a writing system applied to regional languages, including in Gorontalo. Its function is as a medium to understand and teach religion and Islamic values through written language that is easy for the community to understand.<sup>1</sup> The society then developed Pegon Arabic into a corpus that explains how Islam and Arabic culture are integrated in the literature of the archipelago's language and culture so that it is considered an academic manuscript to understand religion in the context of local language and culture.<sup>2</sup> Thus, the

<sup>1</sup>Abdul Aziz et al., "Learning Arabic Pegon for Non-Javanese Santri At Pesantren," *Jurnal Pendidikan Islam* 8, no. 2 (2022): 113–26, <https://doi.org/10.15575/jpi.v8i2.19581>.

<sup>2</sup>Zumaroh Hadi Sulistiani et al., "Aksara Pegon Dan Transmisi Keilmuan Islam: Potret Dari Pesantren Babakan Ciwaringin Cirebon," *EDUKASI: Jurnal Penelitian Pendidikan Agama Dan Keagamaan* 21, no. 2 (2023): 117–37, <https://doi.org/10.32729/edukasi.v21i2.1415>.



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

struggle that occurs between religion and culture is a symbiotic struggle of mutualism, complementary and mutually beneficial. Religion encourages culture to be more solid, on the contrary, culture provides an extraordinary wealth for religion.<sup>3</sup>

Therefore, we often see many Nusantara manuscripts composed with distinctive Arabic orthography, known as the term "Pego/Pegon," which means "deviating" from the standard or unusual Arabic script in its pronunciation. The sign of the deviation of this script is technically applied through (1) adjustment of Arabic letters, (2) use of additional signs, and (3) regional variations, which reflect the results of the acculturation of Islamic culture with local communities modified into regional languages in the archipelago.<sup>4</sup>

In Gorontalo, there are several manuscripts written in Arabic Pegon Gorontalo, such as the Dikil manuscript,<sup>5</sup> Me'raji manuscript,<sup>6</sup> Jabu's manuscript, Buruda's manuscript, Turunani's manuscript, and Debe's manuscript. The manuscripts written in Arabic Pegon Gorontalo cannot be separated from the Islamization in Gorontalo that occurred in the 16th century through trade and the spread of Islam from Ternate and marriage. The Pegon Arabic script was then adopted to write the Gorontalo language, as evidenced by the existence of a manuscript written in Pegon Arabic.

In the context of needs, Pegon Arabic Orthography has an important role in several things: (1) Dissemination of Islamic Knowledge and education (2) Preservation of regional languages, (3) Preservation of local culture, and (4) Literary Documents, therefore its existence should be able to help students access knowledge, religion, language, customs and culture in a way that is closer and relevant to their daily lives.<sup>7</sup>

Gorontalo local wisdom, as an integral part of education, reflects the rich and unique cultural identity of the community.<sup>8</sup> The uniqueness lies in (1) the writing of the script which is slightly different from the Arabic pegon in Indonesia, (2) the diacritic mark which is different from the standard Arabic syakal mark, (3) the way of reading which has its technique and style, (4) its use which is adjusted

---

<sup>3</sup>Moh Asrofi, *Pendidikan Islam Nusantara: Menggali Fenomena, Tradisi Dan Epistemologi*, ed. Lailatuz Zuhriyah, *Menggali Fenomena, Tradisi Dan Epistemologi* (Tulungagung: Akademi Pustaka, 2021), <http://repo.uinsatu.ac.id/34412/1>.

<sup>4</sup>Ibnu Rawandhy N. Hula et al., *Digital Transliteration of Pegon Arabic Orthography for Language Preservation in Gorontalo Manuscripts*, vol. 1 (Atlantis Press SARL, 2023), [https://doi.org/10.2991/978-2-38476-142-5\\_22](https://doi.org/10.2991/978-2-38476-142-5_22).

<sup>5</sup> Moh. Karmin Baruadi, "Tradisi Sastra Dikili Dalam Pelaksanaan Upacara Adat Maulidan Di Gorontalo," *El-Harakah* 16, no. 1 (2014): 1, <https://doi.org/10.18860/el.v16i1.2760>.

<sup>6</sup>Mukhlis Sore, "Amaliah Meeraji (Studi Isa' Miraj Masyarakat Lokal Gorontalo)" (UIN Sunan Kalijaga YOgyakarta, 2024), <https://digilib.uin-suka.ac.id/id/eprint/66024/>.

<sup>7</sup>Lisa Misliani et al., *Aksara, Naskah, Dan Budaya Nusantara* (Indigo Media, 2017).

<sup>8</sup> Abdul Hanan, *Jawa Pegon Dan Tradisi Keilmuan Kitab Kuning* (Indonesia: Values Institute, 2023), <https://www.researchgate.net/publication/383023817%0AJawa>.



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

to a certain day and time, and (5) the meaning that contains it has a positive message and educational values.<sup>9</sup> Therefore, the integration of local wisdom values in the educational curriculum is becoming increasingly important to increase the relevance and effectiveness of learning, so that students can not only learn theory but also understand and appreciate their own culture which is increasingly lost and extinct.<sup>10</sup>

On the other hand, the Islamic education curriculum in Gorontalo has been designed with a national education policy that supports the teaching of Arabic and the application of Islamic values. The efforts of the government and educational institutions in developing a curriculum based on the local context are a strategic step to ensure that education is not only universal, but also reflects the needs and characteristics of the people of Gorontalo.

Although Pegon Arabic Orthography has great potential to be integrated in the educational curriculum based on local wisdom, the challenges in its implementation are still a major concern. Currently, there are not many in-depth studies on how to effectively integrate Pegon Arabic Orthography as a regional characteristic into the existing curriculum.<sup>11</sup> This creates a gap in teaching, where teachers and students may not fully understand how to implement this writing system in a relevant learning context.<sup>12</sup> In addition, there is a lack of clear data and analysis on the needs of students and teachers in teaching Pegon Arabic Orthography Typical Gorontalo, which can hinder the development and effectiveness of local-based teaching methods and become the cause of students' ignorance of their own culture.

On the other hand, the readiness of educational institutions to adopt Pegon Arabic Orthography in the curriculum is also an unresolved issue. This lack of clarity regarding readiness can lead to mismatches between education policies and practices in the field. In addition, the lack of research examining the factors that influence the successful integration of Pegon Arabic Orthography in learning adds to the complexity of this challenge.<sup>13</sup> This indicates the need for further research to

---

<sup>9</sup> Hanan.

<sup>10</sup> Ibnu Rawandhy N Hula, "Content Analysis of Gorontalo Dikili Manuscript and the Relevance to Message and Values of Kindness," *Jurnal Riset Rumpun Ilmu Bahasa (JURRIBAH)* 1, no. 2 (2022): 14–37, <https://doi.org/https://doi.org/10.55606/jurribah.v1i2.374>.

