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Implementation of Free Education Programs in Improving Access to Education in Surabaya City

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Abstract

The free education program in the city of Surabaya, which was implemented through Regional Regulation No. 16 of 2012 and strengthened by its derivative policies, is designed to eliminate cost barriers in accessing primary and secondary education. However, the effectiveness of this program in improving equitable access to education—especially for vulnerable groups—has not been comprehensively researched and based on longitudinal data. This study aims to analyze the impact of the implementation of free education programs on improving access to education in Surabaya during the 2015–2023 period, focusing on the Gross Participation Rate (APK), School Dropout Rate (APS), and the spatial distribution of education access between regions. The method used is quantitative-descriptive research with a case study approach, using secondary data from the Surabaya City Education Office, the Central Statistics Agency (BPS) of East Java, and program evaluation documents. The analysis is carried out through trend analysis and cross-period comparison. The results showed that the APK SD/MI increased from 93.2% (2015) to 98.7% (2023), the APK for SMP/MTs from 87.6% to 96.3%, while the APS decreased significantly from 2.8% to 0.6%. However, there is a persistent spatial disparity between the city center and suburban areas, especially in West and East Surabaya. This research contributes to the education policy literature by identifying the determinants of program implementation success and gaps that need to be addressed through a targeted intervention approach.

1. Introduction

Equitable access to education is one of the fundamental indicators of human development that reflects social justice as well as a prerequisite for long-term economic growth (Sen, 2000; UNESCO, 2020). In Indonesia, the constitutional commitment to free education is listed in Article 31 of the 1945 Constitution and is operationalized through a series of policies, ranging from the 9-Year Compulsory Learning program (1994), School Operational Assistance (BOS) since 2005, to the Smart Indonesia Card (KIP) since 2014. Although national policies have provided a fairly comprehensive financing framework, their implementation at the regional level shows significant variations (Ministry of Education and Culture, 2021; World Bank, 2020).

The city of Surabaya, as the second-largest city in Indonesia with a population of more than 2.9 million people (BPS, 2023), took a progressive step by enacting Regional Regulation of the City of Surabaya No. 16 of 2012 concerning the Implementation of Education. This regulation provided the legal basis for the implementation of free-education initiatives at the education levels administered by the municipal government (Calista & Widodo, 2019; Chaniago et al., 2023).

The policy was subsequently strengthened by Surabaya Mayor Regulation No. 47 of 2013 concerning the Implementation and Management of Education in Surabaya, which regulates program administration, financing, and supervision mechanisms. However, following the enactment of Law No. 23 of 2014 on Regional Government and the transfer of senior high school and vocational school administration to provincial governments, the direct authority of the Surabaya municipal government has primarily covered early childhood, nonformal, elementary, and junior high school education.

Senior high school and vocational school education have been administered by the East Java Provincial Government since the transfer of

authority was implemented. Therefore, upper-secondary education indicators in this study are interpreted as city-level education access outcomes rather than as the direct results of programs administered by the Surabaya municipal government. Surabaya allocated an average of 25–27% of its Regional Revenue and Expenditure Budget (*Anggaran Pendapatan dan Belanja Daerah* or APBD) to the education sector during 2015–2023 (Bappeko Surabaya, 2023), exceeding the mandatory allocation of 20% stipulated by national legislation.

Despite the high budget commitment and strong regulatory support, there remains a substantial research gap in understanding the development and effectiveness of these education programs. First, previous studies generally focused on policy input aspects, such as budget allocation and program coverage, without examining changes in education access over an extended period (Perdana, 2020; Rahayu & Santoso, 2019). Second, the spatial dimension of unequal access to education within Surabaya has received limited attention, as recent research has mainly focused on clustering educational conditions across sub-districts rather than examining longitudinal disparities in education-access indicators (Handitia & Sofro, 2024).

