

Public–Private School Accountability Gaps as Warning Signals for Local Government Oversight

Andi Rahmat Nizar Hidayat^{1*}, Aiman Sabar Rezeky²

¹² Public Administration, Universitas Negeri Makassar, Makassar, Indonesia

*Corresponding author e-mail: andirahmatnizarhidayat@unm.ac.id

Abstract

Gaps between public and private schools are rarely examined as signals of how far local government oversight reaches. This study compared budget accountability, facility provision, and teacher qualification indicators between public and private primary and junior secondary schools in Gowa Regency, Indonesia. A quantitative descriptive-comparative design was applied to the aggregate indicators of the 2025 Gowa Education Report, supplemented by distribution data covering 562 schools across eighteen sub-districts. The analysis computed public–private differences for every indicator, converted the widest differences into ratios, and compared two consecutive report editions. Public schools recorded higher values on every budget accountability indicator. The widest ratios appeared in spending on teacher quality improvement at the primary level, at 12.78 against 5.11, and in the online spending of school operational funds through the procurement platform at the junior secondary level, at 18.79 against 8.88. Private schools recorded a higher composite facility index but a wider between-school facility gap, and their share of spending on teacher quality at the primary level declined between the two editions. Certified teaching staff constituted 7.83 percent in private primary schools against 47.60 percent in public ones. These are observed group-level disparities rather than direct measures of supervision, and they may also reflect financing structures, foundation capacity, staffing arrangements, school size, and student composition. Their consistency on indicators tied to government instruments nevertheless makes them warning signals, to be verified against administrative records rather than treated as established findings, that governance may reach schools unevenly across provider types, and it positions routinely published Education Report data as a low-cost screening tool for deciding where supervision and support deserve direct examination.

Keywords: budget accountability; education governance; governance proxy indicators; public and private schools; school facilities

Received: 9 September 2026

Accepted: 21 September 2026

Published: 26 September 2026

1. INTRODUCTION

Education spending absorbs the largest share of local government budgets in Indonesia, yet the relationship between the size of an allocation and the quality of service received by students is far from linear. Studies across developing countries show that additional spending improves learning outcomes only where governance is adequate (Farayibi & Folarin, 2021; Sahnoun & Abdennadher, 2022), and the quality of local governance determines how education resources respond to the real needs of schools (Konte, 2021). Subnational analysis in India reinforces the point: the efficiency of public expenditure is determined by institutional quality rather than by the volume of funds disbursed (Mohanty & Bhanumurthy, 2021). The central question in education financing accordingly shifts, from how much is allocated toward how far the allocation can be accounted for. Fiscal commitment that fails to be translated into functioning accountability mechanisms ultimately leaves nothing behind but unmet targets (Bennell, 2024).

Decentralisation places district and municipal governments as the party principally responsible for basic education services. Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional grants equal standing to schools organised by the government and by the community, while Peraturan Pemerintah Republik Indonesia Nomor 48 Tahun 2008 Tentang Pendanaan Pendidikan regulates the sources, the allocation, and the accountability of funds for both. The largest instrument of operational financing is channelled through School Operational Assistance funds, whose

management must pass through the ministry's application system (Peraturan Menteri Pendidikan Dasar Dan Menengah Republik Indonesia Nomor 8 Tahun 2026 Tentang Petunjuk Teknis Pengelolaan Dana Bantuan Operasional Satuan Pendidikan, 2026). That obligation, in force throughout the period from which the data analysed here are drawn, turns the digital trail of reporting into the most readily verifiable evidence of compliance available to any oversight forum. The guideline is cited in the edition currently in force, and it is invoked for the continuity of that reporting obligation across successive editions rather than for any provision introduced after the observation period, since the requirement to plan, spend, and report operational funds through the same ministry applications applied to schools of both provider statuses under the guidelines governing the 2024 and 2025 reporting years. Elsewhere, the design of fiscal transfers and community participation jointly determine the quality of service that actually reaches schools (Rangkuti et al., 2024), while reform of authority between levels of government alters the evenness of basic education provision (Zhang et al., 2023). Transfer schemes unmatched by a clear accountability structure may instead weaken the incentive to improve among recipients (Ding et al., 2020).