<sup>11</sup> Fatmawati Djafri and Supra Wimbarti, "Measuring Foreign Language Anxiety among Learners of Different Foreign Languages: In Relation to Motivation and Perception of Teacher's Behaviors," *Asian-Pacific Journal of Second and Foreign Language Education* 3, no. 1 (2018), <https://doi.org/10.1186/s40862-018-0058-y>.

<sup>12</sup> Ibtisam Abdulaziz Bajri and Omer Elsheikh Hago Elmahdi, "Addressing Language Anxiety in the EFL Classroom: EFL Teachers' Perspective," *Theory and Practice in Language Studies* 14, no. 7 (2024): 2222–32, <https://doi.org/10.17507/tpls.1407.30>.

<sup>13</sup> Hendrokuromo Ratna Nur Fatimah Irakusuma, "The International Journal of Pegon Islam Nusantara Civilization," in *Variasi Ortografi Khusus Pegon Dalam Teks Syi'ir Tanda Qiyamat*, ed. Johan Wahyudi, vol. 13 (Jakarta, Indonesia: Islam Nusantara Center (INC), 2024), 19.



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

explore and understand various aspects that can support the integration of Pegon Arabic Orthography in the educational curriculum, to provide a more comprehensive and effective solution.

Several studies have been conducted related to the object of Pegon Arabic orthographic research, such as Ratna Nur "*Kitabah 'Arab Pegon Khashaishuha Wa Ishamatuha fi Tathwir Ta'Lim Al-Lughah Al-'Arabiyyah Bi Indunisiyya*".<sup>14</sup> Barathi "A Survey of Orthographic Information in Machine Translation,"<sup>15</sup> and Beatriz about "Understanding Language Attrition through Orthography".<sup>16</sup> This study examines more about the characteristics, understanding and information of Arabic orthography in general. Similarly, another study on "*Orthography Affects L1 and L2 Speech Perception but Not Production in Early Bilinguals*" This study analyzed the effect of Speech Perception on Bilingual Production.<sup>17</sup> It is different with Robert's research on "*Orthographic Error Analysis*".<sup>18</sup> This study analyzed usage-based linguistics to systematize the inventory of orthographic errors observed in the writings of non-native Russian speakers on longitudinal corpus data (560 thousand tokens) from academic writings of non-native speakers. Similarly, Ibn Rawandhy's research describes the Rules of Orthographic Writing in Rasm Mushaf,<sup>19</sup> This study concludes that the difference in the orthography of Rasm is dominated by reasons, references and writing patterns that generally refer to *madhzaab* with their respective references, both in Al-Dani with the book al-Muqni' and Abu Dawud with the book al-Tabyin so that the writing patterns are varied and cannot be equated.<sup>20</sup>

Similar to previous research, Fakron Jamal in his study focused on the description aspect of the Arabic-Javanese writing system that adopted the Arabic script, which showed that Arabic-Javanese orthography had 28 graphemes used to

<sup>14</sup>Sahal Mahfud and Halimi Zuhdy, "Kitābah 'Arab Pegon Khashāishuhā Wa Ishāmātuhā Fī Tathwīr Ta'Lim Al-Lughah Al-'Arabiyyah Bi Indūnisiyyā," *Arabiyat : Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban* 5, no. 2 (2018): 314–35, <https://doi.org/http://dx.doi.org/10.15408/a.v5i2.7446>.

<sup>15</sup>Bharathi Raja et al., "A Survey of Orthographic Information in Machine Translation," *SN Computer Science* 2, no. 4 (2021): 1–19, <https://doi.org/10.1007/s42979-021-00723-4>.

<sup>16</sup>Beatriz Bermúdez-Margaretto et al., "Understanding Language Attrition through Orthography," *Languages* 6, no. 4 (December 2, 2021): 199, <https://doi.org/10.3390/languages6040199>.

<sup>17</sup>Antje Stoehr and Clara D. Martin, "Orthography Affects L1 and L2 Speech Perception but Not Production in Early Bilinguals," *Bilingualism: Language and Cognition* 25, no. 1 (January 25, 2022): 108–20, <https://doi.org/10.1017/S1366728921000523>.

<sup>18</sup>Robert Reynolds, Laura Janda, and Tore Nessel, "A Cognitive Linguistic Approach to Analysis and Correction of Orthographic Errors," *Russian Journal of Linguistics* 26, no. 2 (2022): 391–408, <https://doi.org/doi.org/10.22363/2687-0088-30122>.

<sup>19</sup>Ibnu Rawandhy N. Hula, "Genealogi Ortografi Arab (Sebuah Tinjauan Historis: Asal-Usul, Rumpun Bahasa Dan Rekaman Inskripsi)," *'A Jamiy : Jurnal Bahasa Dan Sastra Arab* 9, no. 1 (June 16, 2020): 16, <https://doi.org/10.31314/ajamiy.9.1.16-46.2020>.

<sup>20</sup>Ibnu Rawandhy N. Hula and Amrah Kasim, "Al-Qawaid Al-Sittah Dalam Rasm Al-Mushaf (Six Rules of Rasm and the Uniqueness in Qur'an)," *'A Jamiy : Jurnal Bahasa Dan Sastra Arab* 10, no. 2 (September 1, 2021): 385, <https://doi.org/10.31314/ajamiy.10.2.385-418.2021>.



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

represent 23 consonants, while modified letters and digraphs to represent the missing sounds in Arabic.<sup>21</sup>

Many previous studies have shown that the themes of orthography are more studied in the aspects of comparative analysis, history, bilingualism, and the characteristics of the writings, and still rarely studied the aspects of integrating Pegon-Arabic orthography in the development of a curriculum based on local wisdom. In fact, Arab Pegon orthography in Indonesia is one of the cultural heritages that has its own uniqueness and wealth, reflecting a combination of local traditions and the influence of the Arabic language. This writing system not only functions as a communication tool, but also as a means to convey cultural values, religion, and community identity. In the context of education, understanding and mastery of Pegon Arabic orthography is very important to maintain cultural preservation and strengthen understanding of religious and literary texts written in this script.

This statement shows that Pegon Arabic Orthography has an important role in the cultural and educational context in a particular region. The characteristics of Pegon Arabic orthography vary from region to region, both in terms of writing, punctuation, way of reading, reading media and its meaning.<sup>22</sup> This emphasizes the need for curriculum development that focuses on local cultural wisdom, which can facilitate students, teachers, and educational institutions in designing learning programs that reflect the uniqueness of the region. Thus, it is hoped that it can foster interest in studying and exploring the material, as well as the educational values contained in the manuscript written with Arabic Pegon.<sup>23</sup>

Until now, there has been no clear and structured curriculum management model to integrate Pegon Arabic Orthography in the context of local wisdom in Gorontalo. Without a definitive model, the implementation of Pegon Arabic Orthography in education becomes undirected and less optimal, so the potential of this writing system cannot be fully utilized to enrich the learning experience of students. Efforts to overcome this gap are very important so that the integration of Pegon Arabic Orthography can be carried out properly and provide real benefits for education in Gorontalo.

