Literacy Development Through Collaborative Governance in Indonesia: An AHP Based Analysis of the Kampus Mengajar Program

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ABSTRACT

The literacy rate in Indonesia is still declining due to the COVID-19 pandemic, causing Indonesia to rank low among all countries. Various policies implemented by the government have been carried out, one of which is the *Kampus Mengajar* program. The *Kampus Mengajar* program is one of the programs from the Directorate General of Higher Education, Ministry of Education of the Republic of Indonesia, which collaborates with various institutions, including private entities that participate in the target schools. This research discusses the determination of intervention strategies for collaboration in the *Kampus Mengajar* program in realizing impactful literacy improvement. The drafting process uses the theory of collaborative governance with the Analytical Hierarchy Process (AHP) model. Each stakeholder who becomes a respondent has the authority to choose priorities deemed important in establishing collaboration for the implementation of the *Kampus Mengajar* program to achieve literacy improvement in Indonesia. The results of this study indicate that, in collaboration for literacy improvement, stakeholders determine that building trust and commitment is the main priority in the collaboration. In addition, strategies for collaboration with both the government and the private sector have also been developed for literacy improvement. The *Kampus Mengajar* program has demonstrated consistent improvements in literacy learning across its successive implementations. The strategy designed in this research is expected to be used as a guideline for the collaborative-based literacy improvement process that can be implemented in every region.

1. INTRODUCTION

In several developing countries, a widening educational gap has emerged as a consequence of school closures during the COVID-19 pandemic from 2020 to 2022 [1]. Recch et al. [1] further emphasize that this pandemic-induced educational disparity must be addressed through the implementation of appropriate educational policies. Moreover, targeted interventions are needed to enhance literacy, particularly by taking into account the distribution of schools located in areas with limited access to educational resources. The shift to online learning during the pandemic also led to increased feelings of boredom among students, as teachers often assigned excessive amounts of work, much of which was completed with significant involvement from parents [2].

The data suggest that students' literacy levels in Indonesia have shown an upward trend from 2018 to 2022 [3]. However, this increase is still within the range typically observed in less developed countries and is considered only moderately significant. Indonesia urgently requires a future generation equipped with strong literacy competencies to effectively navigate the challenges of the 21st century [4]. The persistently low literacy levels have also been exacerbated by the impact of the COVID-19 pandemic, which severely disrupted the Indonesian education system. Consequently, the development and implementation of strategic educational policies aimed at enhancing literacy and students' critical thinking skills have become imperative [5].

One particularly noteworthy initiative that involves stakeholders outside the traditional school system is the *Kampus Mengajar* (Teaching Campus) program. This program, under the Directorate General of Higher Education, serves as an outreach mechanism to basic and secondary education units, which fall under the jurisdiction of regional governments and the Directorate General of Early Childhood, Primary, and Secondary Education (*PAUD, Dikdas, Dikmen*). As a component of the broader *Merdeka Belajar* policy, *Kampus Mengajar* provides university students with opportunities to engage in experiential learning beyond campus settings through collaboration with teachers in schools [6].

In addition to fostering students' soft and hard skills, the program also aims to improve literacy and numeracy among students in targeted schools. The selection of *Kampus Mengajar* as the research locus is grounded in its unique cross-sectoral collaboration model and its potential to generate

significant impacts on student outcomes. Within classrooms, student-teachers are supervised by mentor teachers, and their teaching activities must be recognized by the host school. Interestingly, the program also involves private schools, which are given the opportunity to collaborate and provide input to student-teachers, thereby enriching the learning experience. These non-state actors, private schools and higher education institutions play a vital role in the program's implementation, underscoring the government's commitment to enhancing student literacy through inclusive partnerships.

The researcher conducted interviews with program staff to better understand how *Kampus Mengajar* is operationalized, particularly regarding stakeholder involvement. Several challenges were identified, especially related to weak communication among stakeholders and the absence of binding agreements. While local education offices and Education Quality Assurance Agencies (*BPMP*) are authorized to verify eligible schools, their roles are currently limited to recommendations issued by the central government, namely the Directorate General of Higher Education and the Directorate General of Early Childhood, Primary, and Secondary Education. As a result, several local education offices lack a clear understanding of their roles and responsibilities in the program. When problems arise on the ground, the expectation is that local offices will resolve them. However, such expectations are difficult to fulfill due to the absence of formal legal mandates or interagency cooperation agreements, including ministerial regulations.

Kampus Mengajar emerged as a response to the challenges posed by the COVID-19 pandemic in Indonesia. This context provides an important foundation for collaboration, particularly given Indonesia's low PISA scores in literacy and numeracy. According to the theory of collaborative governance proposed by Ansell and Gash, prior conditions or "starting conditions" are critical in shaping the impetus for collaboration. The empirical challenges identified in this study align with that theoretical framework. The lack of legal infrastructure governing interagency cooperation has led to fragmented understanding among provincial and district-level stakeholders regarding their respective authorities. Moreover, student-teachers' activities in schools should ideally be supervised by local education offices to align with institutional needs. However, due to poor communication and coordination, Ministry of Education is unable to enforce such supervision effectively.

This reinforces the notion that communication and coordination are essential pillars for effective collaboration [7]. Additionally, Ansell and Gash highlight institutional design as one of the core determinants of successful collaboration. This aligns with the present study's focus on how inter-actor relationships are structured within the *Kampus Mengajar* program [8]. In practice, the institutional design of the program is limited to informal directives and routine coordination meetings, lacking regulatory authority or binding agreements. As a result, the roles of stakeholders are weakened and lack legitimacy [9].

Given the number of institutions involved in the implementation of *Kampus Mengajar*, strengthening stakeholder collaboration becomes crucial. This finding is consistent with research by Rupita [10], who asserts that collaborative governance in educational policy during the COVID-19 pandemic requires active participation from all institutions and community members to foster conducive learning environments [10]. Elken [11] further emphasizes

that central and regional government policies must be harmonized with clearly delineated roles and functions.

Ansell and Gash also assert that one key element in collaborative governance is "commitment to the process", which refers to the shared dedication to achieving collective goals [12]. Returning to the case of *Kampus Mengajar*, it is evident that some agencies lack clarity regarding the program's objectives and operational responsibilities. The absence of formal agreements indicates that the collaborative process is still suboptimal [13]. Meetings are mostly held online, further limiting effective engagement.

Consequently, the expected roles of regional agencies, such as district and provincial education offices, remain unclear and inconsistently executed. This study presents a novel contribution by focusing on collaborative governance and employing the Analytical Hierarchy Process (AHP) model to analyze the *Kampus Mengajar* program, an approach that, to the best of the researcher's knowledge, has not been previously applied to this context. Therefore, this research seeks to explore how collaborative interventions, from the perspective of collaborative governance, contribute to the sustainable improvement of student literacy in targeted schools.