Third, the supporting and inhibiting factors that may explain variations in program implementation and education access across sub-districts have not been systematically identified in the Surabaya context, although recent studies indicate that local institutional capacity, infrastructure, governance, and socioeconomic conditions can influence the implementation of education-access policies (Samhaji & Anggara, 2025). In this study, these factors are identified descriptively through thematic analysis of municipal planning, budgeting, program implementation, monitoring, and evaluation documents by conducting data familiarization, coding, theme development, and interpretation (Naeem et al., 2023).

This study aims to: (1) analyze trends in education access in Surabaya during the 2015–2023 period based on the Gross Enrollment Rate (*Angka Partisipasi Kasar* or APK) and School Participation Rate (*Angka Partisipasi Sekolah* or APS), without attributing the observed changes as causal effects of the free-education program; (2) identify spatial disparities in education access among sub-districts; and (3) identify supporting and inhibiting factors affecting program implementation and education access based on thematic document analysis. The findings of this study are expected to contribute theoretically to the literature on education policy implementation and provide practical implications for policymakers at the municipal and provincial levels.

In the Indonesian context, the BOS program has contributed to reducing dropout rates nationally, although its benefits have not been distributed evenly because regions with stronger administrative capacity and better infrastructure tend to obtain greater benefits (Suyanto & Hisyam, 2016). The decentralization of education in Indonesia has also created opportunities for regional innovation, but it has simultaneously produced disparities in the quality and accessibility of educational services across regions (Kristiansen & Pratikno, 2006).

Specifically, in Surabaya, the free-education program was found to improve the APK at the elementary and junior high school levels, although the study only included data up to 2018 and did not examine disparities among sub-districts (Perdana, 2020). Non-financial barriers, particularly distance to schools and limited access to program information, were also identified as major obstacles for parents in peripheral areas (Rahayu & Santoso, 2019). This study builds on these findings by extending the observation period to 2023 and incorporating a comparison of education-access indicators across sub-districts that was not addressed in previous studies.

2. Method

2.1 Design and Research Approach

This study uses a quantitative-descriptive design within a single-case study approach (Yin, 2018), which allows an in-depth analysis of changes in education access within their real-

world policy context. The unit of analysis consists of annual education-access indicators at the city and sub-district levels, particularly the Gross Enrollment Rate (Angka Partisipasi Kasar or APK) and School Participation Rate (Angka Partisipasi Sekolah or APS), as well as policy documents related to program implementation.

The case is spatially bound by the administrative area of Surabaya City, temporally bound to the 2015–2023 period, and substantively focused on the implementation of free-education policies and the development of education access. The Surabaya City case was selected based on: (a) the completeness of the available longitudinal data; (b) the relative stability of program implementation, which allows for the observation of long-term trends; and (c) its representativeness as a large city facing socio-economic heterogeneity. This design is intended to describe temporal and spatial patterns and identify contextual factors within Surabaya City; therefore, it does not establish causal program effectiveness or impact, and the findings are not statistically generalized beyond the case studied.

2.2 Data Source

The research data were sourced from: (1) Surabaya City Education Statistics for 2015–2023 published by the Surabaya City Education Office; (2) BPS publications Surabaya Municipality in Figures for 2016–2023; (3) evaluation reports on the free-education program from Bappeko Surabaya; (4) Surabaya City budget data from BPKAD; and (5) scientific publications and policy reports from UNESCO and the World Bank.

The Gross Enrollment Rate (Angka Partisipasi Kasar or APK) was defined as the boundaries. Missing data were not imputed and were excluded unless equivalent values could be verified from another official source.

2.3 Analytical Techniques

The analysis was conducted through: (1) trend analysis of APK and APS during 2015–2023 using tables and time-series graphs; (2) comparative analysis with the national average, East Java average, and relevant SDGs targets; and (3) comparison of indicators across Surabaya sub-districts to identify intra-urban disparities. Annual percentage change was calculated as $Percentage\ Change = \frac{Xt - X_{t-1}}{X_{t-1}} \times 100\%$, while the coefficient of variation was calculated as $CV = \frac{SD}{\bar{X}} \times 100\%$ The results were presented descriptively in tables and graphs without formal spatial modelling.

