

# CLOSING THE GAP: EVALUATING LOCAL GOVERNMENT INITIATIVES TO ENHANCE BASIC EDUCATION ACCESS AND QUALITY

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## Abstract

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The efforts of local government to improve access and quality of basic education can reduce educational disparities (Pansiri, 2008). This research aims to describe disparities and the impact of local government initiatives on access to and the quality of primary education in Papua, specifically in Merauke Regency. Utilizing a descriptive qualitative approach, the study examines the efforts of local government officials, education figures, and the local community through snowball sampling for informant selection. Data collection methods include observations, open-ended interviews, focused group discussions (FGD), and structured interviews. The study employs instruments such as gross enrollment ratio (APK), net enrollment ratio (APM), student-school distance, teacher-student ratios, and evaluations of infrastructure and dropout rates. Data analysis categorizes information according to problem themes. The findings reveal significant educational disparities in Papua, with school participation rates below the national average. Contributing factors include limited access to educational facilities, long distances between homes and schools, and economic challenges. Despite these issues, local government initiatives like infrastructure development, scholarship programs, and transportation improvements have positively impacted access to and the quality of primary education in Papua. These efforts demonstrate progress but continued focus on these areas is needed to further reduce educational disparities and improve outcomes for students.

**Keywords:** Education Disparities, Local Government Initiatives, Education Access, Education Quality

**Authors' individual contribution:** Conceptualization — P.R.; Methodology — P.R. and J.; Validation — P.R. and H.H.; Formal Analysis — P.R. and J.; Investigation — P.R. and H.H.; Resources — P.R. and J.; Data Curation — P.R. and J.; Writing — Original Draft — P.R.; Writing — Review & Editing P.R. and J.; Supervision — J. and H.H.; Project Administration — P.R. and J.

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## 1. INTRODUCTION

Education plays a key role in the social and economic development of a country (Zafar et al., 2021). As the foundation of development, education plays a vital role in improving the quality of life for communities and creating better economic opportunities (Lewallen et al., 2015). Education provides individuals with the knowledge, skills, and understanding needed to contribute productively to the labor market. With increasing levels of education, income disparities between individuals tend to shrink, creating a more inclusive society (Lewallen et al., 2015). Furthermore, education also has positive impacts on health, social awareness, and citizen participation in the democratic process. In other words, education is not just about transferring knowledge but is also an investment in sustainable human development that has positive impacts across the social and economic spectrum of a country (Chankseliani & McCowan, 2021). Therefore, improving access to and the quality of education is a top priority on the sustainable development agenda, especially in regions facing educational challenges such as Papua.

The Papua region is located at the eastern end of Indonesia, with difficult-to-access geography and scattered territories. These geographical factors are the main barriers to ensuring equal access to education (Regmi & Jones, 2020). Limited educational infrastructure, long distances between villages, and transportation limitations are factors that restrict students' access to schools (Lin et al., 2014). Additionally, there is a shortage of trained teachers in this region, leading to low teacher-to-student ratios and disrupted teaching quality. Security issues, cultural diversity, and various languages also affect the quality of education in Papua. Vulnerable socioeconomic conditions and high levels of poverty in some areas also contribute to educational disparities (Shi & Stevens, 2021). Therefore, it is necessary to invest resources and formulate education policies that take into account the unique characteristics of Papua to improve access to and the quality of education in the region.

The unique geographical, social, and cultural contexts of Papua have posed significant challenges to the education system in this region. Geographically, Papua is one of the largest provinces in Indonesia, with much of its territory consisting of mountains, forests, and remote islands. Access to schools, especially in remote rural areas, is often hindered by the lack of adequate transportation infrastructure (Hansen et al., 2015). Meanwhile, the diversity of ethnic groups and languages in Papua creates complexities in providing relevant and meaningful education. Social factors, such as high levels of poverty and limited access to healthcare services, can also affect educational participation and outcomes (Noonan et al., 2016). All these elements make the education system in Papua a unique challenge and require special attention from local governments to ensure equal access to and the quality of education in the region.

Data and statistics depicting high levels of educational inequality in Papua, Indonesia, are very concerning. According to recent data, the participation

rate in education in Papua tends to be lower compared to other regions in Indonesia, with significantly lower rates of primary and secondary school enrollment. High dropout rates and limited access to adequate educational facilities are critical issues in this region (Shaturaev, 2021a). Additionally, educational outcomes, such as national test results, show striking inequalities between Papua and other regions, with generally lower academic skill levels. Gender inequality in education is also a serious issue in Papua, with lower female participation rates compared to males. Illiteracy rates and the lack of adequate educational infrastructure in some areas further exacerbate significant educational disparities in the Papua region.

The role of local government in formulating education policies in Indonesia is highly significant (Shaturaev, 2021b). The Indonesian education system is decentralized, meaning that local governments have strong authority and responsibility in designing, implementing, and overseeing education policies at the local level. Local governments, such as provinces and districts/cities, have the autonomy to adapt national policies according to local needs and conditions. They can allocate resources to education, develop curricula based on regional characteristics, and support teacher training and educational infrastructure (Hamid, 2020). With this authority, local governments can be key agents in bridging education gaps, accommodating cultural diversity, and ensuring high-quality and equitable education throughout Indonesia.