Thus, the research question is as follows:

What stakeholder interventions are needed to improve literacy through the Kampus Mengajar program?

2. LITERATURE REVIEW

This study employs the theory of collaborative governance as formulated by Ansell and Gash. According to Ansell and Gash, collaborative governance is defined as:

"A governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets."

Based on the aforementioned definition, collaborative governance can be interpreted as a governing arrangement in which one or more public institutions directly involve non-state stakeholders in a decision-making process that is consensus-oriented and deliberative, aiming to formulate or implement public policies or manage public programs and assets [14].

In the application of the collaborative governance theory proposed by Ansell and Gash, there are four key components of the implementation process. These include: starting conditions, institutional design, leadership, and the collaborative process itself [14]. What differentiates Ansell and Gash's framework from other models is its emphasis on the dynamics of the process itself. It focuses on ensuring that all stakeholders or actors are genuinely engaged in collaboration by facilitating meaningful dialogue, clarifying shared goals, and confirming the capacity and understanding of each actor to participate effectively in the process [14].

As shown in Figure 1, this research focuses on the construction of a collaborative process model encompassing five key elements: dialogue, trust building, commitment, shared understanding, and intermediate outcomes. Several prior studies have employed the collaborative governance framework proposed by Ansell and Gash as a conceptual foundation. The first relevant research is by Douglas et al. [15], titled *"Pathways to Collaborative Performance:*

Examining the Different Combinations of Conditions Under Which Collaborations are Successful." Their research emphasizes that incentives play a critical role in fostering collaboration. Moreover, maintaining intensive relationships contributes significantly to effective collaborative governance processes. The study also underscores the importance of establishing clear organizational structures and performance metrics to support successful collaboration.

The second research, conducted by Uddin [16] and titled *"COVID-19 Pandemic Is Not Just a Health Issue: Governance Challenges in Bangladesh,"* examines crisis management during the COVID-19 pandemic in Bangladesh. This qualitative study highlights the inadequacies in the country's pandemic response, revealing significant governance failures. The findings stress the importance of collaborative governance as a framework for managing crises, particularly in public health emergencies like the COVID-19 pandemic.

The third research, conducted by Losada Maestre et al. [17], titled *"Application of the Analytic Hierarchy Process to Implement Collaborative Governance: Allocation of Urban Structural Funds in the City of Madrid,"* explores the allocation of structural funds in Madrid. The research utilizes the Analytic Hierarchy Process (AHP) to evaluate the implementation of collaborative governance principles in managing financial resource distribution at the municipal level.

Thus, research that explicitly links collaborative governance with literacy improvement models remains limited. This gap is evidenced by the following analysis using VOSViewer (Figure 2).
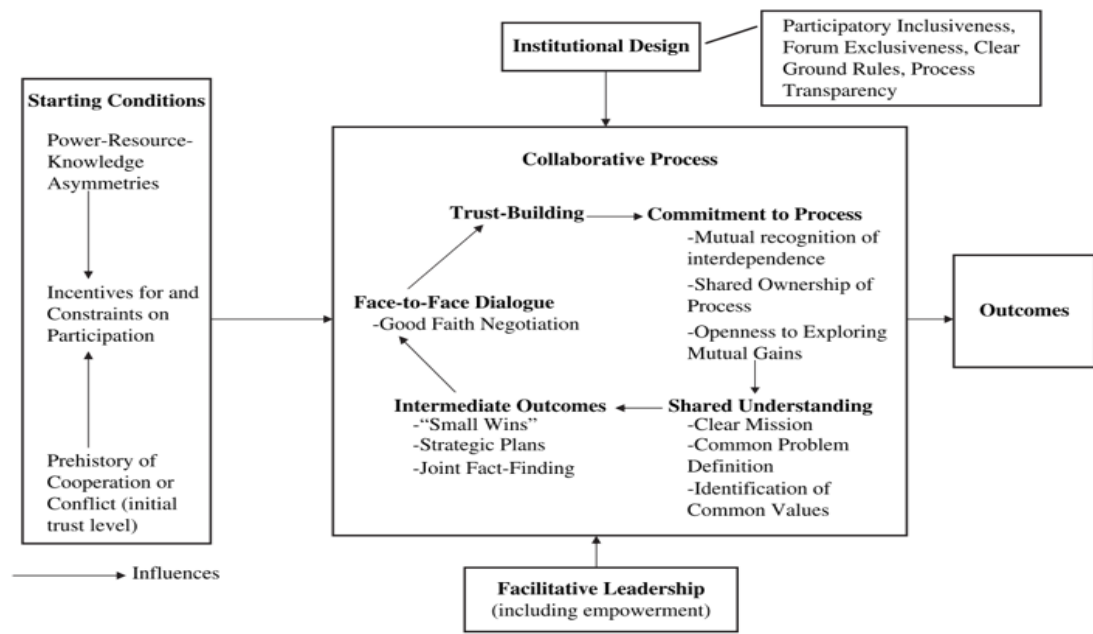

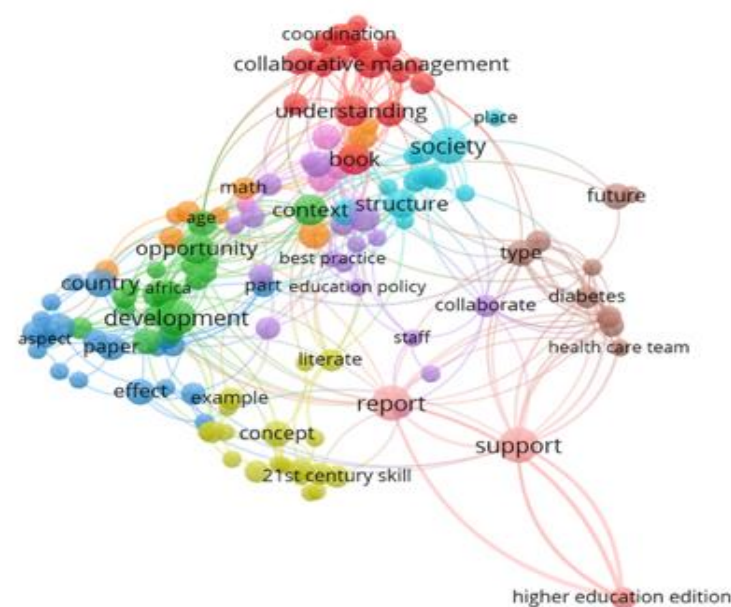**Figure 1.** Collaborative governance Ansell and gash