3. Results and Discussion

3.1 Gross Participation Rate (APK) Trends: Achievements and Trajectories

Longitudinal data for 2015–2023 show an improving trend in APK across all education levels (Chart 1). The SD/MI APK increased from 93.2% to 98.7%, or 5.5 percentage points (5.9%). The SMP/MTs APK rose from 87.6% to 96.3%, or 8.7 percentage points (9.9%), exceeding the national and East Java averages in 2023. Meanwhile, the SMA/SMK/MA APK increased descriptively from 72.4% to 84.1%, or 11.7 percentage points (16.2%), although it remained below the SDG 4 target. The data were consistently sourced from the Surabaya City Education Office and BPS. ratio of all students enrolled at a particular education level to the population of the corresponding official age group, while the School Participation Rate (Angka Partisipasi Sekolah or APS) referred to the proportion of school-age residents attending school.

The units of observation were city-year and sub-district-year for the 2015–2023 period. City- and sub-district-level data were extracted from official publications and administrative records, then compiled in a structured spreadsheet with details of the source, year, table, page, education level, and geographical unit. Data consistency was checked across years based on indicator definitions, age groups, measurement units, and administrative

Table 1. Surabaya City Elementary / MI APK Trends 2015–2023 (Source: Surabaya City Education Office, 2023)

Year	Trending APK (%)	MOT (%)
2015 SD	93.2%	93.2%
2016 SD	94.1%	94.1%
2017 SD	95.3%	95.3%
2018 SD	96.2%	96.2%
2019 SD	97%	97%
2020 SD	97.4%	97.4%
2021 SD	97.8%	97.8%
2022 SD	98.3%	98.3%
2023 SD	98.7%	98.7%

The pattern of APK improvement was not linear, with the highest acceleration occurring during 2016–2019. This period coincided with stronger data-based monitoring mechanisms and the expansion of program coverage to private schools through cross-subsidy schemes. However, because these relationships were not tested empirically, they should be interpreted as possible explanations that require further verification. The COVID-19 pandemic during 2020–2021 slowed the improvement in SD/MI APKs and slightly reduced SMA/SMK/MA APKs in 2020, indicating potential vulnerability to external shocks. Surabaya's relative resilience may also be associated with its digital infrastructure and tablet/laptop support programs, although this interpretation requires further documentary and empirical analysis (Nurmelisa et al., 2025).

Table 2. Comparison of Surabaya Junior High School/MTs APK, National, East Java, and SDG Targets (2023) (Source: BPS & UNESCO, processed by the author)

Indicator	Value (%)	%
Surabaya City	96%	96%
National Average	92%	92%
Average East Java	89%	89%
Target SDG 4 (2030)	100%	100%

Table 2 shows Surabaya's significant comparative advantage: Surabaya's SMP/MTs APK is 4.2 points above the national average and 6.9 points above the provincial average. This advantage does not happen automatically, but is the result of a combination of consistent fiscal commitments, sustainably developed implementation capacity, and supporting programs such as free school buses, free uniforms, and merit scholarships.

3.2 Reducing School Dropout Rates (APS): The Real Impact of Eliminating Cost Barriers

One tangible outcome associated with the free-education program is reflected in the School Participation Rate (*Angka Partisipasi Sekolah* or APS), rather than the dropout rate. APS is calculated as the number of residents within a specified age group who are attending school divided by the total population in the same age group, multiplied by 100%. Table 1 presents APS data by age group during the 2015–2023 period, sourced from BPS and the Surabaya City Education Office.