The Papua region, with its unique geographical and social characteristics, has presented special challenges in the education sector. Local governments in Papua have responded to these challenges through various programs and policies. Some initiatives focus on infrastructure, including school construction and improved transportation networks to address accessibility issues. Additionally, scholarship programs and incentives for teachers have been implemented to enhance teaching quality and attract qualified educators to the region (Podolsky et al., 2016). Efforts have also been made to incorporate elements of local education into the curriculum, respecting Papua's culture, and promoting multilingualism as a learning tool. However, careful evaluation is needed to understand the extent to which these initiatives have succeeded in improving education access and quality in Papua, as well as identifying areas where further improvement is needed. This research will evaluate several key parameters focusing on access and quality of education in the Papua region. The parameters to be evaluated include education access, and analyzing education quality with a focus on parameters such as teacher qualifications, curriculum, teaching methods, and student learning outcomes. It will also assess gender equality aspects in education access and quality. Finally, it will review the long-term impact of local government initiatives in achieving sustainable development goals related to education.

This research builds on previous studies conducted to understand the education challenges in Papua and the efforts made to address education gaps in the region. For example, previous research

may have highlighted issues of accessibility to basic education in Papua, including geographic constraints, limited infrastructure, and socio-economic issues affecting the school participation of Papua's children. Additionally, previous research may have noted various initiatives undertaken by the Papua local government or non-governmental organizations to improve access and quality of basic education in the region. However, these studies may not always have investigated the real impact of these initiatives or provided specific recommendations for further improvement. Therefore, the position of this research is to continue previous studies with a focus on evaluating the concrete impact of Papua local government initiatives on access and quality of basic education. This research aims to fill any knowledge gaps that may still exist in the literature and provide deeper insights into the effectiveness of efforts made, as well as offer more targeted recommendations for further improvement in enhancing basic education in Papua. Thus, this research will be an important contribution to broader efforts to address education gaps in the region.

This research has significant implications in providing better insights into how to improve education in regions with unique challenges such as Papua. The Papua region in Indonesia has unique geographical, social, and cultural characteristics that significantly influence the education system. High levels of educational inequality and limited access to quality education have been major obstacles to achieving sustainable social and economic development in this region. Therefore, this research is important as it will provide a deeper understanding of the effectiveness of local government initiatives in addressing these challenges. The results of this research can be used as a basis for formulating more effective education policies, identifying best practices, and promoting positive changes in Papua's education. Thus, this research will help create more equitable and quality education opportunities, have a positive impact on Papua's communities, and contribute to efforts to advance education throughout Indonesia. The aim of this research is to thoroughly evaluate the impact of local government initiatives in Papua on access and quality of education in the region.

The rest of the paper is structured as follows. Section 2 reviews the literature. Section 3 presents the research methodology. Section 4 provides the results. Section 5 discusses the main findings. Section 6 concludes the paper.

## 2. LITERATURE REVIEW

Education disparities refer to the significant gaps and discrepancies in educational opportunities, resources, and outcomes that exist among different demographic groups within a given population (Lipipun & Angasinha, 2023). These disparities can stem from various factors, including socioeconomic status, geographic location, ethnicity, and gender. Socioeconomically disadvantaged communities often experience disproportionately lower access to quality schools, educational resources, and support systems, which can hinder their academic achievement and long-term success (Agba et al.,

2022). Similarly, marginalized ethnic and racial groups, as well as girls and women, may face systemic barriers that limit their educational opportunities and perpetuate cycles of inequality. Addressing education disparities requires targeted interventions aimed at dismantling structural barriers (Jason, 2020), redistributing resources equitably, and fostering inclusive policies and practices that ensure all individuals have equal access to high-quality education.

Local governments play a pivotal role in addressing education disparities and promoting educational equity within their communities (Karlsson et al., 2020). Through strategic policy development, resource allocation, and community engagement, local authorities can implement a wide range of initiatives to improve education access and quality for residents. These initiatives may include the establishment of early childhood education programs, the provision of financial assistance for low-income families, the construction and maintenance of school infrastructure, and the implementation of diversity and inclusion policies within educational institutions. Moreover, local governments can collaborate with schools, community organizations, and other stakeholders to develop tailored strategies that address the unique needs and challenges of their populations, ensuring that every individual has the opportunity to thrive academically and socially (Gracias et al., 2023).

Education access refers to the ability of individuals to obtain and participate in educational opportunities without encountering barriers or constraints (Lambrechts, 2020). It encompasses various dimensions, including physical access to schools, affordability of education, availability of support services, and cultural acceptance of education. Achieving universal education access requires proactive measures to remove barriers that prevent individuals from enrolling and remaining in school, particularly for vulnerable and marginalized groups (Zickafoose et al., 2024). This may involve implementing policies to eliminate school fees, providing transportation services for students in remote areas, offering scholarships or financial aid, and promoting inclusive educational environments that respect diverse cultural and linguistic backgrounds. Additionally, outreach efforts and community partnerships can play a crucial role in raising awareness about the importance of education and ensuring that all individuals, regardless of their circumstances, have equal opportunities to pursue learning and personal development.