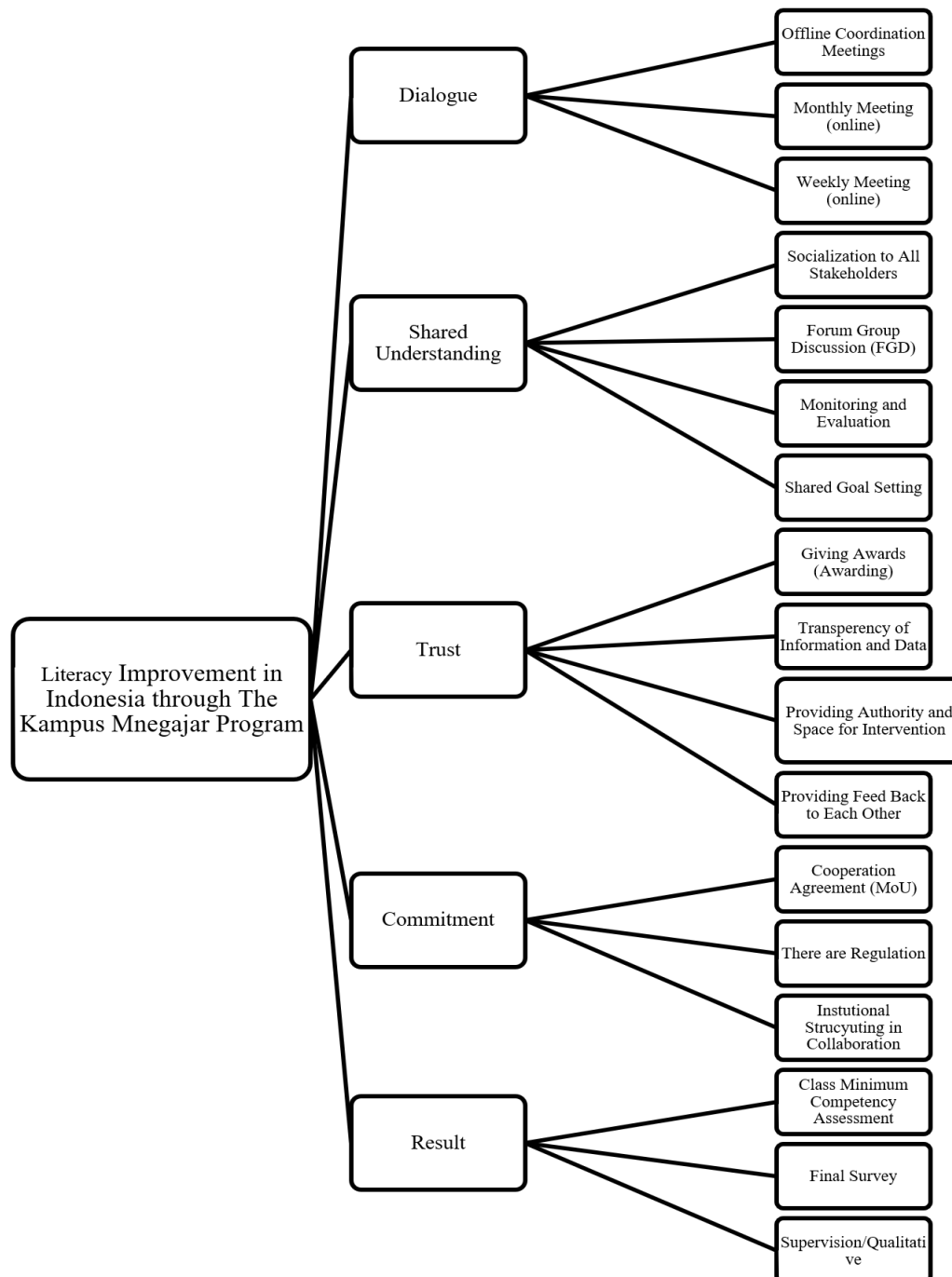**Figure 2.** Novelt analysis by VOSViewer

Figure 3. AHP model

From Figure 3, the linkage between collaborative governance and literacy improvement has not been extensively explored in previous research. Furthermore, this study adopts Indonesia as its general locus, incorporating samples from four different regions, which adds to the complexity of the research and strengthens its potential to generate comprehensive recommendations and a sustainable model for literacy enhancement. Therefore, there remains a gap in the existing literature concerning collaborative efforts in literacy improvement. This is consistent with the theory of collaborative governance, which suggests that governments often face limitations in policy implementation that can be addressed through the involvement of non-state actors. Accordingly, this study seeks to explore the needs in literacy development from a collaborative governance perspective.

3. METHODOLOGY

This study adopts a post-positivist paradigm and employs a mixed-methods approach. In the quantitative phase, the researcher utilizes variables derived from the collaborative governance framework developed by Ansell and Gash. These variables are transformed into sub-criteria or indicators, which are subsequently analyzed using the AHP model. AHP is a structured decision-making framework that ranks alternative policies or strategies based on a hierarchical structure consisting of predefined criteria and sub-criteria [18].

In designing a collaborative model for literacy improvement, it is essential to use a method that can help filter and prioritize key influencing factors. This is particularly important because literacy programs involve multiple stakeholders government

agencies, schools, and non state actors each with different roles and interests. AHP is a relevant approach because it allows researchers to map these factors based on expert assessments. In addition to producing priority weights, AHP ensures logical consistency in the decision making process. By applying this method, the collaborative model developed in this study is expected to be more practical and aligned with real world conditions.

The first step in applying the AHP model involves identifying the criteria, which in this study are determined based on the theoretical constructs of collaborative governance and expert input regarding literacy-related dimensions. The second step involves the development of a questionnaire by presenting a pairwise comparison of priorities, using a scale with the following descriptions (Table 1):

Table 1. Comparison scale of the AHP model

Scale	Information
1	Two elements have the same importance.
3	One element is slightly more important than the others.
5	One element is more important than the others.
7	One element is much more important than the others.
9	One element is absolutely more important than the other.
2,4,6,8	One element with a value close to another.

