



## Strengthening Teacher Capacity in Identifying and Analyzing Critical Education Issues in East Kalimantan

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### ABSTRACT

East Kalimantan holds a strategic position as a buffer zone for the Indonesian Capital City (IKN), which has significant implications for the education sector. Demographic changes, the demand for superior human resources, and inter-regional disparities require an adaptive and equitable education system. This article aims to examine critical education issues in East Kalimantan and analyze their impact on the quality and equity of learning. The method used is a descriptive-analytical study based on a review of the Teacher Capacity Building training materials organized by the East Kalimantan BGTK. The study results indicate that critical education issues include disparities in access and equity of education, teacher quality and distribution, low literacy and numeracy, challenges in implementing the Independent Curriculum, and limitations in digital transformation of education. These issues are systemic, interrelated, and have long-term impacts on the readiness of local human resources to support the development of the IKN. Therefore, strengthening teacher capacity in identifying and analyzing critical education issues is a strategic step in formulating policy solutions and learning practices that are targeted, sustainable, and contextual to regional needs.

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## **INTRODUCTION**

East Kalimantan (Kaltim) has a broad and diverse geographical character, encompassing urban, inland, and coastal areas. This geographical condition creates complex educational dynamics due to differences in access, infrastructure, and socioeconomic conditions of communities in each region. Schools in urban areas tend to have more adequate facilities than schools in inland and coastal areas, creating disparities in educational services. This disparity poses a major challenge to realizing equitable and equitable education for all students. In addition to geographical challenges, East Kalimantan also faces strategic changes due to its designation as a buffer zone for the Indonesian Capital City (IKN). The development of the IKN has a significant impact on population mobility, economic growth, and the increasing need for quality human resources. The world of education is required to be able to adapt to these changes to prepare a competent, adaptive, and competitive generation. Thus, education is no longer solely oriented towards meeting local needs, but also addresses the demands of national development. The social and economic transformation occurring in East Kalimantan demands an education system that is responsive and relevant to future needs. Education is expected to produce graduates who possess not only academic knowledge but also 21st-century skills such as critical thinking, creativity, collaboration, and digital literacy. However, actual conditions on the ground indicate that the quality and relevance of learning are not yet fully distributed across East Kalimantan, potentially widening the gap between community groups (Wariunsora et al., 2025).

In this context, various fundamental problems emerge and develop into critical issues in education. Critical education issues are strategic, systemic, and ongoing issues that significantly impact the quality and equity of education. These issues cannot be resolved through a partial approach but require an in-depth analysis of the root causes and the interrelationships between elements within the education system. Therefore, a comprehensive understanding of critical education issues is crucial for all stakeholders. Critical education issues in East Kalimantan include disparities in access and equity of education, teacher quality and distribution, low student literacy and numeracy, challenges in implementing the Independent Curriculum, and limitations in digital transformation of education. These issues are interconnected and form a complex cycle of problems. If not addressed systematically, these critical issues have the potential to hinder improvements in education quality and the readiness of human resources to support regional development. Teachers play a very strategic role in addressing these critical education issues. As the primary implementers of classroom learning, teachers are in the position closest to students and the reality of learning. Teachers function not only as transmitters of material, but also as facilitators, innovators, and agents of change in education. Therefore, teachers' ability to identify learning problems and analyze educational contexts is a key factor in improving educational quality (Masruhim, 2025).

However, not all teachers have the capacity to systematically identify and analyze critical education issues. Limited understanding of education policy, the use of assessment data, and learning innovations often hinders the formulation of targeted solutions. This situation indicates that strengthening teacher capacity through ongoing training and mentoring is an urgent need, particularly in the context of increasingly complex changes and challenges in education. Strengthening teacher capacity in identifying and analyzing critical education issues is expected to improve the quality of decision-making at the educational unit level. Teachers with strong analytical skills will be better able to design contextual, adaptive, and student-centered learning. Furthermore, teachers can contribute by providing data-based input for the formulation of education policies at the school and regional levels. Efforts to strengthen teacher capacity are also in line with the direction of national education policy, which emphasizes improving teacher professionalism and the implementation of the Independent Curriculum. This curriculum provides teachers with greater room to innovate and adapt learning to student characteristics and the learning environment. However, this flexibility can only be optimally utilized if teachers have a strong understanding of the educational context and the critical issues they face. Based on this description, strengthening teachers' capacity to identify and analyze critical educational issues is a strategic step in realizing quality and equitable education in East Kalimantan. Through a comprehensive understanding of educational issues, teachers are expected to play an active role in creating relevant and sustainable learning solutions. Thus, education in East Kalimantan can optimally contribute to preparing superior human resources to support the development of the Indonesian capital and sustainable regional development (Kusuma & Rini, 2024).