Education quality refers to the overall effectiveness and impact of educational experiences and outcomes on learners' knowledge, skills, and well-being (Trolan et al., 2022). It encompasses various dimensions, including curriculum relevance, pedagogical approaches, teacher competence, learning environments, and student engagement (Sökmen, 2021). High-quality education is essential for equipping individuals with the competencies and capabilities needed to succeed in life, contribute to society, and participate fully in the workforce (Burns, 2020). To enhance education quality, policymakers, educators, and stakeholders must prioritize investments in teacher training and

professional development, curriculum development and review, instructional materials and resources, and school infrastructure and facilities. Moreover, ongoing monitoring and evaluation mechanisms should be in place to assess the effectiveness of education programs, identify areas for improvement, and ensure accountability and transparency in the delivery of education services. By continually striving to improve education quality, societies can empower learners to reach their full potential and build a more prosperous and equitable future for all.

### 3. RESEARCH METHODOLOGY

This research utilizes a descriptive qualitative approach to explore the gaps in the impact of local government initiatives on the access and quality of basic education. Descriptive research is chosen to provide a comprehensive understanding of the situation, particularly concerning local government initiatives regarding access and quality of basic education in Papua. The study is conducted in Merauke Regency, involving participants such as local government officials, education leaders, and community members. Snowball sampling is employed to select primary informants, where existing participants refer new ones. Data collection methods include observation and interviews. Direct field observations are conducted to observe the actual conditions of educational facilities, teaching and learning activities, and interactions between students and teachers. Open-ended interviews are conducted using systematically prepared interview guides based on themes related to access and quality of basic education.

Primary data is gathered through two main methods: focused group discussions (FGD) and structured interviews with key informants. FGD involves discussions with groups consisting of various stakeholders to obtain broader and more comprehensive perspectives. Structured interviews are conducted using pre-prepared question lists to ensure all relevant aspects are covered. Various instruments are utilized in data collection, such as gross participation rate (*Angka Partisipasi Murni*, APK) and net participation rate (*Angka Partisipasi Murni*, APM) to measure school participation rates, student-school distance to understand accessibility, teacher-student ratios to assess classroom dynamics, and dropout rates to evaluate student retention. Data analysis involves categorizing information according to thematic issues, allowing researchers to gain a deep understanding of the challenges and opportunities surrounding local government initiatives and basic education in Papua.

The selection criteria for informants in this study include local government officials responsible for education, education leaders, such as school principals and teachers, and community members with direct experience with the education system in Merauke Regency. Primary informants are selected using snowball sampling, where each initial informant refers to subsequent informants deemed relevant and with deep insights into the research

topic. Interview guides are systematically prepared with open-ended question lists designed to explore the perspectives, experiences, and suggestions of informants regarding local government initiatives to improve access and quality of basic education. Data collection instruments include direct field observations to observe the conditions of educational facilities and teaching-learning activities, as well as in-depth interviews and FGD to collect rich and diverse qualitative data.

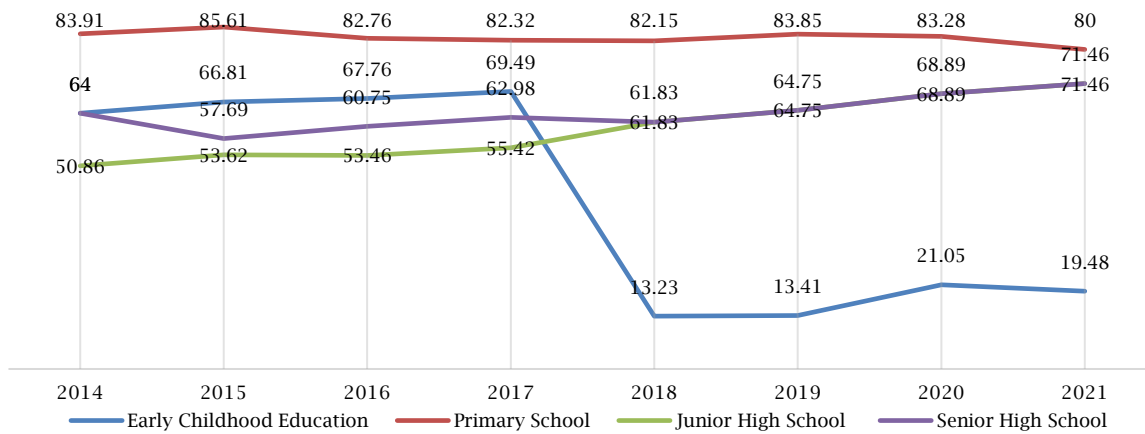
The data collection procedure begins with field observations to obtain an overall picture of the education conditions in the research area, followed by recorded and transcribed in-depth interviews to ensure data accuracy. FGDs are conducted with groups consisting of various stakeholders to gain broader perspectives. Data analysis techniques involve coding, where collected data are categorized based on pre-determined main themes, such as accessibility, teaching quality, and government support. Thematic analysis is conducted to identify patterns and relationships among themes, which are then used to formulate conclusions and recommendations. Detailed documentation of each methodological step, including informant selection criteria, interview guides, data collection instruments, as well as data analysis procedures and techniques, ensures that this research can be replicated or reproduced by other researchers in similar or different contexts.