Following the data collection from respondents, the pairwise comparison values were organized into a structured matrix, which was then used to calculate the eigenvector weights. These weights indicate the relative priority of each criterion in supporting effective literacy development initiatives.

$$\mathbf{A} = \begin{bmatrix} 1 & a_{12} & a_{13} \\ \dfrac{1}{a^2} & 1 & a_{23} \\ \dfrac{1}{a_{13}} & \dfrac{1}{a_{23}} & 1 \end{bmatrix}$$

$$a_{ij}^{\text{norm}} = \frac{a_{ij}}{\sum_{i=1}^{n} a_{ij}}$$

After constructing the comparison matrix, the priority weights or eigenvector are calculated using the following formula:

$$w_i = \frac{\sum_{j=1}^{n} a_{ij}^{\text{norm}}}{n}$$

A consistency ratio analysis will be conducted on the overall results of the criteria and sub-criteria to ensure that the judgments made by experts or stakeholders regarding literacy enhancement are coherent and reliable.

$$\lambda max = \sum (\mathbf{A} \cdot w)_i w_i \, CI = \lambda max - n \, n - 1 \, CR = CI \, RI$$

$$\lambda_{max} = \frac{\sum (\mathbf{A} \cdot w)_i}{w_i}$$

$$CI = \frac{\lambda_{max} - n}{n - 1}$$

$$CR = \frac{CI}{RI}$$

The consistency ratio (CR) is considered acceptable when it meets the required threshold, specifically below 0.1 or 10%. A consistency ratio within this range indicates that the responses are logically consistent. To strengthen and enrich the findings, the researcher also conducted qualitative data collection through in-depth interviews with selected respondents. These respondents included program coordinators responsible for the implementation of the *Kampus Mengajar* initiative, as well as literacy experts representing various stakeholder groups.

As shown in Table 2, a total of 15 individuals served as both respondents and key informants for the primary data collection in this study. As previously explained, the respondents were geographically distributed across Indonesia, representing the western, central, and eastern regions. The selection of research samples was based on the complexity of collaboration-related issues, which was indicated by the high concentration of program participants in those regions.

Table 2. Respondent and informant

Informant / Respondents Code	Role	Institution
N1	Central Government	Head of *Kampus Mengajar* Program
N2	Central Government	Training Supervisor of *Kampus Mengajar* Program
N3	Central Government	Learning Improvement Team Leader, Ministry of Education
N4	Local Government	Center of Education Quality Asurance (BPMP) East Java
N5	Local Government	Center of Education Quality Asurance (BPMP) North Sumatera
N6	Local Government	Center of Education Quality Asurance (BPMP) South Sulawesi
N7	Local Government	Center of Education Quality Asurance (BPMP) East Nusa Tenggara
N8	Local Government	Surabaya Education Office
N9	Local Government	Medan Education Office
N10	Local Government	Kupang Education Office
N11	Local Government	Makassar Education Office
N12	Non State Actor	Headmaster of Hidayatul Ummah Elementary School (Surabaya)
N13	Non State Actor	Headmaster of Muhammadiyah 2 Elementary School (Maros)
N14	Non State Actor	Headmaster of St Arnoldus Elementary School (Kupang)
N15	Non State Actor	Headmaster of Bahagia Elementary School (Medan)

4. RESULT AND DATA ANALYSIS

4.1 AHP model criteria and sub-criteria

The determination of criteria within the AHP model was conducted through in-depth discussions with key stakeholders at the Ministry of Education, guided by the collaborative governance framework proposed by Ansell and Gash. This framework conceptualizes collaboration as a process encompassing five sequential dimensions: dialogue, trust, commitment, mutual understanding, and outcomes. These five dimensions serve as the core criteria of the AHP model, grounded in the theoretical underpinnings of collaborative governance.

Meanwhile, the identification of sub-criteria was carried out through expert forums involving literacy specialists and implementing actors of the *Kampus Mengajar* program. The development of sub-criteria was directed toward capturing technical policies or activities operationalized by stakeholders in response to institutional needs. The following Table 3 presents the criteria and sub-criteria used in the AHP model to assess literacy improvement interventions within the *Kampus Mengajar* program:

Table 3. Criteria and sub-criteria of literacy improvement interventions in the *Kampus Mengajar* program

Criteria	Sub Criteria
Dialogue	Offline Coordination Meetings
	Monthly Meeting (online)
	Weekly Meeting (online)
	Socialization to All Stakeholders
Shared Understanding	Forum Group Discussion (FGD)
	Monitoring and Evaluation
	Shared Goal Setting
	Giving Awards (Awarding)
Trust	Transparency of Information and Data
	Providing Authority and Space for Intervention
	Providing Feed Back to Each Other
	Cooperation Agreement (MoU)
Commitment	There are Regulations
	Institutional Structuring in Collaboration
	Class Minimum Competency Assessment
Result	Final Survey
	Supervision / Qualitative

Based on the table, the hierarchical structure model is illustrated:

This hierarchical figure represents the collaborative process undertaken by the *Kampus Mengajar* program. The determination of both criteria and sub-criteria was grounded in the collaborative governance theory proposed by Ansell and Gash, and further refined through expert consultations with internal literacy specialists involved in the program. A range of sub-criteria was identified, reflecting activities that have been implemented, those that remain suboptimal, as well as anticipated initiatives for future implementation. The hierarchical diagram illustrates how the collaborative process unfolds from the level of criteria to the corresponding sub-criteria. This structure enables a more systematic analysis to determine the most effective collaborative steps to enhance literacy outcomes within the program.

4.2 Comparative analysis of criteria and sub-criteria in the AHP framework

The collaborative process in this study was analyzed using the AHP, integrating expert judgments from the field of literacy to determine the specific activities or technical components represented by the sub-criteria. However, the formulation of the main criteria remained grounded in the theoretical framework of collaborative governance developed by Ansell and Gash. To establish stakeholder priorities, a structured questionnaire was administered, wherein respondents selected from a predefined set of priorities. The initial step in the AHP calculation involved ranking the criteria based on stakeholder input. The prioritization process began with the comparative assessment of criteria using the AHP method. The following Table 4 presents the comparative results of the criteria for collaborative intervention aimed at improving literacy through the *Kampus Mengajar* program:

Table 4. Overall criteria comparison matrix results

	Dialog	Mutual Understanding	Trust	Commitment	Result 2.
Dialog		2.44628	2.59783	3.3345	1.27968
Shared Understanding			1.3798	1.35528	1.5993
Trust				1.19244	2.23987
Commitment					1.92066
Result	Incon: 0.00				