## **LITERATURE REVIEW**

### **The Concept of Critical Issues in Education**

Critical issues in education are fundamental problems that impact the sustainability of the education system as a whole. These issues do not merely arise temporarily, but are structural and systemic in nature because they relate to policies, resources, and educational governance. The existence of critical issues indicates an imbalance between educational goals and actual conditions on the ground, thus requiring serious attention from all educational stakeholders. Critical issues in education are complex and interconnected across elements within the education system. Problems in one aspect, such as a shortage of teachers, can impact other aspects, such as low-quality learning and student learning outcomes. Therefore, critical issues cannot be understood in isolation but must be analyzed holistically, taking into account the social, economic, geographic, and policy contexts. One key characteristic of critical issues in education is their long-term impact on human resource development. If critical issues are not addressed appropriately, the quality of education graduates will decline, impacting regional and national competitiveness. In the long term, this condition can hamper social and economic development, particularly in strategic areas such as East Kalimantan, which is undergoing

major transformation. Critical issues in education generally relate to access to education, learning quality, curriculum relevance, and equitable distribution of education services. Access to education encompasses the availability of schools, teaching staff, and infrastructure, while educational quality relates to the quality of the learning process and student learning outcomes. Educational relevance refers to the alignment of graduate competencies with the needs of society and the workplace. In the context of regions with diverse geographic characteristics, such as East Kalimantan, critical education issues are often exacerbated by geographic and demographic factors. Inland and coastal areas face different challenges than urban areas, ranging from limited infrastructure to limited access to quality education services. This situation emphasizes that critical education issues are not universal, but rather contextual according to regional characteristics. Therefore, understanding the concept of critical education issues is an important foundation for formulating policies and strategies to improve education quality. Identification of critical issues must be followed by an analysis of the root causes and their impact on the education system. With this approach, the formulated solutions are expected to be strategic and sustainable, not reactive (Elbadiansyah, 2025).

### **Quality and Equity of Education**

The quality of education is a key indicator of the success of education delivery, reflecting the quality of the learning process and outcomes. Educational quality is measured not only by students' academic achievements but also by their character development, critical thinking skills, and readiness to face life's challenges. Therefore, educational quality has broad and multidimensional dimensions. Meanwhile, educational equity relates to fairness in access and learning opportunities for all students, regardless of social, economic, or geographic background. Educational equity emphasizes that every child has the same right to receive quality educational services. This principle is the foundation for efforts to realize inclusive and equitable education. Inequality in educational quality and equity often occurs due to differences in geographic conditions and the availability of infrastructure. Schools in urban areas generally have more complete facilities than schools in remote areas. This condition impacts differences in the quality of the learning process and student learning outcomes between regions. In addition to infrastructure factors, the distribution of teaching staff is also a major cause of disparities in educational quality. A shortage of teachers in remote and coastal areas, as well as a mismatch between teacher qualifications and the subjects taught, contribute to low learning quality. The uneven distribution of teachers reflects weak human resource planning in education. Inequality in education quality and equity significantly impacts opportunities for further education and the future of students. Students in areas with limited education services tend to have fewer opportunities to continue their education to a higher level. This situation has the potential to reinforce the cycle of intergenerational social and economic inequality. Therefore, improving education quality must be carried out simultaneously with efforts to equalize education services. Education policies need to be designed based on regional needs to address the specific

challenges faced by each region. With this approach, education quality will not only improve generally but also be felt fairly by all levels of society (Supriyatna, 2025).

### **The Role of Teachers in Improving the Quality of Education**

Teachers are key actors in the education system, playing a strategic role in improving the quality of learning. Through direct interaction with students, teachers play a vital role in transforming the curriculum into meaningful learning experiences. The quality of classroom learning is largely determined by their competence, professionalism, and commitment to their duties. In the learning process, teachers are responsible for planning, implementing, and evaluating learning. Good learning planning enables teachers to adapt materials, methods, and assessments to the characteristics of students. Effective learning implementation creates an active and participatory learning environment, while learning evaluation serves to measure learning outcomes and continuous improvement. Teachers' ability to analyze educational problems is crucial in addressing critical educational issues. Teachers need to understand students' learning challenges, learning barriers, and environmental factors that influence the learning process. Appropriate analysis enables teachers to design learning strategies that are more contextual and responsive to students' needs. Utilizing assessment data is a crucial competency for teachers to improve the quality of education. Assessment data can be used to map student abilities, identify learning gaps, and design follow-up learning. Teachers who are able to utilize data optimally will be more effective in improving student learning outcomes. Furthermore, teachers are required to be able to implement learning innovations in line with current developments and educational policies, such as the implementation of the Independent Curriculum. Learning innovations include the use of technology, the application of differentiated learning, and the strengthening of literacy and numeracy. These innovations are key to creating relevant and meaningful learning. Thus, the role of teachers is not limited to implementing learning but also as agents of change in improving the quality of education. Strengthening teacher capacity through ongoing training and mentoring is a crucial strategy in addressing critical educational issues. Professional and adaptive teachers are expected to contribute significantly to realizing quality and equitable education (Mas & Familawati, 2023).