Alternative methods suitable for conducting the research include quantitative surveys to complement qualitative insights and provide statistical validation of findings. Longitudinal studies could offer insights into the long-term impacts of government initiatives on education outcomes. Additionally, participatory action research involving local communities could foster more inclusive and collaborative approaches to addressing educational challenges. Comparative analyses with regions implementing different intervention strategies could offer valuable insights into the effectiveness of various approaches. Lastly, a mixed-methods approach combining quantitative data collection with qualitative interviews and observations could provide a more comprehensive understanding of the complex dynamics influencing education access and quality in Papua.

### 4. RESULTS

In order to reduce the educational gap in Papua, this research aims to assess the effectiveness of initiatives undertaken by the local government in improving access to and quality of basic education in the region. With a focus on impact evaluation, this study investigates the extent to which the measures taken have influenced student participation as well as improvements in teaching and educational facilities. The results of a thorough analysis are expected to provide better insights for formulating more effective policy strategies in addressing educational challenges in Papua.

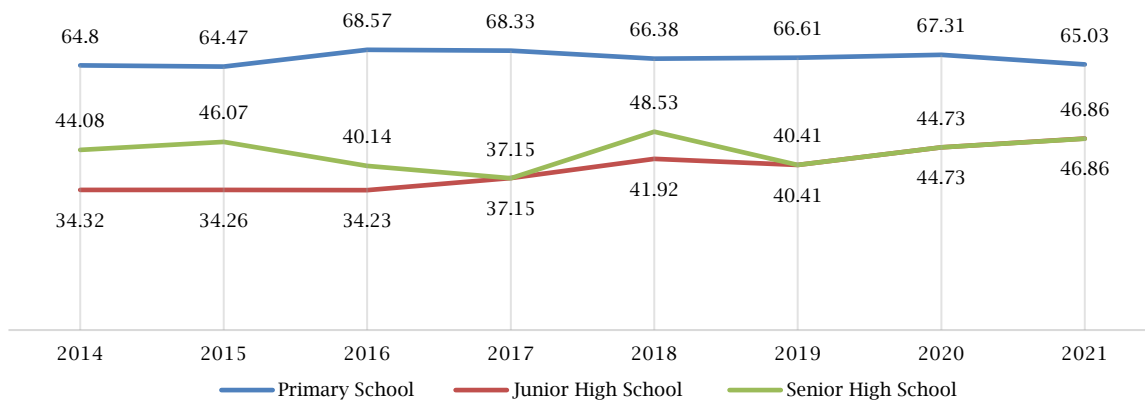
**Figure 1. Gross enrollment ratio (APK)**



Based on Figure 1, APK is a key indicator used to measure the level of participation in education at various levels. In the context of early childhood education, the APK increased steadily from 64% in 2014 to 69.49% in 2017, indicating a positive trend in enrollment rates. However, there was a significant drop in 2018, with only 13.23% enrollment, likely due to various factors such as changes in policies or economic conditions. This trend continued in 2019 and 2020, although there was a slight increase in 2021, reaching 19.48%. For primary school education, the APK remained relatively stable over the years, ranging from 82.15% in 2018 to 85.61% in 2015. However, there was a decrease to 80% in 2021,

indicating a potential decline in enrollment at this level. In contrast, the APK for junior high school and senior high school saw fluctuations over the years. Junior high school enrollment increased from 50.86% in 2014 to 71.46% in 2021, showing a positive trajectory. Similarly, senior high school enrollment experienced growth, with the APK rising from 57.69% in 2015 to 71.46% in 2021. Overall, while there were fluctuations in enrollment rates across different levels of education, there is a general trend of improvement in enrollment rates, particularly in junior and senior high school education, which is a positive indicator for educational access and participation.

**Figure 2. Net enrollment ratio (APM)**



Based on Figure 2, there is an interesting trend in the data on APM for primary, secondary, and tertiary education from 2014 to 2021. For primary education, APM experienced fluctuations, starting from 64.8% in 2014, decreasing to 64.47% in 2015, then sharply rising to 68.57% in 2016, before decreasing again to 68.33% in 2017. Despite the variation, APM for primary education overall tends to stabilize around 66-68% from 2018 to 2021, with a slight decrease in 2021 to 65.03%. Meanwhile, APM for secondary education shows a significant increase from 2014 to 2021. Starting from 34.32% in 2014, APM for this level consistently increased to reach 46.86% in 2021. This indicates an increase in student participation in secondary education during that period. On the other hand, APM for tertiary

education shows different patterns from year to year. There was a significant decrease from 44.08% in 2014 to 37.15% in 2017, before experiencing a spike again to 48.53% in 2018. However, APM then decreased again in 2019 and 2020 before rising again in 2021 to 46.86%. Overall, this APM data provides an overview of the level of student participation in primary, secondary, and tertiary education over eight years. Although there are fluctuations in some years, there is a trend of increasing participation in secondary education, while primary and tertiary education experience greater variation. Further analysis is needed to understand the factors that may influence the fluctuations and trends in this APM data.