The dual organisation of schooling presents a problem more complicated than a mere difference of ownership. Public schools sit inside the administrative chain of command of the local government and follow a uniform planning and reporting cycle, whereas private schools operate with independent financing of widely varying scale, internal governance set by their foundations, and considerably looser supervision. Multi-stakeholder school financing is indeed capable of raising efficiency, but it frequently does so at the cost of equity (Sakamoto, 2022). Dependence on private funds also makes financing data harder to read, because the residual category of other sources conceals the inequity taking place (Hogan & Creagh, 2025). Public-private partnerships that emerge as a way out of budget crises carry a comparable risk (Mitra, 2020). Financing inequity may even persist within a single district, so that oversight at the aggregate level often fails to detect it (Bleiberg et al., 2023).

Gowa Regency offers a case worth examining closely. It accommodates 562 schools across 18 sub-districts, 430 primary and 132 junior secondary. The 2025 Gowa Education Report reveals an uneven pattern once achievement is disaggregated by provider status. The proportion of certified teaching and education personnel in private primary schools reaches only 7.83, while public primary schools stand at 47.60. The school facility index moves in the opposite direction, at 79.64 for private primary schools against 68.27 for public ones. The between-school facility gap within the private group is at the same time wider, at 91.58 against 87.85. A pattern that appears this counter-intuitive demands an explanation that cannot be obtained from district averages alone.

The Education Report is compiled as an instrument for evaluating the education system by both central and local government, and every indicator within it feeds the minimum service standard index of the district concerned (Kementerian Pendidikan Dasar dan Menengah, 2025). That position gives the report a dual function which is rarely recognised. It is diagnostic for individual schools, the use made of it most often, particularly on literacy and numeracy. It is also evaluative for the local government, since several indicators in the resource management and teacher quality dimensions depend on instruments that the education office administers or regulates. Disaggregating achievement by provider status opens a further possibility: the same report can be read as a proxy record of how evenly local government supervision and support reach every school for which it is responsible.

Treating these indicators as a governance proxy requires justification, because public-private differences may equally reflect financing structures, foundation capacity, staffing arrangements, school size, and the socioeconomic composition of students. The proxy reading rests on three considerations. First, the selected indicators are tied to instruments that government controls or regulates: operational funds are spent and reported through ministry platforms, teacher certification depends on government quotas and programmes, and facility data are recorded in the national school database validated with the district education office. Second, private schools receiving operational funds follow the same technical rules, so a persistent gap on these indicators marks an area where government levers exist

but may be applied unevenly. Third, the reading is directional rather than causal: a gap is a warning signal of where supervision and support deserve closer examination, not proof of poor performance, and the alternative explanations are weighed against each finding.

The literature on accountability in education funding has developed along two directions that both leave this question unanswered. The first group examines oversight across jurisdictions, for instance the role of federal oversight in the financing equity of school districts in the United States (Knight et al., 2022) and the effect of state takeover on fiscal equity within districts (Bleiberg et al., 2023). The second group moves inside the school and inspects the capacity of finance committees, governing bodies, and internal procedures (Garcer et al., 2024; King & Mestry, 2023; Sebidi, 2023; Zwane & Mestry, 2025). The Indonesian context has been approached through an internal audit capability model for private secondary schools in Semarang (Raharjo et al., 2024) and through studies of school financial management resting on accountability and transparency (Gusnardi et al., 2021). Cross-regional studies likewise warn that weak system performance is often rooted in governance rather than a shortage of funds (Richards, 2022). The space that remains unfilled lies in a comparative reading of public and private schools at the district level using the same official indicators for both groups.

Accountability in the sense employed here refers to the relationship between an actor and a forum entitled to demand an account, complete with the obligation to explain and the possibility of facing consequences (Bovens et al., 2014). That relationship has a financial and a performance dimension, both legible in budget as well as facility indicators, and public sector accounting supplies the technical instruments through which it operates, namely open recording and reporting (Mardiasmo, 2018). Mapping of the points most vulnerable to leakage in the management of education funds shows that schools far from the reach of bureaucratic supervision carry the greater risk (Hallak & Poisson, 2007). Governing disparities in school infrastructure by numbers is itself no neutral practice but a form of ordering that shapes how the problem is defined (Bartl, 2022), and archival tracing of school finance can expose inequity never stated openly in official policy documents (Cyna, 2023). Measuring the effectiveness of public expenditure requires clarity about the value framework adopted from the outset (Matos et al., 2023).