### **METHODOLOGY**

This article uses a qualitative descriptive method with a document analysis approach to understand and examine critical education issues in East Kalimantan. This approach was chosen because it allows researchers to describe educational phenomena in depth and contextually based on available data sources. The primary data were obtained from the training materials on Strengthening Teacher Capacity in Identifying and Analyzing Critical Education Issues held by the East Kalimantan Teachers and Education Personnel Center (BGTK). This training included conceptual explanations, issue mapping, and strategic analysis related to regional education conditions. The

data analysis process was carried out through several stages, namely document collection, in-depth reading, and grouping of key education issues. Next, each issue was analyzed to identify its root causes and impacts on the quality and equity of education in East Kalimantan. The analysis was conducted systematically by linking the findings to the geographic, social, and regional education policy contexts. Therefore, the study results are expected to provide a comprehensive picture of education problems and their implications for improving the quality of learning (Rahmat, 2024).

## **RESULTS AND DISCUSSION**

### **Gap in Access and Equity in Education**

The study results show that disparity in access to education remains a major problem in East Kalimantan, particularly in the most disadvantaged, frontier, and outermost (3T) regions. The vast and difficult-to-reach geographical conditions result in an uneven distribution of education services. Schools in remote and coastal areas often face limited facilities and infrastructure, which directly impact the quality of the learning process. Long distances and limited transportation are significant barriers for students to access school. In some areas, students must undertake long journeys over difficult terrain, reducing learning motivation and increasing the risk of dropping out. These access barriers contribute to low school enrollment rates, particularly at the secondary education level. Limited educational infrastructure also widens the gap between regions. Schools in remote areas often lack adequate classrooms, laboratories, and other learning support facilities. This condition results in suboptimal learning processes and limits students' opportunities to develop their full potential. The impact of disparity in access to education is reflected in differences in learning outcomes between regions. Students in urban areas tend to have better academic performance than those in remote and coastal areas. This inequality demonstrates that unequal access to education has direct implications for educational quality. In addition to impacting learning outcomes, disparities in access to education also impact students' opportunities to continue their education to a higher level. Students from remote areas have fewer opportunities to continue their education due to limited educational facilities and support. This situation has the potential to reinforce intergenerational social and economic inequality. Therefore, the study's findings emphasize the importance of affirmative action policies to ensure equitable access to education in East Kalimantan. Local governments need to develop strategies based on regional needs to improve educational infrastructure and transportation access. These efforts are expected to reduce educational disparities and increase equity in educational services for all (Handayani & Sunandar, 2022).

### **Teacher Quality and Distribution**

The analysis shows that teacher quality and distribution in East Kalimantan remain uneven. A teacher shortage in remote and coastal areas is a recurring problem and impacts learning effectiveness. This situation leads to an imbalanced teacher-to-student ratio, resulting in a suboptimal learning process. In addition to the shortage of teachers, there is also a mismatch between

teachers' academic qualifications and the subjects they teach. Teachers are often forced to teach outside their areas of expertise due to a shortage of teaching staff. This mismatch impacts the quality of material delivery and student understanding. The uneven distribution of teachers reflects a weak teacher needs planning system. Geographical factors, limited incentives, and a lack of supporting facilities are the main reasons for the low interest of teachers to work in remote areas. As a result, schools in these areas struggle to retain qualified teaching staff. The lack of ongoing professional training also hinders teacher competency improvement. Not all teachers have equal access to capacity-building programs, such as the Independent Curriculum training and the use of learning technology. This situation widens the gap in learning quality between regions. The impact of teacher quality and distribution issues is evident in the low level of learning innovation and the variety of teaching methods. Teachers tend to use conventional learning methods due to limited competence and support. This has implications for low student engagement in the learning process. Therefore, the study results indicate that improving the quality and equitable distribution of teachers is a top priority in improving education. Affirmative action policies, incentives, and strengthening ongoing training need to be implemented in an integrated manner. This step is expected to improve the quality of learning evenly throughout East Kalimantan (Andriani, 2024).