Based on the results presented in the table above, the comparison matrix was calculated using the Expert Choice application. This comparison represents the preliminary output derived from the data provided by respondents/experts during the earlier phase of the study. To obtain a more tangible representation of the values, the results can be classified using eigenvectors or the relative weights assigned to each element. These weights are subsequently visualized through a graphical model, which facilitates a clearer understanding of the priorities and the hierarchical ordering of elements in the comparison process. Figure 4 illustrates the graphical representation of the comparative calculations:
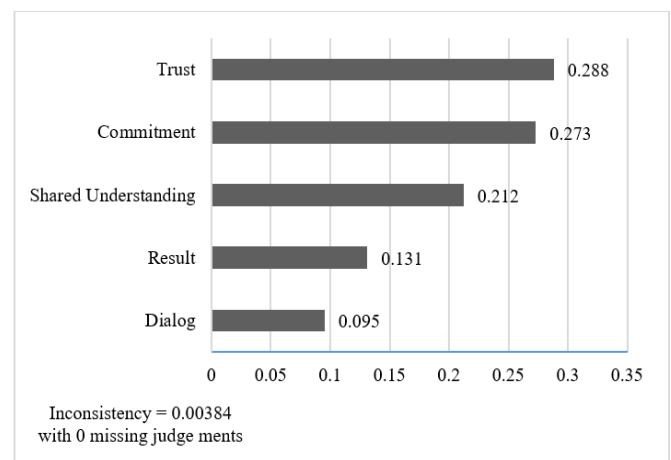

Inconsistency = 0.00384 with 0 missing judge ments

Figure 4. Eigen vector (Criteria)

From the eigenvector calculation presented above, it is evident that the *trust* criterion holds the highest weight at 0.288, followed by *commitment* at 0.273, and *mutual understanding* at 0.212. Meanwhile, the *results* and *dialogue* criteria were assigned lower priority weights of 0.131 and 0.095, respectively. These findings indicate that, within the context of collaborative interventions for literacy improvement through the *Kampus Mengajar* program, *trust* is perceived as the most critical and prioritized factor contributing to the achievement of the overarching goal, namely, literacy enhancement. Trust among stakeholders is also recognized as the foundational element of any effective collaboration [19]. In addition, the consistency ratio was 0.00384, well below the acceptable threshold of 0.1. Therefore, it can be concluded that the AHP approach employed in this analysis produced results that are both accurate and reliable.

To further analyze each sub-criterion, the researcher conducted a detailed assessment of all predefined sub-criteria. The AHP procedure involved pairwise comparison matrices, followed by the computation of priority weights or

eigenvectors. These calculations have been compiled, and the following section presents the analytical results in terms of the eigenvector magnitudes for all sub-criteria:

Following the eigenvector calculation from Table 5, the subsequent step involves assessing the consistency of each sub-criterion. The resulting consistency values must fall below the maximum acceptable threshold of 0.1. The table above outlines the evaluation of each criterion component, aligned with the stages of the collaborative process as conceptualized by Ansell and Gash. The criteria that have been assigned respective weights will be further analyzed in greater depth in the subsequent subsection discussing the collaborative process.

Table 5. Calculation of eigenvector and consistency ratio on criteria and sub-criteria

Criteria	Egn Vctr	Sub-Criteria	Egn Vctr	CR
Dialogue	0.095	Offline Coordination Meetings	0.393	
		Monthly Meeting (online)	0.369	0.00029
		Weekly Meeting (online)	0.239	
Shared Understanding	0.212	Socialization to All Stakeholders	0.170	
		Forum Group Discussion (FGD)	0.268	0.00321
		Monitoring and Evaluation	0.241	
		Shared Goal Setting	0.321	
Trust	0.288	Giving Awards (Awarding)	0.104	
		Transparency of Information and Data	0.365	
		Providing Authority and Space for Intervention	0.249	0.03
		Providing Feed Back to Each Other	0.282	
Commitment	0.273	Cooperation Agreement (MoU)	0.425	
		There are Regulations	0.309	0.00594
		Institutional Structuring in Collaboration	0.267	
Result	0.131	Class Minimum Competency Assessment	0.427	
		Final Survey	0.202	0.00055
		Supervision / Qualitative	0.371	

4.3 Collaborative process

4.3.1 Dialogue

According to the collaborative governance framework developed by Ansell and Gash, the collaborative process comprises five core components: dialogue, commitment, shared understanding, trust, and results. In the AHP analysis of the *dialogue* criterion, offline coordination was assigned the highest weight (0.393), followed by weekly online coordination sessions with weights of 0.369 and 0.239, respectively. The consistency ratio of 0.00029 indicates that the results are highly reliable and consistent. These findings suggest that face-to-face communication is perceived as the most effective approach in supporting the collaborative process, particularly in the implementation of the *Kampus Mengajar* program as it facilitates more direct information exchange and reduces the potential for miscommunication. As stated by Respondent N1:

"During the coordination meeting, we also conducted a mapping of the support needed in each region. We received feedback that face-to-face activities are better and more effective than online ones."

The analysis reveals that direct communication fosters emotional engagement, reinforces trust, and accelerates the

formation of shared understanding. An inclusive and participatory interaction model within governmental settings can effectively facilitate collaboration among diverse actors [20]. Sustained communication is essential to establishing alignment among stakeholders [21]. While intensive in-person dialogue is considered the most effective means of engagement [22]. The collective involvement of actors serves as the initial foundation for dialogue in collaborative processes [23]. Dialogue forums also play a critical role in enabling knowledge transfer among stakeholders through active and participatory discussion and program coordination.

4.3.2 Shared understanding

The *shared understanding* criterion underscores the importance of aligning perceptions among stakeholders in the process of improving literacy. Based on the AHP results, the sub-criterion *shared goal setting* ranked as the top priority with a weight of 0.321, followed by *focus group discussions* (0.268), *monitoring and evaluation* (0.241), and *socialization to all stakeholders* (0.17). The consistency ratio of 0.00321 confirms that the results are highly reliable. These findings indicate that establishing shared goals is considered the most critical element in fostering effective collaboration. Stakeholders believe that consensus on objectives from the outset provides a clear direction for the implementation of the *Kampus Mengajar* program. This aligns with the view that a mutual understanding of challenges and implementation processes constitutes a fundamental basis for impactful collaboration [24]. This is further supported by the testimony of Respondent N4:

"We feel that, so far, we lack a solid understanding of the program's objectives. It is crucial to establish goals together at the beginning so that each stakeholder understands what should be done."

Furthermore, *shared understanding* not only guides the direction of collaboration but also strengthens cross-actor coordination and enhances policy efficiency. It serves as a key indicator of successful collaboration [25]. It includes a shared comprehension of vision, goals, and the specific roles of each party involved [11]. In practice, the geographic dispersion of stakeholders poses a challenge in harmonizing perspectives and commitments. Therefore, understanding must not be fragmented; all actors need a comprehensive grasp of the direction, responsibilities, and objectives of the collaboration to ensure a synergistic and sustainable approach to literacy improvement.