Table 3. School Dropout Rate (APS) per Education Level, Surabaya City 2015–2023

Year	APS SD/MI (%)	APS SMP/MTs (%)	APS SMA/SMK (%)
2015	1,2	2,8	4,6
2016	1,0	2,4	4,1
2017	0,9	2,1	3,7
2018	0,7	1,8	3,2

Year	APS SD/MI (%)	APS SMP/MTs (%)	APS SMA/SMK (%)
2019	0,6	1,5	2,8
2020	0,6	1,6	3,0
2021	0,5	1,3	2,6
2022	0,4	0,9	2,1
2023	0,3	0,6	1,7

(Source: Surabaya City Education Office, 2023)

The data in Table 3 reveals a consistent decline in APS across all levels. The APS of junior high schools/MTs—the level most vulnerable to dropping out of school due to economic factors—decreased from 2.8% (2015) to 0.6% (2023), or a decrease of 78.6%. This far exceeds the national average decline of 41% in the same period. One interesting anomaly is the increase in high school APS in 2020 (from 2.8% to 3.0%), which can be explained by two factors: first, the economic pressure of households due to the pandemic encouraged some students to work to help their families; Second, the difficulty of adapting to online learning is more difficult for students from underprivileged families.

A qualitative study conducted during the same period found that eliminating education fees was a major factor influencing families' decisions not to withdraw their children from school when facing economic difficulties (Wardhani, 2021). This finding is consistent with the theoretical argument of the capability approach, which suggests that financial barriers constrain individuals' educational opportunities, while their removal can expand access to broader educational capabilities (Sen, 2000).

3.3 Spatial Disparities: Critical Findings That Need Attention

Although aggregate trends show significant improvements, spatial analysis based on sub-district data reveals persistent gaps and should be a policy concern. Figure 3 visualizes the distribution of SMP/MTs APK based on sub-district groups in five Surabaya areas.

Table 4. Sub-district Distribution Based on Junior High School / MTs APK Level per Surabaya Region (2023) (Source: Surabaya City Education Office, processed by the author)

Category	Proposing yourself Visual	%
Central Surabaya (APK ≥ 98%)	32%	32%
North Surabaya (APK 94–97%)	22%	22%
South Surabaya (APK 95–98%)	21%	21%
East Surabaya (APK 89–93%)	14%	14%
West Surabaya (APK 85–90%)	11%	11%

Graph 4 shows that sub-districts in Central Surabaya consistently achieved APK values above 98%, while several sub-districts in West and East Surabaya remained at approximately 85–90%. Based on descriptive data from the Surabaya City Education Office and the Bappeko Surabaya survey, three factors may be associated with this disparity. First, school infrastructure density, measured by the ratio of junior high schools to students at the sub-district level, averaged 1:2.400 in central areas and 1:4,100 in peripheral areas. Second, household socio-economic conditions may affect school participation because opportunity costs remain relevant for children from low-income families. Third, differences in program information and awareness may also contribute, as the Bappeko survey (2022) reported that 34% of parents in peripheral areas were unaware of the full coverage of the free-education program. Because these factors were not tested statistically, they should be interpreted as descriptive hypotheses rather than causal explanations.

The findings of this spatial disparity strengthen and expand the argument of about the unequal distribution of benefits in subsidized-based education programs (Suyanto & Hisyam, 2016). In the intra-urban context, this inequality shows that a universal free education policy (flat policy) needs to be complemented by targeted interventions that take into account the heterogeneity of intra-urban conditions.

3.4 Budget Allocation and Its Relationship to Program Outcomes

The consistency of program achievements is inseparable from the fiscal

commitment of the Surabaya City Government. Table 5 presents the allocation of the education budget and its correlation with outcome indicators.

Table 5. Education Budget Allocation and Outcome Indicators for the City of Surabaya, 2015–2023

Year	Budget Pend. (Rp Billion)	% of the APBD	APK SMP (%)	APS SMP (%)
2015	1.847	24,8	87,6	2,8
2017	2.134	25,3	91,2	2,1
2019	2.562	26,1	93,8	1,5
2021	2.748	25,8	95,1	1,3
2023	3.214	27,2	96,3	0,6

(Source: BPKAD Surabaya & Education Office, processed by the author)

The data in Table 5 show a descriptive pattern in which increased education budget allocation coincided with improved educational outcomes. The education budget increased nominally by 74% from IDR 1.847 trillion in 2015 to IDR 3.214 trillion in 2023, while its share of the APBD rose from 24.8% to 27.2%. However, because no correlation coefficient or statistical significance test was conducted, this pattern cannot be interpreted as a statistically proven or causal relationship. The introduction of e-procurement and performance-based auditing systems in 2017 may also have supported expenditure efficiency, although this interpretation requires further verification through budget realization and cost-efficiency analysis.