This study set out to address three objectives in sequence: to compare indicators of budget governance accountability between public and private schools at the primary and junior secondary levels in Gowa Regency, to compare the facility index together with the between-school facility gap in both groups, and to assess how far the resulting pattern can be read as a warning signal of uneven local governance reach once alternative institutional explanations are taken into account. The novelty of the study lies in its treatment of Education Report data, ordinarily read as a portrait of student academic quality, as a proxy for governance accountability with provider status serving as the unit of comparison, while keeping observed disparities analytically separate from their interpretation. It extends public sector accountability research into the funding and facilities of basic education at the local level and supplies education offices with a low-cost screening tool for deciding where support across the schools under their authority should be examined more closely.

2. METHOD

This study used a quantitative approach with a descriptive-comparative design applied to official secondary data, following the character of the available figures, namely district aggregates already disaggregated by provider status. Comparison across categories based on government data demands clarity about the unit of analysis from the outset, particularly where data availability constrains the researcher (Önder & Ayhan, 2022).

The research site covers the whole of Gowa Regency, South Sulawesi Province. The principal data source is the 2025 Gowa Education Report, updated on 17 March 2025 and containing 124 indicators for each level (Kementerian Pendidikan Dasar dan Menengah, 2025). It compiles the 2024 National Assessment, the national basic education database, the continuing professional development system,

and the School Resource database aggregating transactions from the school budget planning and procurement applications. Each indicator appears in three rows of values, namely All, Public, and Private, yielding 372 rows of observation at each level. Supporting data on school distribution and connectivity by sub-district come from the 2026 database of the Gowa Regency Education Office.

The unit of analysis is the provider status category at each level, not the individual school. This matters because the available figures are already aggregate values, so variation between schools cannot be observed directly. The population represented covers all general primary and junior secondary schools in Gowa Regency, numbering 430 and 132 respectively. The variables are grouped into three dimensions as presented in Table 1.

Table 1. *Operational definitions of the research indicators*

Dimension	Code	Indicator	Data source
Budget accountability	E.2	Proportion of school resources used for quality improvement	School Resource database (SIPLah, ARKAS)
	E.2.1	Proportion of spending on teacher and education personnel quality	School Resource database (SIPLah, ARKAS)
	E.2.2	Proportion of non-personnel spending on learning quality	School Resource database (SIPLah, ARKAS)
	E.3	Use of ICT for budget management	School Resource database (SIPLah, ARKAS)
	E.3.1	Proportion of operational (BOS) funds spent online through the SIPLah procurement platform	School Resource database (SIPLah, ARKAS)
	E.3.2	School Resource platform use index: timeliness and completeness of reporting	School Resource database (SIPLah, ARKAS)
Facilities and facility gaps	E.7	School Facility Index	National school database
	E.7.1	School Room Facility Index	National school database
	E.7.2	School Sanitation Index	National school database
	D.21	Between-school facility gap (decile 10 against decile 1)	National school database
	D.21.1	Between-school room facility gap	National school database
	D.21.4	Between-school ICT facility gap	National school database
Teacher governance	C.1	Proportion of certified teaching and education personnel	Allowance information system
	C.3	Training experience of teaching and education personnel	Merdeka Mengajar platform; professional development system

Source: compiled from the 2025 Gowa Education Report (Kementerian Pendidikan Dasar dan Menengah, 2025)

Two indicators were excluded after preliminary inspection, namely the teacher distribution index for the private group and the adequacy of civil servant teacher formations, both recorded as zero because of absent entries. The sub-district internet data were also internally inconsistent, since every school was recorded as having access while some were also counted as sitting at points without signal; connectivity was therefore read only from the latter column.

The validity of the secondary data was safeguarded through three checks: completeness, ensuring that every indicator carried all three status rows at both levels; direction, reading the achievement definition of each row, which confirmed that the D.21 family is labelled by gap size so that a higher value denotes a wider distance between decile 10 and decile 1; and plausibility, tracing extreme, zero, and round values before analysis. Several private-group gap values are round fractions such as 33.33, 50.00, and 55.55, suggesting that the deciles contain few schools and that these values are sensitive to single-school changes. The quality of the underlying school database also warrants caution: the district

validation dashboard for the 2025/2026 even semester reports completeness of 91.75 percent, validity of 79.47 percent, and currency of 73.19 percent, with room data showing the weakest validity, so facility indicators are read with particular care. Data were collected through documentary study of the official files, cross-checking the value, label, and definition of each indicator row.