4.3.3 Trust building

The third criterion within the collaborative process is *trust*, which serves as a fundamental pillar in its implementation [26]. The analysis reveals that the sub-criterion transparency of information and data holds the highest weight at 0.365, followed by providing feedback to each other at 0.282. The sub-criteria with the lowest weights are providing authority and space for intervention (0.249) and giving awards (0.104). The resulting consistency ratio of 0.03, well below the acceptable threshold of 0.1 demonstrates that the AHP calculations are both consistent and reliable. This study highlights that data and information transparency is the most prioritized aspect by stakeholders in building trust, underscoring transparency as the initial step toward collaborative synergy. All respondents, particularly from non-state actors, emphasized the current lack of openness in information sharing, suggesting a need for strengthened trust-

building mechanisms. As expressed by Respondent N14:

"I believe that trust from the central team toward schools—especially private schools that still need guidance and support in improving literacy—must be enhanced. While we have established mutual trust in submitting target school data, moving forward we need to promote a more comprehensive exchange of data and information."

Trust among stakeholders is demonstrated through mutual confidence in verifying target schools and in coordination activities. Mutual trust and resource exchange reflect interdependence, wherein not only the government but also private actors are committed to improvement and contribution [27]. Trust agreements mirror the needs and expectations of all involved parties and serve as a foundation for cooperation and increased participation in program or policy implementation. Trust can cultivate understanding, legitimacy, and commitment among collaborative participants [28]. In practice, trust established through the exchange of information among stakeholders particularly in the verification of target schools significantly influences other collaborative variables such as shared understanding and legitimacy. Thus, trust functions not merely as a supporting element but as a primary driver in optimizing sustainable collaborative processes [29].

4.3.4 Commitment

The fourth criterion in the collaborative process is *commitment*, which is closely linked to each stakeholder's willingness to engage in or implement collaborative efforts [30]. Among the three sub-criteria for commitment, *cooperation agreement* emerged as the most significant form of commitment, with the highest weight of 0.425. This is followed by *regulation* (0.309) and *institutional structure* (0.267). The consistency ratio obtained was 0.00594, which is substantially lower than the acceptable threshold of 0.1. This indicates that the prioritization of the commitment criteria through the AHP approach is both consistent and reliable. Based on the weighting, stakeholders require a clear and legally binding Memorandum of Understanding (MoU) or formal cooperation agreement. Collaboration must not be symbolic or informal; rather, it necessitates explicit procedures and documentation to ensure clarity and sustainability [14]. This finding is reinforced by Respondent N6, who noted:

"We are actually already committed, but it seems that we need to strengthen it through a broader, written agreement. This would make the commitment more structured and robust."

A more in-depth analysis reveals that weak commitment often stems from the absence of a clearly defined MoU among stakeholders, particularly with private schools. To date, coordination has primarily occurred through official letters at the time of program implementation or assignment deployment. However, these mechanisms have proven insufficient in cultivating a strong and sustainable commitment among stakeholders. Another finding highlights the challenge of cross-sectoral coordination, especially across actors with differing hierarchical positions, such as government institutions and non-state actors, which often lack established mutual commitments. This condition aligns with the notion that commitment must be initiated by stakeholders themselves, as voluntary compliance forms the foundation of effective collaboration [31]. Commitment to the collaborative process can influence structural arrangements, governance mechanisms, and the overall optimization of inter-organizational collaboration [30]. Therefore, building a more structured form of commitment formalized through legal documents is crucial to ensuring that program implementation proceeds in alignment with a shared vision and direction.

4.3.5 Collaborative result

The final criterion in the collaborative process pertains to *results*, which serve as an evaluative measure to determine the effectiveness of goal attainment based on the outcomes achieved. Based on the eigenvector calculations for selecting instruments to assess the outcomes of collaborative literacy improvement through the *Kampus Mengajar* program, the highest priority was assigned to the sub-criterion *class minimum competency assessment*, with a weight of 0.427. This was followed by *qualitative assessment* at 0.371 and *final survey* at 0.202. The resulting consistency ratio was 0.00055, which is substantially lower than the maximum acceptable threshold of 0.01. This indicates that the prioritization of the result criteria through the AHP method is both consistent and reliable. The findings reveal that stakeholders prioritize the use of measurable assessment tools administered by the Ministry of Education of the Republic of Indonesia. They assert that such assessments offer standardized, evidence-based metrics capable of accurately gauging the level of literacy across Indonesian schools. In this context, education assessments are viewed as essential tools for informing future policy directions [32].
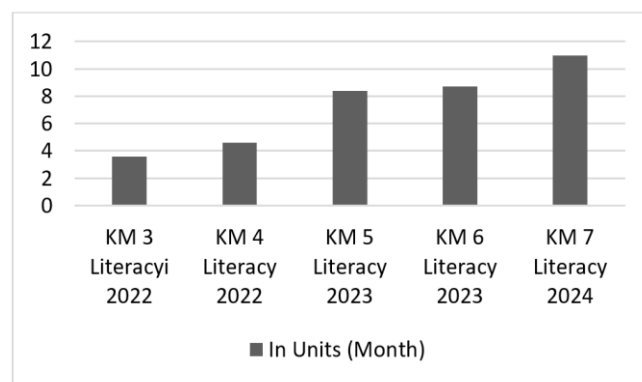
Figure 5. Result of class assessment from 2022 to 2024 at the *Kampus Mengajar* program

From Figure 5 above, the collaborative initiatives carried out under the *Kampus Mengajar* program have resulted in positive outcomes in improving literacy instruction in the targeted schools. The following data illustrate the results of class-based assessments, which are used to evaluate the extent to which the *Kampus Mengajar* program has positively impacted literacy learning within the participating schools.

It is evident that the results of the class-based literacy assessments show consistent improvement year over year. The graph illustrates the progress of literacy learning measured in months. The *Kampus Mengajar* program is implemented over a four-month period; thus, in 2022, during the third cohort (KM 3), the impact of the four-month literacy intervention was equivalent to 3.6 months of standard classroom instruction. In contrast, in 2024, during the seventh cohort (KM 7), the four-month program achieved a literacy outcome equivalent to 11 months of regular instruction. These findings suggest that the literacy gains produced by the program exceeded the actual duration of the intervention itself. The *Kampus Mengajar* program has also resulted in positive impacts across thousands

of beneficiary schools, both public and private. All participating schools reported tangible benefits from the program. Many stakeholders observed greater diversity in instructional tools and approaches, which helped students better comprehend the learning materials, thereby improving literacy outcomes. As noted by respondent N13:

"We are very pleased with this program. Students enjoy learning with university students; they feel the learning process becomes more engaging. In fact, some students who previously could not read are now able to read. Our assessment results also improved significantly during the implementation of Kampus Mengajar."