**Table 1.** Facilities and access of elementary schools, junior high schools, and senior high schools or equivalent in Waan District

No.	Village	Elementary school			Junior high school			Senior high school / vocational school	
		Amount	Access	Function (Yes/No)	Amount	Access	Function (Yes/No)	Amount	Access
1.	Kladar	1	Very easy	No	0	Difficult	-	0	Very difficult
2.	Sabon	1	Very easy	Yes	0	Difficult	-	0	Difficult
3.	Tor	1	Very easy	Yes	0	Difficult	-	0	Very difficult
4.	Waan	1	Very easy	Yes	1	Very easy	Yes	0	Very difficult
5.	Konorau	1	Very easy	Yes	0	Very difficult	-	0	Very difficult
6.	Sibenda	1	Difficult	No	0	Difficult	-	0	Very difficult
7.	Wetau	1	Very easy	Yes	0	Very difficult	-	0	Very difficult
8.	Kawe	1	Very easy	No	0	Very difficult	-	0	Very difficult
9.	Dafnawanga	0	Very difficult	-	0	Difficult	-	0	Very difficult
10.	Wantarma	0	Difficult	-	0	Very difficult	-	0	Very difficult
11.	Pembri	1.	Very easy	No	0	Very difficult	-	0	Very difficult

Note: SD: elementary school; SMP: junior high school; SMA: senior high school; SMK: vocational school.

There are nine elementary schools in Waan District. Six of them are government-owned schools and three are privately owned schools managed by *Yayasan Pendidikan dan Persekolahan Katolik*, YPPK (Catholic Education and School Foundation). The nine schools are SD Impres Kawe, SD Impres Kladar, SD Impres Konorau, SD Impres Sibenda, SD Negeri Pembri, SD Negeri Wetau, SD YPPK Sabon, SD YPPK Tor Kladar, and SD YPPK Waan. Overall, the educational activities in several villages are very concerning because almost all villages lack teaching and learning activities. The educational issues include the lack of teachers residing in the villages (high absenteeism and low quality of teachers). The absence of supporting facilities for teachers such as

clean water, sanitation facilities, teacher housing, and adequate lighting. The transportation costs are very high to access duty stations. Students are more inclined to accompany their parents to forage in the forest because there is no one to take care of them or provide food if they attend school in the village. Additionally, in Kawe Village, there have been cases of expulsion of teachers because the community is disappointed with teachers who only come to administer exams but never teach students in Kawe Village. Meanwhile, in Wetau Village, the community has expelled teachers due to disputes between parents and teachers, such as when a parent did not accept the treatment of a teacher who physically assaulted a student at school.

**Table 2.** Facilities and number of teachers in Waan District villages

Village	Total number of teachers		Supporting facilities			Building condition
	Total	Active	Teacher's house	Clean water	Toilet	
Wantarma	8	2	There is	There is not any	There isn't any	Heavy damaged
Sibenda	-	-	-	-	-	There is not any
Wetau	6	2	There is	There is not any	There is	Light damage
Pembri	7	0	There is	There is not any	There is	Light damage
Kawe	8	0	There is	There is not any	There is	Light damage

The village of Wantarma has a total of eight teachers, but only two of them are active. The support facilities in this village are limited, with no teacher housing, clean water, or bathrooms. Additionally, the condition of the school buildings in this village is very concerning, with buildings experiencing severe damage. In the village of Sibenda, there is no available data regarding the number of teachers, supporting facilities, or the condition of the buildings. This may indicate that the village faces challenges in data provision or may have very inadequate educational conditions. Meanwhile, the village of Wetau has six teachers, with only two of them being active. Although there are facilities such as teacher housing and bathrooms, the village still lacks access to clean water. The condition of the school buildings tends to be slightly damaged. In the village of Pembri, despite

having seven teachers who should be active, all teachers seem to be inactive. Facilities such as teacher housing and bathrooms are available, but there is still a lack of access to clean water. The condition of the school buildings also experiences slight damage. The village of Kawe has eight teachers, but like Pembri village, there are no active teachers. Facilities such as teacher housing and bathrooms are available, but there is still a lack of access to clean water. The condition of the school buildings in this village also experiences slight damage. Overall, the educational conditions in these villages indicate various challenges, ranging from a lack of active teachers, and limited facilities, to concerning building conditions. Serious efforts are needed to improve access and quality of education in these areas.

**Table 3.** Quality of teaching in schools

<i>Teaching quality criteria</i>	<i>Findings</i>
Teacher qualifications	Most teachers have educational qualifications that comply with national standards. There are still a number of teachers who do not have adequate qualifications.
Teaching methods	The variety of teaching methods used by teachers, including lectures, discussions, and practice. There is a lack of implementation of interactive and innovative teaching methods.
Facilities and infrastructure	Facilities and supporting facilities for teaching are still limited in several schools. Lack of access to technology and additional learning resources.
Learning evaluation	The learning evaluation process still tends to be traditional and pays little attention to aspects of students' creativity and critical thinking abilities.

Teacher qualifications are generally in line with national standards, but there remains a significant number of teachers lacking adequate qualifications. Teaching methods vary, including lectures, discussions, and practical activities, yet there is a notable deficiency in the use of interactive and innovative approaches. Facilities and infrastructure for teaching are insufficient in many schools, with limited access to technology and additional learning

resources. Furthermore, the learning evaluation process tends to be traditional, often overlooking the importance of fostering students' creativity and critical thinking abilities. These findings underscore the need for targeted improvements in teacher training, infrastructure, and evaluation methods to enhance the overall quality of education in the region.