#### **Low Literacy and Numeracy**

Educational assessment results show that the literacy and numeracy skills of students in East Kalimantan remain below the expected target. This condition is an important indicator that the quality of learning does not fully support the mastery of basic competencies. Literacy and numeracy are the main foundations for student learning success at the next level of education. Low literacy and numeracy are inseparable from learning practices that are still oriented towards memorization. The learning process tends to emphasize textual mastery of material, without providing sufficient space for students to develop critical thinking and problem-solving skills. As a result, students struggle to apply knowledge in real-world contexts. The limited use of assessment data is also a factor exacerbating the low literacy and numeracy achievements. Assessment data has not been optimally utilized by teachers to design follow-up learning. This data could be used to more accurately map student learning needs. The limited availability of contextual and relevant teaching materials also contributes to low literacy and numeracy. Teaching materials that are not appropriate to the context of students' lives result in less meaningful learning. This results in low student interest in learning and engagement in the learning process. The impact of low literacy and numeracy significantly impacts student readiness for further education and the world of work. Students with low literacy and numeracy skills tend to experience difficulties in understanding information, making decisions, and solving problems. This condition has the potential to reduce the competitiveness of regional human resources. Therefore, the study results emphasize the importance of strengthening literacy and numeracy learning based on

assessment data. Teachers need to be encouraged to implement learning strategies oriented towards developing basic competencies. This effort is expected to continuously improve the quality of student learning outcomes (Pitriyani & Hanim, 2023).

### **Challenges of Implementing the Independent Curriculum**

The study results show that the implementation of the Independent Curriculum in East Kalimantan has not been uniform. Differences in teachers' understanding of the concepts and principles of the Independent Curriculum are a key factor. This situation leads to variations in the quality of curriculum implementation at the educational unit level. Teachers still face difficulties in implementing differentiated learning, the core of the Independent Curriculum. Differences in student abilities and characteristics have not been fully accommodated in lesson planning and implementation. As a result, learning tends to be uniform. Limited teaching and assessment tools also hinder the implementation of the Independent Curriculum. Not all schools have adequate access to learning resources and curriculum implementation guidelines. This results in less than optimal learning planning based on learning outcomes. The lack of intensive mentoring for teachers weakens the quality of curriculum implementation. Teachers need ongoing support to understand and apply the concepts of formative assessment and student-centered learning. Without adequate mentoring, curriculum implementation risks not achieving its intended goals. The impact of the challenges in implementing the Independent Curriculum is evident in learning that is not fully contextualized and meaningful. Students have not been optimally involved in the learning process that encourages exploration and creativity. This hinders the achievement of 21st-century competencies. Therefore, the study results emphasize the need for systematic and ongoing support in the implementation of the Independent Curriculum. Strengthening teacher capacity through training and learning communities is a crucial strategy. These efforts are expected to improve the quality of curriculum implementation and learning (Yuningsih & Yulianti, 2025).

### **Digital Transformation and Human Resources Readiness to Face the New Capital City**

Digital transformation of education is a strategic necessity in facing the development of the Indonesian Capital City. However, studies show that access to digital technology in East Kalimantan remains unequal. Limited internet access in some areas widens the digital divide between regions. Low digital literacy among teachers and students also hinders the use of learning technology. Technology is often used only as an administrative tool, not yet effectively integrated into the learning process. This condition prevents digital transformation from having a significant impact on learning quality. The digital divide impacts the limited innovation of technology-based learning. Schools in remote areas struggle to develop meaningful digital learning. As a result, students in these areas have more limited learning opportunities than those in urban areas. In addition to digital transformation, the readiness of human resources in education to face the development of the new capital city is also a major concern. The competencies of education graduates are not fully aligned

with the needs of the future workforce. This indicates the need for curriculum adjustments and strengthening of vocational skills. The lack of collaboration between educational institutions and the industrial world is one factor contributing to the low relevance of education. Vocational education has not been optimally integrated with the needs of local and national industries. This situation has the potential to hinder local community participation in the development of the new capital city. Therefore, the study's findings emphasize the importance of accelerating equitable digital transformation and strengthening vocational education. Collaboration between the government, educational institutions, and industry needs to be strategically enhanced. This step is expected to improve the readiness of local human resources to support the sustainable development of the Indonesian capital city (Wariunsora et al., 2025).

## CONCLUSIONS AND RECOMMENDATIONS

Critical education issues in East Kalimantan are complex and interconnected, encompassing disparities in access and equity of education, teacher quality and distribution, low student literacy and numeracy outcomes, challenges in implementing the Independent Curriculum, and limitations in digital transformation of education. These diverse issues are influenced by the vast and diverse geographical conditions, the limitations of education policies that are not yet fully data-driven, and weak collaboration among stakeholders. If not addressed systematically and sustainably, these issues have the potential to hinder improvements in education quality and human resource readiness in East Kalimantan. Strengthening teacher capacity in identifying and analyzing critical education issues is a strategic step in efforts to improve the quality and equity of education. Teachers with analytical skills and contextual understanding are expected to be able to design adaptive, relevant, and student-centered learning. Furthermore, strong educational leadership, adaptive policies, and data-driven learning innovations are needed to realize a quality and equitable education system. With this approach, education in East Kalimantan is expected to contribute optimally to supporting sustainable development and preparing human resources ready to face the challenges of developing the Indonesian Capital City

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