3.5 Success Mediating Factors: A Synergistic Policy Ecosystem

This study indicates that the implementation of Surabaya's free-education program may have been supported by a synergistic policy ecosystem. Based on descriptive document analysis, at least four key supporting factors were identified: First, the integration of the program with other social services. Surabaya's Regional Social Security Program (Jalin Matra) ensures that students from poor families not only receive free education, but also access to nutritious food through the school's healthy canteen program, routine health checks, and psychosocial assistance. This holistic approach overcomes non-financial barriers that cost subsidies alone cannot solve.

Second, the use of technology for monitoring and accountability. The education management information system (DAPODIK) integrated with the city's social data system allows the identification of students at risk of dropping out of school early. Data from 2019–2023 show that this early warning system successfully prevented dropouts in more than 12,000 students through timely intervention by BK teachers and social workers.

Third, private sector and community involvement. Educational CSR programs from companies in Surabaya are coordinated through the Surabaya Education Forum (FPS), resulting in contributions in the form of scholarships, facilities, and teacher training worth an average of IDR 87 billion per year (2019–2023). Community involvement through the School Committee also increases a sense of ownership of the program and reduces the likelihood of moral hazard.

Fourth, leadership stability and long-term vision. The consistency of education policy orientation across the period of city leadership (2010–2023) creates institutional memory and program sustainability that is not interrupted by the change of regional heads, in contrast to the pattern observed in many other districts/cities in Indonesia (Kristiansen & Pratikno, 2006).

4. Conclusion

This study shows that education-access indicators in Surabaya generally improved during the implementation of the free-education program from 2015 to 2023. The SMP/MTs APK increased by 8.7 percentage points, while the junior high school dropout rate decreased by 78.6%, and Surabaya consistently exceeded the national and East Java averages for the observed indicators. These findings indicate that improvements in education access were associated with the implementation of free-education policies, fiscal commitment, and a supportive policy ecosystem. However, other social, economic, and institutional factors may also have contributed to these changes.

Therefore, the absence of pre-program data, a comparison group, and a counterfactual limits the causal attribution of these improvements solely to the free-education program. However, a critical finding of this study is the persistence of intra-urban spatial disparities which indicates that universal policies are necessary but not sufficient. Suburban districts—especially West and East Surabaya—are still significantly behind, and this gap will not be addressed by simply increasing budgets or expanding the scope of programs without targeted interventions based on spatial data.

The most pressing policy implications are: first, the reformulation of programs with explicit spatial components—greater budget allocation and more intensive interventions in the districts with the lowest APKs; second, strengthening assistance programs for families in suburban areas to overcome non-financial barriers such as opportunity costs and limited information; Third, the institutionalization of data-based early warning systems that have proven effective into a permanent regulatory framework. From an academic perspective, this study contributes to the education policy implementation literature in developing countries by demonstrating that the success of education subsidy programs depends heavily on institutional capacity, cross-program synergy, and consistent political will—not just budget size. Further research using the difference-in-differences or quasi-experimental design method will strengthen the identification of the causal impact of this program.

References

Badan Perencanaan Pembangunan Kota (Bappeko) Surabaya. (2022). Evaluasi Program Pendidikan Kota Surabaya 2019–2022. Pemerintah Kota Surabaya.

Badan Perencanaan Pembangunan Kota (Bappeko) Surabaya. (2023). Laporan Kinerja Pembangunan Daerah Kota Surabaya 2023. Pemerintah Kota Surabaya.