The analysis then proceeded in four stages. The first placed the 2025 values for public and private schools side by side on each indicator and computed the difference between them as a measure of the observed gap. The second computed the ratio between the two statuses on the indicators showing the widest differences. The third compared the 2025 values with those of the 2024 edition in both groups to read the direction of movement, since two points in time offer evidence unavailable in a single-year snapshot. The fourth interpreted each pattern at three separate levels, namely the observed disparity recorded in the data, the institutional explanations that could plausibly produce it, and the governance signal that remains once those explanations are considered. Only the first level is directly measured; the second and third are interpretive and are labelled as such in the discussion.

Inferential difference testing was deliberately not employed. The available data contain only three rows of values per indicator, so the requirement of between-unit variation demanded by such tests is not satisfied. The choice of a measurement approach is not a neutral technical matter, since different approaches to the same financing equity data can yield different policy conclusions and must be selected explicitly and justified (Knight & Mendoza, 2019). Output-based measurement of equity in resource allocation points the same way, namely reading differences between outcome indicators instead of imposing a statistical model unsupported by the data structure (Omoeva et al., 2021). The analytical framework linking provider status, the three dimensions of indicators, the alternative institutional factors, and the proxy reading of governance reach is presented in Figure 1.

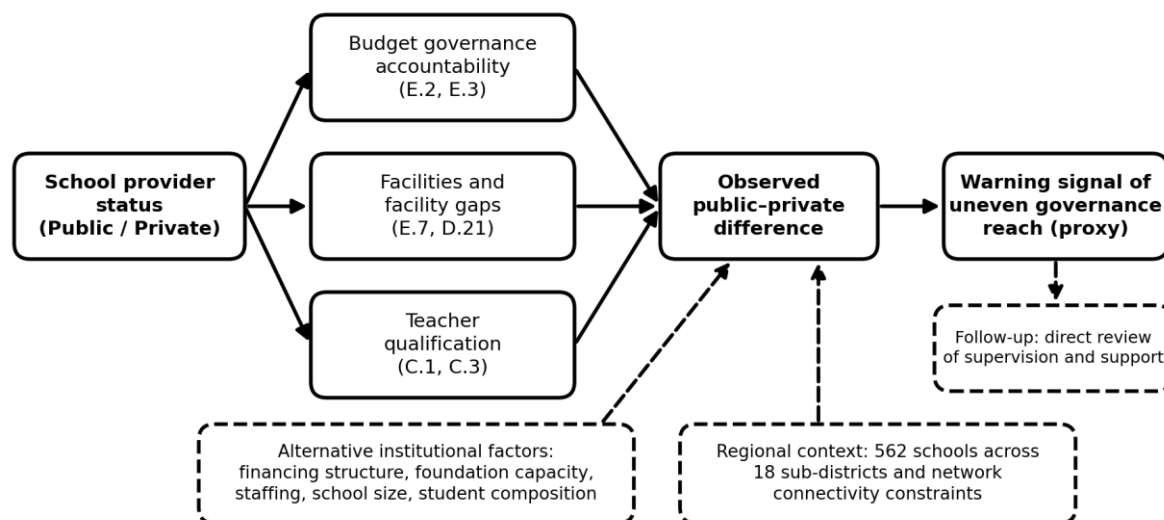


Figure 1. Analytical framework of public-private accountability gaps as governance proxies

Source: developed by the authors (2026)

The limitations of this design need stating openly. District aggregate data preclude generalisation to sub-districts or particular schools, so the findings are group patterns. The design measures differences in aggregated outcomes rather than supervision intensity, support volume, or the functioning of accountability mechanisms, so the difference scores are treated as proxies and warning signals, never as direct evidence of local government performance. A two-edition span shows direction but not trend, and the change in the certification and training instruments between editions demands further caution.