This research offers a new approach to education by analyzing the need for the integration of Pegon Arabic Orthography in a curriculum based on local wisdom. With a focus on developing learning models that are relevant to the local

---

<sup>21</sup>Fakron Jamalín and Asma Abdul Rahman, "Arabic-Java Writing System: How Javanese Language Adopts Arabic Script," *Izdiyar : Journal of Arabic Language Teaching, Linguistics, and Literature* 4, no. 1 (April 30, 2021): 43–58, <https://doi.org/10.22219/jiz.v4i1.11337>.

<sup>22</sup>Ibnu Rawandhy N Hula et al., "Transcription of Pegon Gorontalo Arabic Orthography, Malay and Arabic Standard: A Contrastive Linguistic Analysis," *A Jamiy: Jurnal Bahasa Dan Sastra Arab* 11, no. 2 (2022): 322–41, <https://doi.org/http://dx.doi.org/10.31314/ajamiy.11.2.322-341.2022>.

<sup>23</sup>Darmawan Harefa et al., *Perspektif Psikologi Pendidikan Kearifan Lokal Nusantara* (CV Jejak Jejak Publisher), (2024).



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

cultural context, this research seeks to ensure that teaching is not only effective but also in line with the values and traditions that exist in the Gorontalo community. In addition, this research uses a needs analysis method that involves local communities and stakeholders, so that it can gain a deeper and more comprehensive insight into the challenges and opportunities faced in integrating Pegon Arabic Orthography. With this approach, it is hoped that a more inclusive curriculum can be created and able to support the development of students' character while preserving existing local wisdom.

This research is expected to make a significant contribution to the development of a more relevant and contextual Islamic education curriculum in Gorontalo. With a focus on the integration of Pegon Arabic Orthography, this research aims to improve students' understanding of this writing system as well as the importance of local wisdom in the context of education. From the results of the research, it is hoped that concrete policy recommendations can be produced that can help educational institutions in integrating Pegon Arabic Orthography into their curriculum. The implications of this research will not only enrich teaching materials, but will also provide a clear direction for the development of educational policies that support the preservation of local culture and more effective learning.

The specific purpose of this study is to answer three main problems that are significant for the development of educational curriculum in Gorontalo. First, how to analyze the needs of students related to the difficulties of learning Pegon Arabic Orthography in the context of local wisdom, so that they can understand the challenges and opportunities that exist? Second, how to evaluate the readiness of educational institutions in implementing Pegon Arabic Orthography in a curriculum based on local wisdom, in order to ensure that all parties are ready to carry out new learning programs?, Third, how to develop and make strategic recommendations for the integration of Pegon Arabic Orthography in the Islamic education curriculum that can be used as a practical guide and a typical curriculum for educational institutions in Gorontalo?

### RESEARCH METHODS

This research method uses a mixed approach to achieve three research objectives that have been set. This approach allows researchers to explore and understand the perspectives of students, teachers, and educational institutions related to learning Pegon Arabic Orthography in the context of local wisdom. Through questionnaires, in-depth interviews, and observations, researchers collected authentic data, thus providing a clear picture of the challenges and opportunities that exist as part of the needs analysis.

The population in this study includes students, teachers, and managers of Islamic boarding schools in Gorontalo. For sample selection, the researcher used a purposive sampling technique, where the selected participants had experience and knowledge related to Pegon Arabic Orthography. The number of samples is 50



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

respondent students, 20 teachers, and 5 managers of Islamic boarding school educational institutions consisting of; (al-Islam Islamic Islamic Boarding School Gorontalo Regency, al-Khairat Islamic Boarding School Gorontalo City, al-Huda Islamic Boarding School Gorontalo City, Al-Azhfar North Gorontalo Islamic Boarding School, and Hubulo Islamic Boarding School Bone Bolango Regency). The five pesantren are directly related to Arabic language teaching and Islamic education curriculum so they represent relevant institutions in integrating Pegon Arabic orthographic learning.

The data collection techniques that will be used include (1) a questionnaire, used to identify difficulties in learning Pegon Gorontalo Arabic Orthopaedics. These difficulties consist of (a) Fluency in Reading, (b) Accuracy in Pronunciation, (c) Accuracy in Writing, and (d) Understanding of Meaning. From these four aspects, the researcher can understand the aspects that need to be improved or improved in the learning process, (2) in-depth interviews will be conducted with teachers to identify the needs and challenges in learning Pegon Arabic Orthography, besides the interviews aim to collect views from teachers and administrators of educational institutions to evaluate their readiness in implementing this writing system. (3) Observation will be carried out to observe the readiness of educational institutions in integrating Pegon Arabic Orthography learning in four aspects: (a) Infrastructure, (b) Arabic Orthographic Teaching Materials, (c) Management Support, and (d) Resource Readiness.

The analysis of the collected data will be carried out using thematic analysis techniques. This process begins with (1) Questionnaire results that are statistically processed using a Likert scale of 1-5, and (2) Transcription of the interview results into a text that is ready to be analyzed. (3) Needs analysis in the context of student and teacher needs, and institutional readiness, carried out through observation data and (4) interpretation of the analysis results in the form of narratives that answer research questions and provide practical recommendations for the integration of Pegon Arabic Orthography in the Islamic education curriculum in Gorontalo.

### RESULTS AND DISCUSSION

To get the results of students' needs about the difficulties of learning Pegon Arabic Orthography, the research conducted a questionnaire, to find out four indicators, 1) Smoothness of Reading on Manuscripts written with Pegon Gorontalo Arabic, 2) Accuracy of Arabic orthographic pronunciation based on Gorontalo phonology, 3) Accuracy of Arabic orthographic writing, and 4) Understanding of the content of reading Pegon Gorontalo Arabic manuscripts taken from Dikili and Me'raji manuscripts, The questionnaire data is as shown with the following graph.



# TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

## A. Analysis of Student Needs Related to Learning Difficulties in Pegon Arabic Orthography

**Table 1. Results of Student Questionnaire**

Analysis of Difficulties in Learning Arabic Orthography Pegon Gorontalo					
Institution	N	Smooth	Pronunciati on	Writing	Understandin g
Al-Islam	10	3.4	3.0	3.8	1.7
AL-Khairat	10	4.7	3.7	3.8	2.4
Al-Huda	10	4.6	3.5	4.8	2.0
Al-Azhfar	10	3.4	3.2	4.3	1.9
Hubulo	10	4.9	3.5	5.0	3.0
Total	50				

Average difficulty (1) Fluency: Hubulo institution has the highest score (4.9), indicating that students at the institution feel very fluent. In contrast, Al-Islam and Al-Azhfar had the lowest score (3.4), indicating difficulties in smoothness. (2) Pronunciation: The pronunciation value varies, with Al-Khairat (3.7) and Al-Huda (3.5) showing better results than Al-Islam (3.0) and Al-Azhfar (3.2). (3) Writing: The Hubulo Institute also showed the best results in this indicator (5.0), while Al-Khairat and Al-Islam had the same score (3.8). (4) Understanding: Again, Hubulo (3.0) has the highest score, while Al-Islam (1.7) shows very low understanding among other institutions.