Badan Pusat Statistik (BPS). (2023). Kota Surabaya dalam Angka 2023. BPS Jawa Timur.

Calista, W. D., & Widodo, H. (2019). Pengawasan pelaksanaan Peraturan Daerah Nomor 16 Tahun 2012 tentang penyelenggaraan pendidikan berkaitan dengan pungutan dalam lingkungan sekolah di Kota Surabaya. *Novum: Jurnal Hukum, 6*(4), 98–108. https://doi.org/10.2674/novum.v6i4.30887

Chaniago, N. S., Syahputra, R., Nasution, M. A., Sanawi, F., Siahaan, A., & Nasution, I. (2023). Analysis of legal basis in education: Study of law, policy and deviance in education. *Al-Ishlah: Jurnal Pendidikan, 15*(2), 2103–2113. https://doi.org/10.35445/alishlah.v15i2.2673

Handitia, N. R., & Sofro, A. (2024). Analisis klaster kecamatan di Kota Surabaya berdasarkan data pendidikan tahun 2022–2023. *Jurnal Gaussian, 13*(2), 351–362. https://doi.org/10.14710/j.gauss.13.2.351-362

Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi (Kemendikbud). (2021). Statistik Pendidikan Indonesia 2021. Pusat Data dan Teknologi Informasi Kemendikbud.

Kristiansen, S., & Pratikno. (2006). Decentralising education in Indonesia. International Journal of Educational Development, 26(5), 513–531. https://doi.org/10.1016/j.ijedudev.2005.12.003

Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods, 22*, 1–18. https://doi.org/10.1177/16094069231205789.

Nurmelisa, Nurbaya, S., & Nasrullah. (2025). Enhancing learning quality: Analysis of HR management and digital media utilization at TKIT Anak Sholeh Al Mubarak Pallangga Gowa. *Income Journal of Economics Development, 5*(1), 34–42.

https://doi.org/10.54065/ijed.5.1.2025.358

Perdana, A. A. (2020). Analisis kebijakan pendidikan gratis di Kota Surabaya: Perspektif implementasi dan dampak. Jurnal Kebijakan dan Administrasi Publik, 24(1), 55–72. https://doi.org/10.22146/jkap.50882

Peraturan Daerah Kota Surabaya Nomor 16 Tahun 2012 tentang Penyelenggaraan Pendidikan. (2012). Lembaran Daerah Kota Surabaya Tahun 2012 Nomor 16.

Rahayu, D. S., & Santoso, B. (2019). Persepsi masyarakat terhadap program pendidikan gratis di Kota Surabaya: Antara harapan dan realitas. Jurnal Sosial dan Humaniora, 9(2), 112–128. https://doi.org/10.17977/jsh.v9i2.12774

Samhaji, S., & Anggara, F. D. (2025). Analisis implementasi kebijakan pemerataan akses pendidikan pada daerah tertinggal Indonesia. *Journal of Governance and Policy Innovation, 5*(2), 99–112. https://doi.org/10.51577/jgpi.v5i2.839.

Sen, A. (2000). Development as freedom. Anchor Books.

Suyanto, B., & Hisyam, M. (2016). The impact of the School Operational Assistance (BOS) program on dropout rates in Indonesian schools. Asian Social Science, 12(8), 91–102. https://doi.org/10.5539/ass.v12n8p91

UNESCO. (2020). Global education monitoring report 2020: Inclusion and education—All means all. UNESCO Publishing.

Wardhani, R. K. (2021). Faktor-faktor yang mempengaruhi angka putus sekolah di kota metropolitan: Studi kasus Surabaya 2018–2020. Jurnal Pendidikan dan Kebudayaan, 6(1), 44–58. https://doi.org/10.24832/jpnk.v6i1.1802

World Bank. (2020). Indonesia education sector overview: Toward a strong, competitive, and equitable education system. World Bank Group.

Yin, R. K. (2018). Case study research and applications: Design and methods (6th ed.). SAGE Publications.