3. RESULTS AND DISCUSSION

Three conventions govern the presentation that follows. Values taken directly from the Education Report, together with the differences and ratios computed from them, are reported as measured findings. Statements about the institutional conditions that could produce those values are labelled as interpretation and are presented as possibilities that the available data are unable to adjudicate. Comparisons between the 2024 and 2025 editions describe the direction of change between two observations and are not read as trends. Where the two levels of statement appear in the same paragraph, the interpretive one is marked by its own qualifying language.

3.1 School Distribution and the Connectivity Context

The structure of basic education provision in Gowa Regency is not geographically even. Somba Opu sub-district accommodates 79 schools, followed by Pallangga with 52 and Bajeng with 50, while Parigi holds only 16 and Bajeng Barat 18. The three largest sub-districts lie along the urban corridor bordering the city of Makassar, whereas the sub-districts with the fewest schools are located in the interior. The full distribution is presented in Table 2.

Table 2. *Distribution of schools and points without signal by sub-district*

No.	Sub-district	Primary	Junior sec.	Total	Points without signal
1	Bajeng	39	11	50	0
2	Parang Loe	17	4	21	2
3	Tinggi Moncong	25	6	31	4
4	Bungaya	16	6	22	0
5	Tompobulu	24	7	31	2
6	Barombong	17	4	21	0
7	Biring Bulu	24	8	32	0
8	Tombolo Pao	26	8	34	3
9	Bontolempangan	13	7	20	2
10	Pattallassang	19	7	26	0
11	Bontonompo Selatan	20	3	23	0
12	Parigi	12	4	16	0
13	Somba Opu	56	23	79	0
14	Pallangga	42	10	52	0
15	Manuju	16	8	24	2
16	Bontomarannu	21	7	28	0
17	Bontonompo	28	6	34	0
18	Bajeng Barat	15	3	18	0
Total		430	132	562	15

Source: compiled from the database of the Gowa Regency Education Office, 2026

Fifteen schools are recorded at points without signal, all in six highland sub-districts, namely Tinggi Moncong, Tombolo Pao, Parang Loe, Tompobulu, Bontolempangan, and Manuju. The number is small, at less than three percent of all schools, but its weight changes once it is connected to the expectation that operational funds are spent and reported online, an obstacle not faced by schools in the urban corridor. Mapping of this kind frequently escapes aggregate reporting, since governance of school

infrastructure by numbers always leaves territory that the indicators cannot read (Bartl, 2022). Those six sub-districts accommodate 161 schools, close to a third of the district total.

3.2 Gaps in Budget Governance Accountability

Public schools record higher values on every budget accountability indicator, without a single exception at either level. Table 3 presents the full comparison, while Figure 2 displays the same pattern in the form of paired bars.

Table 3. Comparison of budget governance accountability indicators, 2025

Level	Code	Indicator	Public	Private	Difference
Primary	E.2	Use of resources for quality improvement	30.86	20.73	+10.13
	E.2.1	Spending on teacher and personnel quality	12.78	5.11	+7.67
	E.2.2	Non-personnel spending on learning quality	18.07	15.61	+2.46
	E.3	Use of ICT for budget management	63.15	59.19	+3.96
	E.3.1	Operational funds spent online (SIPLah)	26.30	23.14	+3.16
	E.3.2	School Resource platform use index	100.00	95.23	+4.77
Junior sec.	E.2	Use of resources for quality improvement	26.39	20.50	+5.89
	E.2.1	Spending on teacher and personnel quality	7.62	5.28	+2.34
	E.2.2	Non-personnel spending on learning quality	18.76	15.21	+3.55
	E.3	Use of ICT for budget management	59.39	53.01	+6.38
	E.3.1	Operational funds spent online (SIPLah)	18.79	8.88	+9.91
	E.3.2	School Resource platform use index	100.00	97.14	+2.86

Source: compiled from the 2025 Gowa Education Report (Kementerian Pendidikan Dasar dan Menengah, 2025)

The proportion of school resources used for quality improvement at the primary level reaches 30.86 in the public group and 20.73 in the private group, a difference of 10.13 points. That difference narrows at the junior secondary level to 5.89 points, though its direction remains the same. The sharpest point emerges instead in the component covering spending on the quality of teaching and education personnel at the primary level: 12.78 in public schools against 5.11 in private schools, a ratio of two and a half to one. In the aggregate, private schools allocate a far smaller share of their recorded resources to improving the capacity of their own teaching staff.