Comparison Between Institutions. Hubulo: Shows the best performance across all indicators, especially in Writing and Comprehension. This suggests that these institutions may have more effective learning methods. Al-Khairat and Al-Huda: Both have good grades, especially in Fluency and Writing, but there is still room for improvement in Pronunciation and Comprehension. Al-Islam and Al-Azhfar: Both show greater difficulties in all indicators, especially Comprehension, which indicates the need for more attention in teaching in these institutions.

From this analysis, we can draw the conclusion that the Hubulo institutions show the most positive results, while Al-Islam and Al-Azhfar need to improve their learning methods. Recommendations for institutions with lower scores may include: (1) Training for teachers: Developing teaching competencies in Pegon Arabic orthography. (2) Learning Program: Develop a more interactive and contextual curriculum to improve student understanding, (3) Evaluation and Feedback: Conduct continuous evaluation of teaching methods and obtain feedback from students for improvement. This analysis can help in planning better teaching strategies and developing more effective curricula according to the needs of students in each institution.



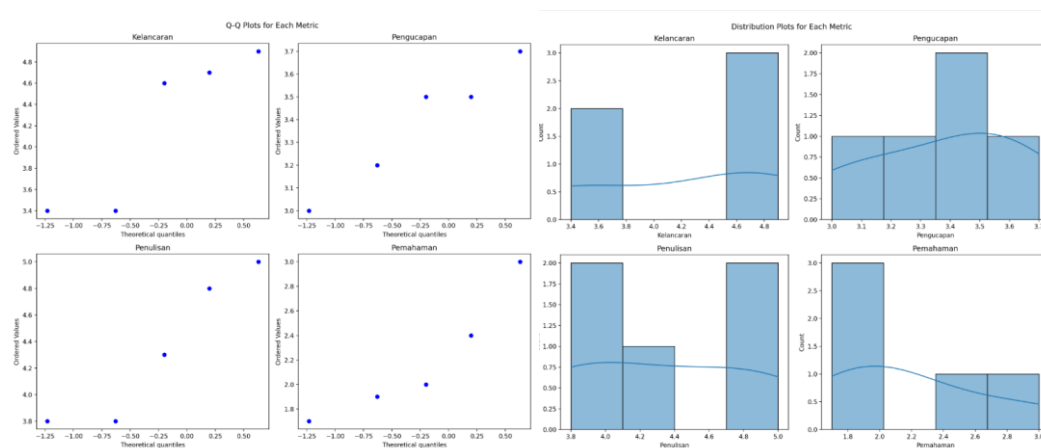
## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

Based on descriptive statistical analysis of the data of difficulty indicators (Fluency, Pronunciation, Writing, Comprehension), results were obtained that reflected the level of difficulty of students. For the Fluency indicator, the average score is 3.2 with a median of 3 and a mode of 3, indicating that most students are experiencing moderate difficulty. Pronunciation has an average of 3.2, a median of 3, and a mode of 3, which shows a similar pattern of difficulty. The Writing Indicator shows an average of 4.0, a median of 4, and a mode of 4, indicating that students tend to have higher difficulties in this aspect. Meanwhile, for Comprehension, the mean was 2.2, median 2, and mode 2, indicating that students felt more comfortable in comprehension compared to writing.

Furthermore, standard deviation analysis provides additional insight into variations in the data. Fluency has a standard deviation of 0.79, indicating moderate variation among students. Pronunciation also has the same standard deviation, which is 0.79. However, Writing shows a higher standard deviation, which is 0.83, which indicates that there is more variation in the difficulties students experience in this aspect. Lastly, Comprehension has a standard deviation of 0.63, which indicates the uniformity of difficulty levels in this category. Overall, the results of this descriptive analysis provide a clear picture of the difficulties faced by students in learning Pegon Arabic Orthography.



The data consisted of 4 metrics (Fluency, Pronunciation, Writing, Comprehension) in 4 institutions. The normality test (both Shapiro-Wilk and Kolmogorov-Smirnov) showed some limitations due to the small number of samples ( $n=4$  institutions). By looking at the Q-Q plot and the distribution plot, we can observe: Fluency shows bimodal distribution, Pronunciation appears relatively symmetrical, Writing shows a slight tilt to the right, Comprehension shows a relatively normal distribution. Given the small sample size, we may want to consider non-parametric methods for further analysis. The graph data above, then a normality test was carried out, using Shapiro-Wilk.



# TADBIR: Jurnal Manajemen Pendidikan Islam

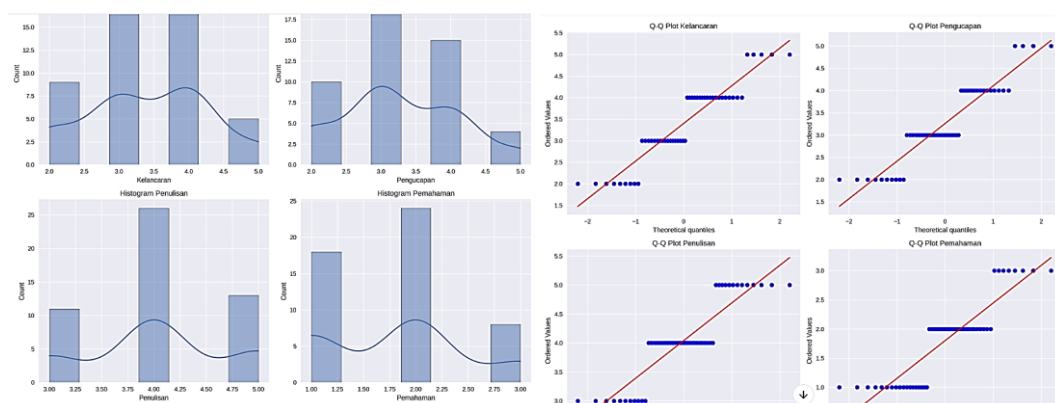
P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

## 1. Shapiro Wilk Normality Test

Shapiro Wilk Test					
	N	Smooth	Pronunciati on	Writing	Understanding
Statistic	50	0.7150	0.8436	0.7944	0.8214
p-value	50	0.0001	0.0001	0.0000	0.0000
Total	0.9378				
p-value	0.0111				

All metrics showed significant abnormalities ( $p\text{-value} < 0.05$ ) on the Shapiro-Wilk and Kolmogorov-Smirnov tests. The distribution plot shows: (1) Fluency: Bimodal distribution with peaks of about 3.4 and 4.6-4.7, (2) Pronunciation: Relatively uniform distribution between 3.0-3.7, (3) Writing: Right-skewed distribution and (4) Understanding: Left-skewed distribution. Here is a visualization for checking the normality of each indicator:



Based on the results of the Shapiro-Wilk test, all indicators (Fluency, Pronunciation, Writing, Comprehension, and Total) have a  $p\text{-value} < 0.05$ , which indicates that the data is not normally distributed. Since these groups of data were not normally distributed, the researchers used non-parametric statistical methods for further analysis using the Kruskal-Wallis test for more than two groups.



# TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

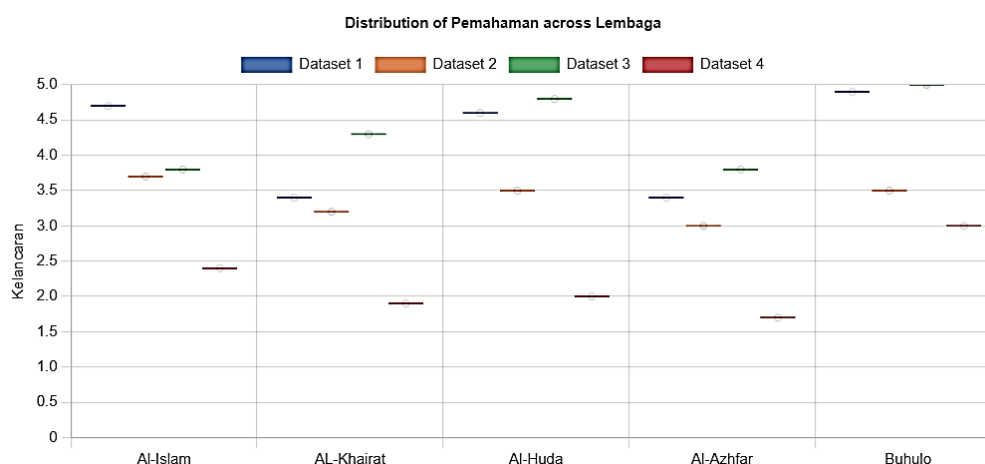
## 2. Uji Kruskal-Wallis

Uji Kruskal-Wallis					
	N	Smooth	Pronunciati on	Writing	Understandin g
Statistic	50	4.0000	4.0000	4.0000	4.0000
p-value	50	0.4060	0.4060	0.4060	0.4060

The results of the Kruskal-Wallis test show that the p-values for all indicators (Fluency, Pronunciation, Writing, Comprehension) are greater than 0.05, which indicates that there is no statistically significant difference between the four indicators.

With a p-value of 0.4060, which is greater than the general significance level (0.05), we cannot reject the null hypothesis. In other words, the difference in values in these indicators may be due to random variations, not due to systematic factors. This also means that there is not enough evidence to state that there are significant differences between the groups in terms of Fluency, Pronunciation, Writing, and Comprehension. This means that for all the indicators tested, the groups showed relatively similar performance and values and there was no indication that one group was better or worse than the other based on the data. Next, the Mann Witney U Test was carried out and the results were obtained as shown in the following diagram.

## 3. Uji Mann Witney U Test





# TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

Post-hoc analysis using the Mann-Whitney U test showed no statistically significant difference between the pairs of the "Institution" group for all metrics, as all p-values were above 0.05. This confirms the previous results of Kruskal-Wallis.

## 2. Evaluation of Educational Institutions in Implementing Pegon Arabic Orthography in the Curriculum

In this part, the researcher collected data through interviews from 20 teachers on the evaluation of educational institutions to implement the learning of Pegon Gorontalo Arabic orthography in a curriculum based on local wisdom. The interview is related to two main things: (1) Challenges and (2) Needs, as presented in the following table.

**Table 2** Data on Teacher Interview Results

ID Guru	Pondok Pesantren	Tantangan	Kebutuhan/Harapan
Guru 1	al-Islam Regency Gorontalo	Lack of training	Specific teaching materials about Pegon Orthography
Guru 2	al-Islam Regency Gorontalo	Limited resources	Easily accessible learning resources
Guru 3	al-Khairat City Gorontalo	Lack of understanding of Orthography	Training for teachers
Guru 4	al-Khairat City Gorontalo	Less varied teaching methods	Interactive teaching methods
Guru 5	al-Huda City Gorontalo	Lack of teaching materials	Textbooks and teaching aids
Guru 6	al-Huda City Gorontalo	Limited technology resources	Training on the use of technology in teaching
Guru 7	Al-Azhfar Gorontalo Utara	Limited teaching time	More flexible schedule
Guru 8	Al-Azhfar Gorontalo Utara	Lack of support from managers	Support in the form of facilities and resources
Guru 9	Hubulo Regency Bone Bolango	Different understandings among teachers	Agreement on teaching methods



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

Guru 10	Hubulo Regency Bone Bolango	Student incomprehension	Simpler teaching methods
Guru 11	al-Islam Regency Gorontalo	Limitations in assessment	Clear scoring criteria
Guru 12	al-Khairat City Gorontalo	Lack of feedback from students	Effective feedback system
Guru 13	al-Huda City Gorontalo	Difficulties in measuring learning outcomes	The right evaluation tools
Guru 14	Al-Azhfar Gorontalo Utara	Limitations in curriculum development	Adaptive curriculum
Guru 15	Hubulo Regency Bone Bolango	Lack of cooperation between institutions	Cooperation network with other institutions
Guru 16	al-Islam Regency Gorontalo	Lack of understanding of student needs	More in-depth analysis of student needs
Guru 17	al-Khairat City Gorontalo	Lack of advanced training	Continuing training programs
Guru 18	al-Huda City Gorontalo	Inconsistent application of orthography	Clear Orthographic application guidelines
Guru 19	Al-Azhfar Gorontalo Utara	Access to more literature	Effective online learning platform
Guru 20	Hubulo Regency Bone Bolango	Limitations of the literature on Orthography	Access to more literature

From the results of interviews with 20 teachers from five Islamic boarding schools, several main themes emerged: (1) Challenges: (a) Lack of Training and Resources: Many teachers highlighted the lack of adequate training and limited resources, both in the form of teaching materials and teaching aids., (b) Variety of Teaching Methods: Teachers felt that the teaching methods used were less varied and interactive, which can affect students' understanding. (2) Needs/Expectations: (a) Specific Teaching Materials: There is a clear need for more specific and contextual teaching materials regarding Pegon Arabic Orthography., (b) Training and Support: Teachers want continuous training and support from institution managers to improve the quality of teaching, and (3) Cooperation and Networking:

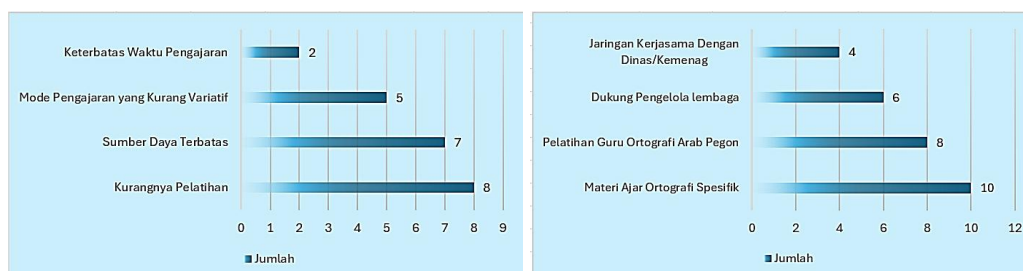


# TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

Cooperation between institutions is needed to share resources and experience in teaching Pegon Gorontalo Arabic Orthography.