Intermediate outcomes serve as one of the key indicators of success in collaborative initiatives, particularly when evaluated through the lens of impact and results [33]. This study also finds that such collaborative outcomes can inform future program improvements. The upcoming iterations of the *Kampus Mengajar* program aim to analyze prior results to refine implementation strategies. The outcomes achieved thus far have directly addressed the issue of learning loss, a critical concern contributing to literacy decline following the COVID-19 pandemic. Accordingly, the program's intended goals are beginning to show alignment with actual outcomes. These findings underscore the importance of enhancing and institutionalizing collaboration as a means to optimize the effectiveness and sustainability of future program outcomes.

4.4 Key research findings

Based on the overall priority weightings of both criteria and sub-criteria for improving literacy in Indonesia through the *Kampus Mengajar* program, a comprehensive summary can be visualized through the following aggregated sub-criteria chart:

The overall results indicate that the sub-criterion *transparency of information and data* ranks highest in the total weighting of all sub-criteria, with a score of 0.109, while *weekly meeting* holds the lowest priority with a score of 0.022. This suggests that stakeholders perceive openness as the foundational element for building mutual trust in collaborative

settings. Following this, the presence of a legally binding MoU is considered essential for formalizing collaboration and establishing a shared commitment to literacy improvement goals.

From Figure 6 above, the results of all sub-criteria have been mapped using the AHP model. For the *dialogue* criterion, face-to-face meetings are deemed more effective than online coordination. However, interviews with key informants reveal that, despite the preference for in-person interactions, online dialogues serve as a practical alternative to maintain continuity in stakeholder communication. Within the *shared understanding* criterion, the establishment of jointly agreed-upon objectives emerges as the most critical factor in aligning stakeholder perceptions and guiding the direction of collaborative actions. In this context, the primary shared objective is the enhancement of literacy and the recovery of learning outcomes disrupted by the COVID-19 pandemic. Regarding *trust building*, transparency in data and information is consistently prioritized. Effective collaboration for literacy advancement requires openness, particularly from local government agencies, in providing access to education-related data to facilitate needs-based planning and intervention. This finding is corroborated across all informant testimonies, emphasizing the necessity of institutional commitment to data transparency.

In terms of *commitment*, the results underscore the importance of formal cooperation agreements through MoUs. Such legal instruments are considered strategic priorities to ensure accountability and binding engagement among all collaborating parties [34]. Lastly, for the *collaborative result* criterion, stakeholders unanimously prioritize the use of standardized classroom assessments with high levels of validity and reliability [35]. These assessments are not only tools for measuring progress but also critical instruments for evaluating the broader impact of the *Kampus Mengajar* program. The evidence indicates that the program has significantly contributed to literacy improvement in targeted schools.
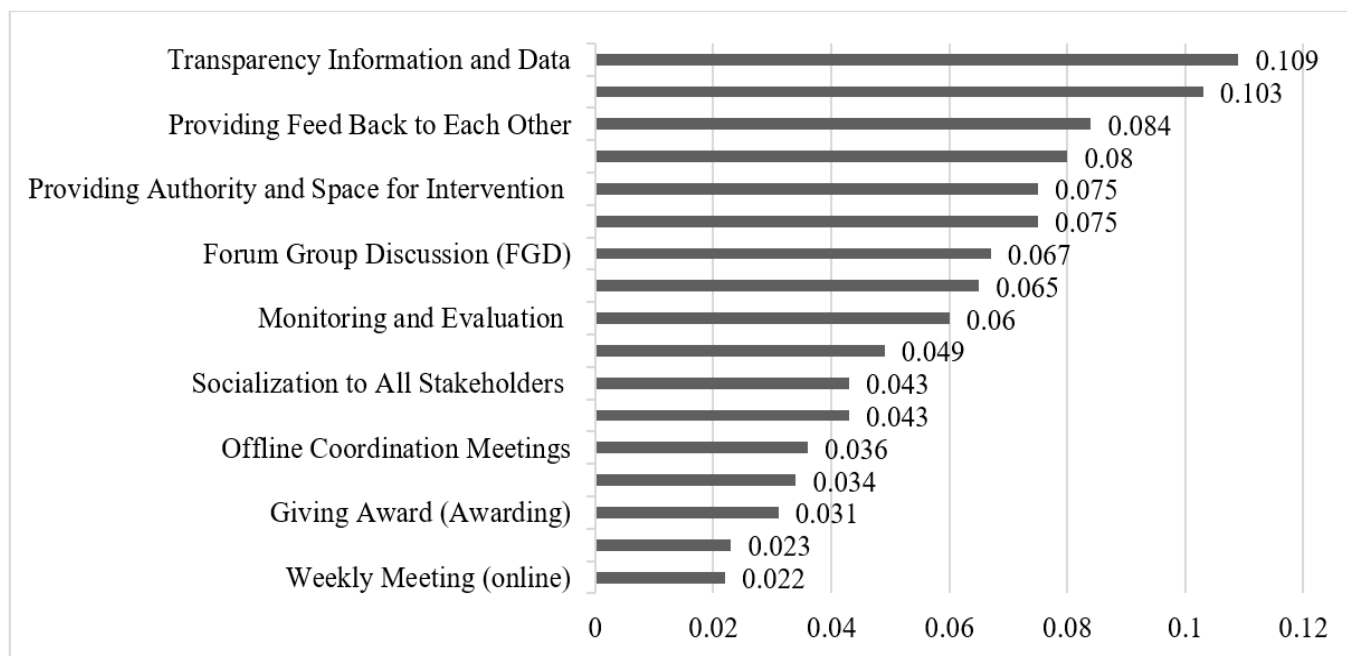

Figure 6. Sub-criteria calculation result graph

The AHP provided a structured and reliable framework for determining strategic priorities in collaborative literacy interventions. This method allows for comprehensive evaluation of each collaboration component, yielding practical recommendations for enhancing both strategy and impact. The findings affirm that achieving collaborative goals requires a well-defined structure, shared vision and mission, and committed leadership across stakeholder groups [36]. Therefore, collaborative processes remain vital for enhancing literacy outcomes in Indonesia, with a necessary emphasis on addressing the needs of both public and private schools.

However, despite the use of Ansell and Gash's theory in explaining the overall outcomes of literacy development efforts, the model does not explicitly address the external factors that may influence such processes. Findings from this study reveal the presence of external dynamics, such as resistance from private schools to participate in the program. Therefore, a more constructive framework is needed to account for external factors that may affect the implementation and outcomes of literacy initiatives.