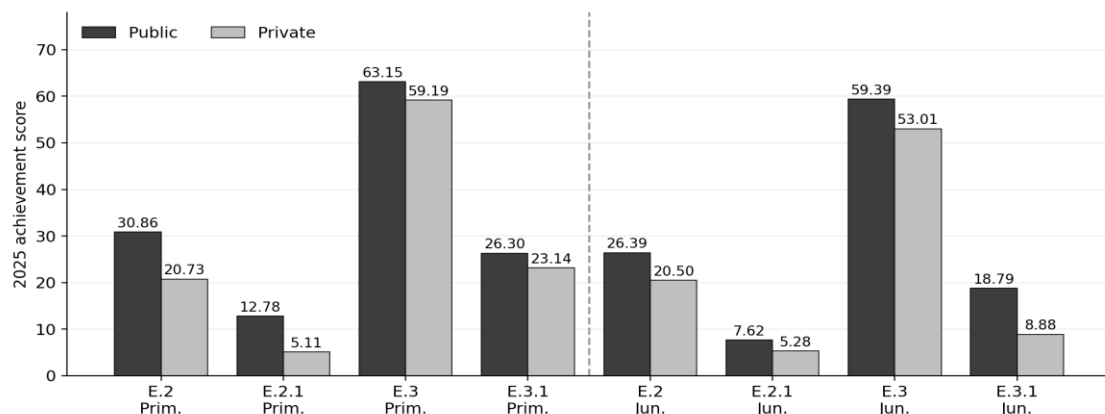


Figure 2. Budget accountability indicators in public and private schools

Source: compiled from the 2025 Gowa Education Report (Kementerian Pendidikan Dasar dan Menengah, 2025)

The component covering non-personnel spending on learning quality moves within a far narrower range, at 18.07 against 15.61 at the primary level and 18.76 against 15.21 at the junior secondary level. The difference in pattern between these two components carries a useful clue. Spending on books, teaching materials, and other learning needs constitutes a relatively routine transaction that any school can execute, whereas spending on improving the quality of teaching staff demands planning, access to training programmes, and partnership with certified providers. The gap is widest on the component that requires institutional capacity, which suggests, although it does not demonstrate, that capacity rather than the mere availability of funds is the binding constraint.

The use of information technology for budget management displays a more revealing pattern. The difference on the aggregate indicator is moderate, at 3.96 points at the primary level and 6.38 points at the junior secondary level, but it widens once attention moves to the share of operational funds spent online through the SIPLah procurement platform at the junior secondary level, at 18.79 against 8.88, or more than two to one. The School Resource platform use index, which measures the timeliness and completeness of reporting, is by contrast almost perfect in both groups: 100 in public schools against 95.23 and 97.14 in private primary and junior secondary schools. The difference therefore lies less in reporting or access to the platform than in the share of spending channelled through the government procurement system.

That finding carries a specific meaning within the framework of accountability as a relationship between actor and forum (Bovens et al., 2014). Spending channelled through ministry platforms is the medium through which school transactions become traceable, since the management of operational funds is required to pass through the ministry application system, an obligation that applied during the observation period and is carried forward in the guideline cited here (Peraturan Menteri Pendidikan Dasar Dan Menengah Republik Indonesia Nomor 8 Tahun 2026 Tentang Petunjuk Teknis Pengelolaan Dana Bantuan Operasional Satuan Pendidikan, 2026). A lower share of spending recorded there means that more of a school's financial activity is less visible to the forum that ought to review it, which is consistent with the vulnerable point mapped by Hallak and Poisson (2007): schools further from direct bureaucratic control face greater risk because corrective mechanisms are weaker, not because their managers' intentions differ. The data, however, show lower traceability of spending, not weaker supervision as such.

A fair reading therefore separates what is observed from what is inferred. Low figures in private schools do not indicate misuse of funds. Several institutional explanations can produce the same pattern: limited administrative capacity, the absence of staff dedicated to the procurement application, a smaller share of government funds in private budgets, small school size, and foundation-level arrangements that handle part of the spending outside school accounts. Some lie outside government control, yet the first two point to accompaniment that the education office can provide. The study of internal audit capability in private schools in Semarang likewise concludes that accountability in private education funding demands institutional capacity building rather than additional rules (Raharjo et al., 2024), and evidence from Cameroon shows that the greatest weakness lies in systems for tracking resources rather than in the volume of funds (Mboutchouang Kountchou, 2025).