**Figure 1.** Challenges and Needs of Learning Arabic Orthography

From the results of in-depth interviews with 20 teachers, they also revealed several challenges faced in the teaching process. Teachers stated that lack of training and resources was a major obstacle. In addition, they hope for more contextual teaching materials and interactive teaching methods to improve student understanding. This expectation reflects the need to improve existing teaching approaches. In addition, the interview results showed that the main challenge in learning Pegon Arabic Orthography was the lack of training and resources, while the teachers' expectations focused on improving teaching materials and more interactive teaching methods. This reflects the urgent need to improve teaching approaches to be more effective and responsive to the needs of students in Islamic boarding schools in Gorontalo.

## B. Evaluation of Educational Institution Readiness

Observations were carried out in five Islamic boarding school-based educational institutions in Gorontalo which showed that although most institutions have basic infrastructure for teaching, only 40% of them have teaching materials specific to Pegon Arabic Orthography. The following table shows the condition of the infrastructure and teaching materials:

**Table 3.** Infrastructure

Institution	Classroom Availability	Learning Equipment	Internet Access
Al-Islam Regency Gorontalo	Adequate	Proyektor, papan tulis	Available
Al-Khairat City Gorontalo	Enough	Papan tulis	Limited
Al-Huda City Gorontalo	Adequate	Proyektor	Available



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

Al-Azhfar Gorontalo Utara	Enough	Papan tulis, buku	Limited
Hubulo Regency Bone Bolango	Adequate	Proyektor, komputer	Available

Classroom Availability: 60% of institutions have adequate classrooms, while 40% are adequate. Learning Equipment: The majority of institutions have projectors, but some only have a whiteboard. Internet access: 60% of institutions have good internet access, while 40% have limited.

**Table 4.** Arabic Orthography Teaching Materials

Institution	Availability of Teaching Materials	Relevance to Local Wisdom	Variety of Teaching Methods
Al-Islam Regency Gorontalo	Available	High	Good
Al-Khairat City Gorontalo	No specific material yet	Medium	Less Good
Al-Huda City Gorontalo	Available	High	Good
Al-Azhfar Gorontalo Utara	Available	High	Good Enough
Hubulo Regency Bone Bolango	No specific material yet	Medium	Less Good

Availability of Teaching Materials: 60% of institutions have teaching materials available, while 40% do not have them. Relevance to Local Wisdom: 80% of institutions have high relevance to local wisdom. Variety of Teaching Methods: 40% of institutions have a good variety of teaching methods, while 60% lack.

**Table 5.** Management Support

Institution	Manager's Commitment	Budget Allocation	Teacher Training Program
Al-Islam Regency Gorontalo	High	Adequate	Have
Al-Khairat City Gorontalo	Medium	Limited	Not have
Al-Huda City Gorontalo	High	Adequate	Have
Al-Azhfar Gorontalo Utara	Medium	Limited	Not have
Hubulo Regency Bone Bolango	High	Adequate	Have



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

Commitment of Managers: 60% of institutions show high commitment from managers. Budget allocation: 60% of institutions have adequate budget allocation, while 40% are limited. Teacher Training Programs: 60% of institutions have training programs, while 40% do not have.

**Table 6.** Resource Readiness

Institution	Teacher Competence	Training Availability	Student Motivation
Al-Islam Regency Gorontalo	Good	Available	Height
Al-Khairat City Gorontalo	Good Enough	Limited	Medium
Al-Huda City Gorontalo	Good	Available	Height
Al-Azhfar Gorontalo Utara	Good Enough	Limited	Medium
Hubulo Regency Bone Bolango	Good	Available	Height

Teacher Competence: 60% of institutions have good teacher competence. Training Availability: 60% of institutions have training available, while 40% are limited. Student Motivation: 60% of institutions demonstrate high student motivation.

From the observation results, five Islamic Boarding School-based education shows variations in readiness to implement Pegon Arabic Orthography. Institutions with strong management support and access to relevant materials tend to have better readiness. In contrast, institutions experiencing limitations in infrastructure and management support indicated a need to increase their capacity before implementing the new curriculum.

Interviews with the institution's managers show that management's support for the teaching of Pegon Arabic Orthography is still minimal, around 60%. Here are some sample excerpts from the interview.

"We are still constrained in procuring the right teaching materials for Pegon Arabic Orthography. Many books are not yet available, and we need more training for our teachers."

"Our budget is limited, making it difficult to provide adequate training. We also do not fully understand the importance of Pegon Arabic Orthography in our curriculum."

"We have several training programs, but not enough to meet the needs of teaching Orthography. In addition, there is a lack of awareness among staff about the importance of Orthography in the local context."



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

"We focus on basic lessons and pay less attention to Pegon Arabic Orthography. We need more support from outside parties to develop this curriculum."

"Although we are doing our best with the resources at hand, we still feel the need to improve management support. We want to involve more community leaders to support the teaching of Pegon Arabic Orthography."

From the results of the interviews, it can be seen that the management's support for the teaching of Pegon Arabic Orthography is still minimal in five Gorontalo Islamic boarding schools. The main reasons include budget constraints, lack of relevant teaching materials, and lack of training for teachers. Managers are aware of the importance of this teaching, but face various challenges in its implementation. Efforts to improve management support are urgently needed so that the teaching of Pegon Arabic Orthography can be more optimal.

The manager acknowledged the need for training for teachers to prepare them to teach Pegon Arabic Orthography more effectively. In addition, a Special Teacher is needed to carry out Arabic orthographic learning at Pondok Pesentren, because this Arabic orthographic material must have knowledge in the writing aspect and the reading aspect.

This is quite reasonable because Pegon Arabic orthography has letters that are not the same as standard Arabic letters. These letters are found in seven consonants (da, ch, ta, pa, ga, ng, ny) as shown in the following image.



**Figure 2.** Pegon Arabic Orthographic Consonants

In addition to fluency in reading and writing differences, Pegon Arabic orthography must also be supported by the reader's knowledge of the local language of Gorontalo which can help in understanding the meaning of reading and its style.