**Table 4.** Government support in education

<i>Government support</i>	<i>Findings</i>
Education infrastructure	The government has invested in developing educational infrastructure in Papua. There are still deficiencies in the distribution and maintenance of educational facilities.
Scholarship and assistance program	There are scholarship and assistance programs provided by the government for the Papuan people. These programs have helped increase access to education for communities in need.
Education policy	Adopt educational policies that support increased access and quality of education. Policy implementation still faces challenges in its implementation in the field.

The study found that government support in improving access and quality of education in Papua includes investment in educational infrastructure, provision of scholarship and assistance programs, and the adoption of educational policies that support increased access and quality of education. Although the government has invested in the development of educational infrastructure, there

are still deficiencies in the distribution and maintenance of these facilities. Scholarship and assistance programs have helped increase educational access for communities in need. However, the implementation of educational policies in the field still faces various challenges, indicating the need for a more effective and coordinated approach to address these issues.

**Table 5.** Access information in each district

<i>Information access criteria</i>	<i>Findings</i>
Availability of school information	Information about schools and educational programs is still limited in remote areas. This information is more easily accessible in urban areas.
Information media	Local media such as radio and newspapers are used to disseminate educational information. Internet penetration and use of digital media are still low in several remote areas.
Education program socialization	The government and related institutions have carried out the socialization of educational programs. There are still challenges in reaching all levels of society.
Community understanding	Public awareness and understanding of the importance of education still varies. In some remote areas, people do not understand the programs offered.

The research findings indicate that the availability of information about schools and educational programs is still limited in remote areas, while this information is more easily accessible in urban areas. Local media such as radio and newspapers are used to disseminate educational information, but internet penetration and the use of digital media are still low in some remote areas. The government and related institutions have carried out socialization of educational programs, but there are still challenges in reaching all levels of society. Public awareness and understanding of the importance of education vary, with some remote areas still lacking an understanding of the programs offered.

## 5. DISCUSSION

The research findings provide a more detailed overview of educational disparities in Papua, supported by field-collected facts. Data analysis reveals that school participation rates in Papua are still far below the national average. According to the data obtained, school participation rates in Papua at the primary education level are still low, with most Papua children not continuing their education to higher levels. Factors contributing to low participation rates include limited access to educational facilities (Atuahene & Owusu-Ansah, 2013), long distances between schools and homes, and economic factors that force many Papua children to work or help their families at home. Additionally, the research also reveals that

graduation rates in Papua tend to be lower compared to the national average. Data from the Ministry of Education and Culture show that student graduation rates in Papua are still below the national average, especially in remote and isolated areas. This indicates a gap in academic achievement between Papua and other regions in Indonesia.

Regarding the availability of educational facilities (Atuahene & Owusu-Ansah, 2013), the research found that many areas in Papua still lack adequate educational facilities. Based on field surveys conducted in several districts in Papua, it was found that most schools in these areas still lack classrooms, libraries, sports facilities, and other teaching support facilities. This provides a clearer picture of the infrastructure challenges faced by education in Papua. The research also highlights issues with the quality of teaching in Papua. Interviews with teachers and educators in the region revealed that a lack of training, support, and motivation for teachers can affect the quality of their teaching. Additionally, a lack of teaching materials tailored to local needs is also a serious problem in improving the quality of education. Thus, the field facts gathered from this research provide a deeper understanding of the complexity of educational disparities in Papua. They also offer a strong basis for formulating more effective strategies and policies to address educational challenges in the region (Brunetti et al., 2020).

The research findings indicate that evaluations of initiatives undertaken by the Papua local government to improve access and quality of primary education have encountered some important findings. First, most of these initiatives have led to improvements in physical access to schools, especially in rural areas that were previously difficult to reach. Infrastructure development programs, such as building new schools and improving existing facilities, have successfully expanded the reach of primary education for the people (Barrett et al., 2019). However, while the increase in physical access appears significant, educational quality remains a challenge. Evaluations also highlight the need for improving teacher qualifications, updating curricula relevant to local contexts, and increasing access to quality learning materials and educational resources (de los Arcos et al., 2016). Additionally, the research found that despite efforts to improve access and quality of primary education, some areas in Papua still experience significant disparities in terms of educational access and teaching quality. This underscores the need for further evaluation of implemented strategies and the possibility of adopting more holistic and integrated approaches to improving primary education in Papua. Therefore, the research findings provide a foundation for the Papua local government to review existing strategies and policies and identify areas where further improvement is needed to enhance access and quality of primary education in the region.

Initiatives undertaken by the local government in Papua have had a significant impact on access and quality of primary education in the region. Data analysis indicates a significant increase in school participation rates, where student participation rates in primary education have gradually increased with the implementation of education programs initiated

by the local government (Kundu et al., 2021). Furthermore, evaluations of teaching quality also show tangible improvements. This is reflected in improved teacher performance assessments, more innovative teaching methods, and increased student understanding of subject matter. The provision of educational facilities and infrastructure has also seen significant improvements, with the construction and improvement of more modern and adequate school infrastructure (Eze et al., 2018). This has had a positive impact on the teaching and learning conditions in Papua schools, enhancing student and teacher motivation, and reducing disparities in access to education. However, there are still challenges to be overcome, such as increasing education access for remote communities and improving the quality of education in remote areas. Therefore, policy recommendations include increasing investment in teacher training, improving transportation access to facilitate education access, and increasing budget allocations for educational infrastructure development. Thus, this research provides comprehensive insights into the impact of local government initiatives on primary education in Papua and provides a basis for the development of more effective policies to address educational challenges in the region.