3.3 The Facility Paradox: A Higher Index with a Wider Dispersion

The direction of the gap reverses once attention shifts to physical facilities. The school facility index in private primary schools reaches 79.64 against 68.27 in public primary schools, while at the junior secondary level the figures are 73.88 against 69.72. The room facility component contributes the largest difference, at 79.08 in private primary schools against 45.53 in public primary schools. The full detail is presented in Table 4.

Table 4. *Comparison of facility indices and facility gaps, 2025*

Level	Code	Indicator	Public	Private	Difference
Primary	E.7	School Facility Index (↑ better)	68.27	79.64	–11.37

Level	Code	Indicator	Public	Private	Difference
	E.7.1	Room Facility Index (↑ better)	45.53	79.08	-33.55
	E.7.2	Sanitation Index (↑ better)	61.40	69.52	-8.12
	D.21	Between-school facility gap (↑ wider gap)	87.85	91.58	-3.73
	D.21.1	Room facility gap (↑ wider gap)	79.60	83.17	-3.57
	D.21.4	ICT facility gap (↑ wider gap)	67.47	50.00	+17.47
Junior sec.	E.7	School Facility Index (↑ better)	69.72	73.88	-4.16
	E.7.1	Room Facility Index (↑ better)	45.58	56.59	-11.01
	E.7.2	Sanitation Index (↑ better)	55.66	66.58	-10.92
	D.21	Between-school facility gap (↑ wider gap)	88.46	91.81	-3.35
	D.21.1	Room facility gap (↑ wider gap)	76.93	83.63	-6.70
	D.21.4	ICT facility gap (↑ wider gap)	40.00	55.55	-15.55

Source: compiled from the 2025 Gowa Education Report (Kementerian Pendidikan Dasar dan Menengah, 2025)

Note: the difference column is computed as the public value minus the private value. The two families of indicators run in opposite directions, so the sign must be read against the direction marker. On the E.7 indices a negative sign means that private schools are in a better position, whereas on the D.21 gap indicators a negative sign means that private schools are in a worse position.

That advantage loses part of its meaning as soon as the facility gap indicator is read alongside it. The facility gap value measures the distance between schools in the highest decile and those in the lowest, so that a larger figure signifies a more uneven distribution. The private group records 91.58 at the primary level and 91.81 at the junior secondary level, both exceeding the public group at 87.85 and 88.46. Figure 3 places the two indicators side by side so that the contradiction becomes immediately visible.

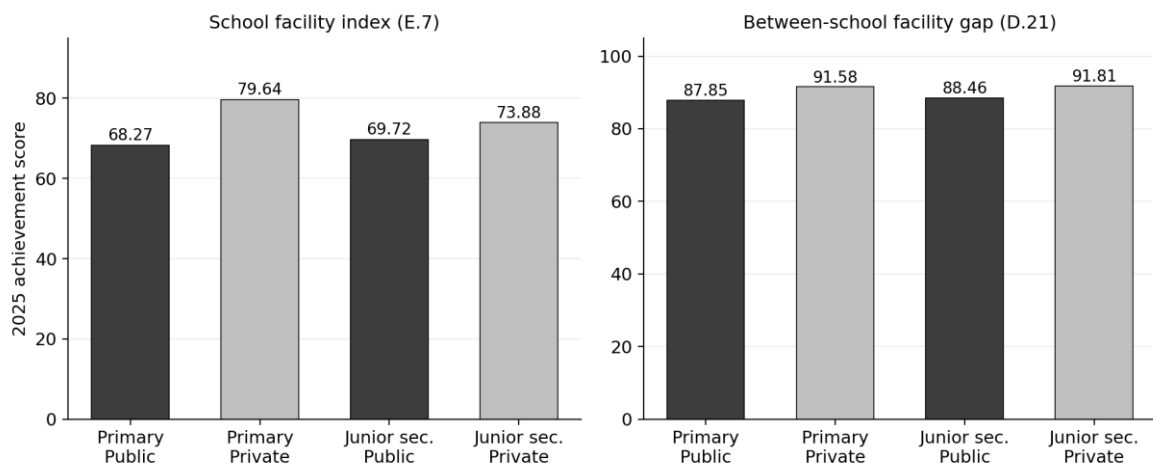


Figure 3. Facility index and facility gap by provider status

Source: compiled from the 2025 Gowa Education Report (Kementerian Pendidikan Dasar dan Menengah, 2025)