### C. Strategic Development and Recommendations

#### 1. Development of Curriculum Based on Gorontalo Local Wisdom

Based on the results of the needs analysis, it is important to integrate Pegon Arabic Orthography with local wisdom to create a curriculum that is relevant and contextual to Gorontalo culture. The new curriculum must include examples related



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

to the culture and traditions of Gorontalo, so that students can more easily understand the material and relate it to daily life. For example, the use of local texts written in Pegon Arabic Orthography can help students understand the implicit message of the writing and reading of the manuscript they are studying. In addition, involving community leaders, traditional leaders and teachers in the development of Pegon Arabic Orthographic teaching materials will ensure that the content presented is not only academic, but also beneficial for the development of students' cultural identity. With this approach, it is hoped that the teaching of Pegon Arabic Orthography will become more interesting and effective, and can increase students' understanding and love for their language and culture.

### 2. Training for Pegon Arabic Orthotology Teachers

The organization of regular training for teachers is highly recommended to improve their competence in teaching Pegon Arabic Orthography. This training should include interactive teaching methods (both how to read, write, and program), so that teachers can apply interesting and effective techniques in the classroom. In addition, the training should provide an in-depth understanding of Pegon Arabic Orthography, including its history, structure, and application in the local context of Gorontalo. By strengthening teachers' knowledge and skills, it is hoped that they will be able to teach material more confidently and inspiringly, as well as be able to answer questions and challenges that students may face. Quality training can also educate teachers on the importance of local wisdom in teaching, so that they can relate Pegon Arabic Orthography to local culture and traditions, creating a more meaningful learning experience for students.

### 3. Establishing Partnerships Between Institutions and Higher Education

Partnerships with other institutions or universities are strongly encouraged to assist in the development of Pegon Arabic Orthography teaching materials and provide the necessary support. This collaboration can include the provision of relevant resources, training, and research, so that educational institutions have access to the latest information and teaching techniques. In addition, collaboration with academics and experts in the field of Orthography and linguistics can enrich the existing curriculum with new and innovative perspectives and become the characteristic curriculum of Islamic boarding schools in Gorontalo. By strengthening existing resources through this partnership, it is hoped that the quality of teaching can be significantly improved, as well as create a more dynamic and interactive learning environment. It will also encourage the exchange of ideas and best practices between educational institutions, so that all parties can learn from each other and develop in an effort to improve students' understanding of Pegon Arabic Orthography.



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

### 4. Use of Technology in Learning Pegon Arabic Orthography

The use of learning applications and interactive media can be an effective tool to increase students' interest in Pegon Arabic Orthography. As with cottage extra-learning that utilizes technology, students can learn in a more engaging and interactive way, which can strengthen their understanding of the material. For example, the application is khat pegon, and audio-based programming exercises. It is believed that this can make the learning process more enjoyable and stimulate students' curiosity about how to read, how to write, how to program and understand the meaning and meaning of the manuscript. Additionally, interactive media such as learning videos and simulations can help explain complex concepts in a more visual and easy-to-understand way. With the integration of this technology, it is hoped that students will not only be more motivated to learn, but also be able to develop digital skills that are important in the modern era, so learning Pegon Arabic calligraphy is one way to preserve the local culture that is on the verge of extinction.

The results of this study show that there are significant challenges in the teaching of Pegon Arabic Orthography, both in terms of the needs of students and teachers and the readiness of educational institutions. The proposed recommendations are expected to help integrate Pegon Arabic Orthography into the Islamic education curriculum in Gorontalo more effectively by considering four aspects, namely 1) Development of a Curriculum Based on Gorontalo Local Wisdom, 2) Training for Pegon Arabic Orthography Teachers, 3) Establishing Partnerships Between Institutions and Higher Education, 4) The Use of Technology in Pegon Arabic Orthopedic Learning.

### CONCLUSION

Based on the results of the three tests conducted, it can be concluded that: (1) The data is not normally distributed, so it requires non-parametric statistical methods such as the Kruskal-Wallis test; (2) The Kruskal-Wallis test showed no significant difference between the indicators of Fluency, Pronunciation, Writing, and Comprehension, indicating that the performance between the groups was relatively similar; (3) The analysis of the average difficulty per institution indicates that the Hubulo Institute has the best performance in all indicators; (4) Al-Islam and Al-Azhfar experienced greater difficulties, especially in Understanding, which showed the need for improvement in the teaching methods in these institutions; (5) The Mann-Whitney U Test can support this conclusion by exploring specific comparisons between groups, where if this test shows significant differences between Hubulo Institute and other institutions, it will corroborate the finding that Hubulo has better performance; (6) Conversely, if there is no significant difference, then all institutions are considered to have relatively similar performance despite variations in the average value of difficulty.



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

Based on the evaluation of the readiness of five pesantren-based educational institutions in Gorontalo, it was found that Based on infrastructure analysis, 60% of educational institutions have adequate classrooms and internet access, while 40% are only sufficient, indicating that most already have good facilities; In terms of teaching materials, 40% of institutions are available, but there is an urgent need for the development of specific materials, with 80% of existing ones relevant to local wisdom; management support shows 60% high commitment and adequate budget allocation, although 40% is still limited; For resource readiness, 60% of institutions have good teacher competence and training availability, as well as high student motivation. Overall, although many institutions have good infrastructure and management, improvements in teaching materials, variety of teaching methods, and teacher training are still needed to optimize the teaching of Pegon Arabic Orthography.

From the aspect of development and strategic recommendations for teaching Pegon Arabic Orthography in Gorontalo include four main points: (1) The integration of the curriculum with local wisdom is very important to create teaching materials that are relevant and contextual with the local culture. (2) Regular training for teachers is needed to improve their competence in teaching Pegon Arabic Orthography with interactive methods. (3) Establishing partnerships with higher education institutions can help in the development of teaching materials and provide the necessary support. (4) The use of technology in learning, such as applications and interactive media, can increase students' interest and make the learning process more interesting. This recommendation aims to overcome the existing challenges and increase students' understanding and love for the Gorontalo language and the culture of writing and reading Pegon Arabic.

### BIBLIOGRAPHY

Asrofi, Moh. *Pendidikan Islam Nusantara: Menggali Fenomena, Tradisi Dan Epistemologi*. Edited by Lailatuz Zuhriyah. *Menggali Fenomena, Tradisi Dan Epistemologi*. Tulungagung: Akademi Pustaka, 2021. <http://repo.uinsatu.ac.id/34412/1>.

Aziz, Abdul, Saliha Sebgag, Muhammad Mujtaba Mitra Zuana, and Ira Suryani. "Learning Arabic Pegon for Non-Javanese Santri At Pesantren." *Jurnal Pendidikan Islam* 8, no. 2 (2022): 113–26. <https://doi.org/10.15575/jpi.v8i2.19581>.

Bajri, Ibtesam Abdulaziz, and Omer Elsheikh Hago Elmahdi. "Addressing Language Anxiety in the EFL Classroom: EFL Teachers' Perspective." *Theory and Practice in Language Studies* 14, no. 7 (2024): 2222–32. <https://doi.org/10.17507/tpls.1407.30>.