4.5 Literacy improvement strategy in Indonesia

The *Kampus Mengajar* program represents one of the national literacy improvement initiatives mandated by the Ministry of Education of the Republic of Indonesia. Beyond emphasizing collaborative governance, the program also strategically targets schools with low literacy performance, encompassing both public and private institutions. This inclusive targeting approach reflects a shift toward equity in education policy, ensuring that literacy interventions reach the most vulnerable learning environments. In addition to the programmatic framework, this study recommends that local education authorities actively engage in collaborative processes for literacy enhancement by leveraging available resources and establishing partnerships with relevant stakeholders. The research findings culminated in the development of a strategic model for collaborative literacy improvement, which emphasizes multi-stakeholder engagement, resource optimization, and sustainable governance mechanisms.

Figure 7 illustrates the AHP results used to determine the collaborative strategy for improving literacy through the *Kampus Mengajar* program. The prioritization of collaboration strategies is based on AHP analysis, which outlines a structured sequence of strategic actions to enhance literacy outcomes. The first step involves joint goal setting among stakeholders, a foundational action aimed at aligning collective efforts toward national literacy advancement [37].

The second step entails the establishment of binding and legal cooperation agreements, accompanied by clearly defined rules governing the collaboration [38]. In this phase, stakeholders are encouraged to engage actors across sectors, including governmental and private institutions to support the implementation process. Private sector actors may serve as financial contributors or assume monitoring functions, thereby reinforcing transparency, trust, and mutual commitment within the collaborative ecosystem [38].

Third, transparency in information and data sharing is emphasized as a critical component for cultivating trust among stakeholders. The final step involves conducting standardized assessments to measure outcomes against the predetermined goals, allowing the collaborative impact to be both visible and quantifiable [39]. These assessments should be complemented by comprehensive evaluations to identify areas requiring improvement and to enhance the overall effectiveness of the collaboration process. Throughout each stage, consistent dialogue and sustained communication are imperative to maintaining momentum and addressing emerging challenges.

The implementation of this strategy must be approached through a continuous, multi-stakeholder collaboration involving central and local governments, educational institutions, and non-state actors. By prioritizing trust-building, commitment, shared understanding, effective communication, and measurable outcomes, Indonesia can accelerate equitable and high-quality literacy improvement. The success of the *Kampus Mengajar* program may serve as a benchmark for literacy enhancement strategies in other countries or regions. Furthermore, cross-sectoral collaboration does not need to be centralized under national authority; local governments are encouraged to tailor and implement such strategies according to their specific capacities and contextual needs.
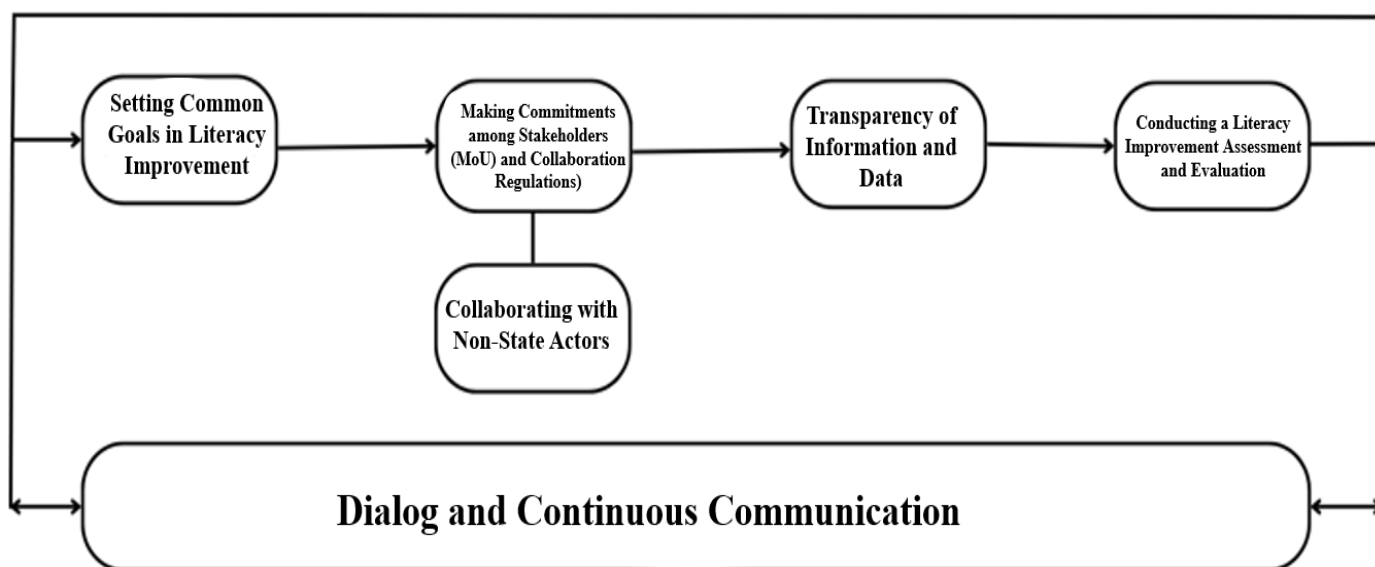

Figure 7. Collaborative framework for literacy improvement

5. CONCLUSION

The results of the analysis using the AHP method indicate that trust is the main priority in collaboration, followed by commitment, shared understanding, results, and dialogue. Trust is viewed as a fundamental foundation in building collaboration because it reflects the alignment of vision and goals among stakeholders. This trust can be built through transparency of data and information, which becomes the basis for formulating a legal and binding cooperation framework, such as a MoU. Commitment needs to be strengthened through clear regulations and institutional support, while shared understanding becomes essential to harmonize the direction and collaborative objectives. Although it holds a lower position in priority, effective dialogue, especially through face-to-face coordination remains necessary to maintain continuity in communication.

These findings emphasize that the success of the *Kampus Mengajar* program in improving literacy depends heavily on a structured and goal-oriented collaborative process. Assessment-based evaluations using standardized instruments serve not only as indicators of program effectiveness but also as a foundation for continuous improvement. The literacy improvement strategy derived from AHP priorities reflects the potential of cross-sector collaboration to address educational challenges in a holistic manner by establishing shared goals, strengthening commitment, and designing supportive institutional frameworks. Such a collaborative design enables government actors to accelerate literacy progress in a more flexible and measurable way. Regional differences in characteristics should be seen as opportunities to adapt and innovate literacy models according to local needs and cultural contexts. Moreover, the involvement of the private sector is essential to ensure that policy implementation is inclusive and benefits society at large.

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