In studying the improvement of education quality in Papua, this research emphasizes that, despite an increase in education access, the regional government is seriously focusing its efforts on enhancing the quality of education. Several initiatives have been implemented, including intensive training programs for teachers to improve their competence in delivering learning materials effectively (Caena & Redecker, 2019). Additionally, significant curriculum updates aim to keep pace with the latest developments in the education sector. The updated curriculum is expected to enhance the relevance of learning materials to the needs of society and the workforce. Furthermore, significant investments in educational facilities, including school infrastructure improvements and the provision of learning support facilities, have been highlighted. This is aimed at creating a conducive and adequate learning environment, ensuring that students can receive education to higher standards (Sogunro, 2015). Overall, these steps are taken to create positive changes in the Papua education system and enhance the competitiveness of education at the national level.

After conducting comprehensive research on access and quality of basic education in Papua and evaluating the initiatives undertaken by the regional government, several policy recommendations can be proposed. Firstly, inclusive policy changes oriented towards the local community are needed to enhance participation and education quality. This may include developing culturally relevant curricula and empowering communities to be more involved in education decision-making (Johnson, 2014). Secondly, budget allocations need to be increased, especially for improving educational facilities, teacher training, and supporting scholarship programs for students from low-income families. Additionally, oversight and accountability for education budget utilization need to be enhanced to ensure the effectiveness and efficiency of public funds (Rutherford & Rabovsky, 2014). Thirdly, more holistic and sustainable implementation strategies



need to be developed, including more accessible early education programs, strengthening education monitoring and evaluation systems, and integrating technology into learning to enhance education quality. By comprehensively and sustainably implementing these recommendations, it is hoped that the Papua regional government can more effectively address education gaps and improve access and quality of basic education in the region.

The increase in education access in Papua is a positive outcome of various initiatives implemented by the regional government. Research findings indicate a significant increase in education access in the region. One of the main indicators of this improvement is the increase in the number of schools (Day et al., 2016). The regional government has succeeded in establishing more educational institutions, expanding the school network, and enhancing students' capacity to meet their educational needs (Kruss et al., 2015). Additionally, this research highlights the effectiveness of expanded scholarship programs by the regional government. These programs not only help reduce the financial burden on families but also serve as a key factor in increasing student participation in education. The availability of greater financial incentives through scholarship programs encourages more students to pursue higher education and reduces the dropout rate (Salmi & D'Addio, 2021).

The regional government's efforts to improve education access are also reflected in the improvement of the transportation system (Boisjoly & El-Geneidy, 2017). By ensuring the availability of reliable and affordable transportation, children in the region can more easily access educational institutions. This helps overcome geographical and infrastructural constraints that often hinder access to education in Papua. The results of this research indicate that regional government initiatives in Papua have successfully had a positive impact on increasing education access. Concrete steps such as increasing the number of schools, expanding scholarship programs, and improving transportation make significant contributions to creating a more inclusive education environment accessible to all segments of society.

The research findings indicate that the quality of teaching in Papua faces several major challenges that require serious attention. One key issue is the variation in teacher qualifications. Although most teachers have qualifications that meet national standards, there are still some teachers who do not meet adequate qualifications (Ingersoll, 2020). This directly impacts their ability to effectively implement the curriculum and deliver material in a way that is comprehensible to all students. In addition to qualifications, the teaching methods used by teachers in Papua also vary. Some teachers still rely on traditional methods such as lectures, while others have begun to use discussion and practice methods. However, the research shows that there is still a lack of implementation of more interactive and innovative teaching methods that can increase student participation and encourage critical thinking. Interactive teaching methods are crucial to creating a dynamic and engaging learning environment for students (El-Sabagh, 2021).

Supporting teaching facilities and infrastructure are also significant constraints in Papua. Many schools still lack basic facilities such as adequate

classrooms, laboratory equipment, and access to technology such as computers and the Internet. These limitations hinder teachers' ability to provide quality teaching and limit students' access to additional learning resources that can enrich their knowledge. Without access to adequate technology and learning resources (Dakhi et al., 2020), students in Papua fall behind compared to those in other regions with better facilities. The process of learning evaluation in Papua also tends to be traditional and lacks attention to important aspects such as creativity and critical thinking skills of students. Many schools still use evaluation methods that only test students' memorization skills without providing a comprehensive assessment of their critical thinking and problem-solving abilities. Comprehensive and holistic evaluation is needed to develop students' full potential and prepare them for future challenges (Ray, 2023).

These findings highlight the need for various improvements in the education sector in Papua. Enhancing teacher qualifications through training and further education is essential to ensure that all teachers have adequate competencies (Garzón Artacho et al., 2020). Additionally, the implementation of more interactive and innovative teaching methods should be encouraged to create a more engaging learning environment for students. Improving facilities and access to technology and additional learning resources must also be a priority to support a more effective teaching process (Singh et al., 2022). Lastly, reforming the learning evaluation process is necessary to ensure a more holistic assessment of students' abilities. These efforts are expected to significantly improve the quality of teaching in Papua and ensure that all students have equal opportunities to receive a quality education. Government support in enhancing access and quality of education in Papua has been evident through various initiatives and programs. The government has invested in the development of educational infrastructure, though there remain deficiencies in the distribution and maintenance of educational facilities. Scholarship and aid programs provided by the government have contributed to improving educational access for those in need (Shaturaev, 2021b), but the implementation and scope of these programs still require enhancement. Furthermore, the adoption of educational policies aimed at increasing access and quality has been carried out, yet the execution of these policies continues to face challenges on the ground.