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

- Baruadi, Moh. Karmin. "Tradisi Sastra Dikili Dalam Pelaksanaan Upacara Adat Maulidan Di Gorontalo." *El-Harakah* 16, no. 1 (2014): 1. <https://doi.org/10.18860/el.v16i1.2760>.
- Bermúdez-Margaretto, Beatriz, Federico Gallo, Mikhail Pokhoday, Yury Shtyrov, Hamutal Kreiner, and Andriy Myachykov. "Understanding Language Attrition through Orthography." *Languages* 6, no. 4 (December 2, 2021): 199. <https://doi.org/10.3390/languages6040199>.
- Djafri, Fatmawati, and Supra Wimbarti. "Measuring Foreign Language Anxiety among Learners of Different Foreign Languages: In Relation to Motivation and Perception of Teacher's Behaviors." *Asian-Pacific Journal of Second and Foreign Language Education* 3, no. 1 (2018). <https://doi.org/10.1186/s40862-018-0058-y>.
- Hanan, Abdul. *Jawa Pegon Dan Tradisi Keilmuan Kitab Kuning*. Indonesia: Values Institute, 2023. <https://www.researchgate.net/publication/383023817%0AJawa>.
- Harefa, Darmawan, Ni Luh Wayan Yasmiatai, M Pd SH, Mikaus Gombo, M Pd Arwan, Eka Junaidi, and M Agrippina Wiraningtyas. *Perspektif Psikologi Pendidikan Kearifan Lokal Nusantara*. CV Jejak (Jejak Publisher), 2024.
- Hula, Ibnu Rawandhy N. "Genealogi Ortografi Arab (Sebuah Tinjauan Historis: Asal-Usul, Rumpun Bahasa Dan Rekaman Inskripsi)." *'A Jamiy : Jurnal Bahasa Dan Sastra Arab* 9, no. 1 (June 16, 2020): 16. <https://doi.org/10.31314/ajamiy.9.1.16-46.2020>.
- Hula, Ibnu Rawandhy N., Muh. Arif, Suharia Sarif, Nur Taqwa Amin, Berti Arsyad, and Sriwahyuningsih R. Saleh. *Digital Transliteration of Pegon Arabic Orthography for Language Preservation in Gorontalo Manuscripts*. Vol. 1. Atlantis Press SARL, 2023. [https://doi.org/10.2991/978-2-38476-142-5\\_22](https://doi.org/10.2991/978-2-38476-142-5_22).
- Hula, Ibnu Rawandhy N., and Amrah Kasim. "Al-Qawaid Al-Sittah Dalam Rasm Al-Mushaf (Six Rules of Rasm and the Uniqueness in Qur'an)." *'A Jamiy : Jurnal Bahasa Dan Sastra Arab* 10, no. 2 (September 1, 2021): 385. <https://doi.org/10.31314/ajamiy.10.2.385-418.2021>.
- Hula, Ibnu Rawandhy N. "Content Analysis of Gorontalo Dikili Manuscript and the Relevance to Message and Values of Kindness." *Jurnal Riset Rumpun Ilmu Bahasa (JURRIBAH)* 1, no. 2 (2022): 14–37. <https://doi.org/https://doi.org/10.55606/jurribah.v1i2.374>.



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

- Hula, Ibnu Rawandhy N, Adimawati Helingo, Sitti Adawiyah Jassin, and Suharia Sarif. "Transcription of Pegon Gorontalo Arabic Orthography, Malay and Arabic Standard: A Contrapeptive Linguistic Analysis." *'A Jamiy: Jurnal Bahasa Dan Sastra Arab* 11, no. 2 (2022): 322–41. <https://doi.org/http://dx.doi.org/10.31314/ajamiy.11.2.322-341.2022>.
- Jamalin, Fakron, and Asma Abdul Rahman. "Arabic-Java Writing System: How Javanese Language Adopts Arabic Script." *Izdihar: Journal of Arabic Language Teaching, Linguistics, and Literature* 4, no. 1 (April 30, 2021): 43–58. <https://doi.org/10.22219/jiz.v4i1.11337>.
- Mahfud, Sahal, and Halimi Zuhdy. "Kitâbah 'Arab Pegon Khashâishuhâ Wa Ishâmâtuhâ Fî Tathwîr Ta'Lîm Al-Lughah Al-'Arabiyyah Bi Indûnîsiyyâ." *Arabiyat: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban* 5, no. 2 (2018): 314–35. <https://doi.org/http://dx.doi.org/10.15408/a.v5i2.7446>.
- Mislani, Lisa, Nyi Mas Umi Kalsum, S R Saktimulya, Trisna Kumala Satya Dewi, Dede Hidayatullah, and Muhlis Hadrawi. *Aksara, Naskah, Dan Budaya Nusantara*. Indigo Media, 2017.
- Raja, Bharathi, Chakravarthi Priya, Rani Mihael, and Arcan John. "A Survey of Orthographic Information in Machine Translation." *SN Computer Science* 2, no. 4 (2021): 1–19. <https://doi.org/10.1007/s42979-021-00723-4>.
- Ratna Nur Fatimah Irakusuma, Hendrokuromo. "The International Journal of Pegon Islam Nusantara Civilization." In *Variasi Ortografi Khusus Pegon Dalam Teks Syi'ir Tanda Qiyamat*, edited by Johan Wahyudi, 13:19. Jakarta, Indonesia: Islam Nusantara Center (INC), 2024.
- Reynolds, Robert, Laura Janda, and Tore Nessel. "A Cognitive Linguistic Approach to Analysis and Correction of Orthographic Errors." *Russian Journal of Linguistics* 26, no. 2 (2022): 391–408. <https://doi.org/doi.org/10.22363/2687-0088-30122>.
- Sore, Mukhlis. "Amaliah Meeraji (Studi Isa' Miraj Masyarakat Lokal Gorontalo)." UIN Sunan Kalijaga YOgyakarta, 2024. <https://digilib.uin-suka.ac.id/id/eprint/66024/>.
- Stoehr, Antje, and Clara D. Martin. "Orthography Affects L1 and L2 Speech Perception but Not Production in Early Bilinguals." *Bilingualism: Language and Cognition* 25, no. 1 (January 25, 2022): 108–20. <https://doi.org/10.1017/S1366728921000523>.



## TADBIR: Jurnal Manajemen Pendidikan Islam

P-ISSN: 2338:6673; E-ISSN 2442:8280

Vol. 12. No. 02. Agustus, 2024, Hal: 332-355

---

Sulistiani, Zumaroh Hadi, Didin Nurul Rosidin, Asep Saefullah, and Mujizatullah Mujizatullah. "Aksara Pegon Dan Transmisi Keilmuan Islam: Potret Dari Pesantren Babakan Ciwaringin Cirebon." *EDUKASI: Jurnal Penelitian Pendidikan Agama Dan Keagamaan* 21, no. 2 (2023): 117–37. <https://doi.org/10.32729/edukasi.v21i2.1415>.