The findings highlight several key areas for improvement. First, there is a need for better distribution and upkeep of educational infrastructure to ensure that facilities are accessible and in good condition across all regions. Second, the coverage and implementation of scholarship and aid programs should be expanded to reach a broader population and ensure that more students can benefit from these opportunities. Lastly, the effective implementation of educational policies must be strengthened to overcome practical obstacles and ensure that these policies translate into real, positive changes in the educational landscape of Papua. These efforts require a concerted approach, involving not only the allocation of resources but also continuous monitoring and evaluation to address emerging challenges and adapt strategies accordingly. By focusing on these

areas, the government can create a more equitable and high-quality educational system (Sahlberg, 2021), providing all children with the opportunity to receive a meaningful education and contribute to the region's human development (Mantovani et al., 2021).

The research findings on information access in basic education in Papua reveal several important aspects that require further attention. First, the availability of information about schools and educational programs remains limited in remote areas, while this information is more accessible in urban areas. This indicates a significant information gap between urban and remote areas, which can affect participation and quality of education. Second, local media such as radio and newspapers are often used to disseminate educational information; however, internet penetration and the use of digital media are still low in some remote areas. This limitation reduces the effectiveness of information dissemination in an increasingly advanced digital era. Furthermore, educational program socialization by the government and related agencies has been conducted but still faces challenges in reaching all layers of society. This highlights the need for more effective and inclusive strategies to reach all community groups, including those in remote areas with limited access. Lastly, public awareness and understanding of the importance of education vary. In some remote areas, the community lacks understanding of the educational programs offered, indicating the need for more intensive education and awareness-raising about the benefits of education. Overall, these findings highlight significant challenges in educational information access in Papua and demonstrate the need for more focused and directed efforts to ensure that all segments of society receive adequate and accurate information about education. These efforts include increasing internet penetration, more broadly utilizing digital media, and strengthening community socialization and education programs about the importance of education. Thus, it is hoped that better equality in educational information access can be achieved throughout Papua.

## 6. CONCLUSION

Based on the findings, analysis, and interpretation of this study, it can be concluded that the education gap in Papua remains a serious problem that requires more serious attention and action. Data shows that school participation rates in Papua are still far below the national average, especially at the elementary level, while graduation rates also tend to be lower compared to the national average. Factors such as limited access to educational facilities, long distances between schools and homes, and economic factors affect the low participation rates and quality of education in this region. The education infrastructure in Papua is still very much lagging behind, with most schools experiencing a shortage of classrooms and other supporting facilities. Lack of training and support for teachers also affects the quality of teaching, while the lack of teaching materials suitable for the local context poses a serious obstacle to improving the quality of education. Nevertheless, initiatives undertaken by the local government of

Papua have had a positive impact on improving access and quality of basic education. Infrastructure development, scholarship programs, and transportation improvements have successfully expanded the reach of education for the people of Papua. However, there are still challenges to be overcome, such as improving teacher qualifications, curriculum renewal, and increasing access to quality teaching materials. More integrated and holistic actions from the local government of Papua, as well as strong support from the central government, are needed to address the education gap in this region. Steps such as infrastructure improvements, increasing teacher qualifications, and curriculum renewal need to be prioritized to improve access and quality of basic education in Papua. Thus, the hope is to provide equal and quality educational opportunities for all children in Papua and to accelerate human development in this region.

The research highlights significant challenges in the quality of teaching, access to educational information, and government support in Papua. Key issues include variations in teacher qualifications, limited use of interactive teaching methods, inadequate teaching facilities, and traditional learning evaluations. Additionally, there is a notable information gap between urban and remote areas, with limited access to digital media and educational program awareness. Despite government initiatives to improve infrastructure and provide scholarships, implementation and reach remain insufficient. Addressing these challenges requires comprehensive strategies to enhance teacher training, infrastructure, information access, and policy execution, aiming to create a more equitable and high-quality educational system in Papua. This study has several limitations that need to be considered, such as data that may not fully reflect current conditions due to limitations in data collection in remote areas, and the lack of in-depth exploration of the influence of local culture on participation and quality of education in Papua. For future research, it is recommended to conduct more comprehensive longitudinal studies with larger samples that cover various regions in Papua, including remote areas. Additionally, further research is needed to understand the role of local culture and how educational interventions can be tailored to this cultural context. Studies on the effectiveness of various intervention programs that have been implemented are also important to evaluate their success and identify best practices that can be adopted more broadly. This paper holds significance for future research as it sheds light on the existing disparities and impacts of local government initiatives on primary education in Papua, providing a crucial foundation for further investigation into educational development in the region. By employing a comprehensive descriptive qualitative approach and utilizing various metrics to assess educational access and quality, the study offers valuable insights into the challenges and effectiveness of current initiatives. Future research can build upon this foundation to explore more nuanced aspects of educational interventions, assess long-term impacts, and devise targeted strategies to further enhance basic education access and quality in Papua.

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