A high average combined with a wide dispersion is arithmetically compatible with more than one underlying distribution, and aggregate data cannot identify which of them applies here. An uneven internal structure, in which part of the private group sits well above the rest, is one possibility; a comparable combination can also follow from the small number of schools in each decile of this group, from changes in the number of private schools recorded between editions, or from uneven completeness of facility entries in the national school database. Separating these accounts requires school-level observation, which the present design does not supply, so no claim is advanced here about how facility provision is in fact distributed within the private group. What the data establish is the combination itself,

namely that the private group records both the higher index and the wider gap at each level. Independent financing that depends on the capacity of each foundation and on the socioeconomic composition of the families each school serves is one institutional condition under which such a combination would be unsurprising. Analysis of the financing of public schools with private funds in Punjab found a comparable trade-off between efficiency and equity, in which the entry of non-government funding raises average achievement while widening the distance between schools (Sakamoto, 2022). Criticism of the other income sources category in Australian school funding data adds a further layer: tidy aggregation conceals the inequity operating behind it (Hogan & Creagh, 2025). Segregation of economic capacity between areas has likewise been shown to shape patterns of local public expenditure over long periods (Gallagher, 2021).

Public schools display the reverse profile, namely a lower facility index but a relatively tighter dispersion. That profile is unsurprising for schools following a uniform regional planning and budgeting cycle, because uniformity of procedure is likely to produce uniformity of achievement while simultaneously limiting the possibility of any leap forward. The effectiveness of public spending cannot be judged from a single measure, and the choice of value framework determines the conclusion produced (Matos et al., 2023). A local government reading only the facility index might conclude that private schools require little attention, whereas the gap indicator suggests that such a conclusion would be premature.

One component runs against the general pattern. The ICT facility gap at the primary level is wider in the public group, at 67.47 against 50.00, whereas at the junior secondary level it is wider in the private group, at 55.55 against 40.00. These are also the least stable values in the data, with the private junior secondary figure moving from 33.33 and the public one from 55.55 between editions, so a composite index can conceal component movements that cancel one another out. Sustainable maintenance of school facilities ultimately depends on leadership at the school level rather than on a procurement budget alone (Nhlapo, 2020), and technical maintenance knowledge needs to be institutionalised rather than left to individual schools (Molén et al., 2023).

3.4 Teacher Qualification as the Widest Gap

The most extreme distance in the entire dataset lies instead in the human resource dimension. The proportion of certified teaching and education personnel in public primary schools reaches 47.60, while private primary schools stand at only 7.83, a ratio of more than six to one. The junior secondary level shows a similar pattern with a narrower distance, at 46.20 against 22.19. Training experience among teaching personnel follows the same direction, as shown in Table 5.

Table 5. Comparison of teacher governance indicators, 2025

Level	Code	Indicator	Public	Private	Difference	Ratio
Primary	C.1	Proportion of certified personnel	47.60	7.83	+39.77	6.08
	C.3	Training experience of personnel	67.79	45.60	+22.19	1.49
Junior sec.	C.1	Proportion of certified personnel	46.20	22.19	+24.01	2.08
	C.3	Training experience of personnel	63.39	34.00	+29.39	1.86

Source: compiled from the 2025 Gowa Education Report (Kementerian Pendidikan Dasar dan Menengah, 2025)

Teacher certification is not an internal school affair alone, since formations, quotas, and professional programmes are controlled by government. The figure of 7.83 in private primary schools is therefore not solely a mirror of foundation quality. It may equally reflect staffing arrangements particular to private schools, such as a higher share of foundation-appointed teachers who do not yet meet eligibility requirements, higher staff turnover, or shorter length of service. Gaps in education resources across various contexts have been shown to respond to the quality of local governance (Konte, 2021), which makes the allocation of certification opportunities a legitimate area for scrutiny, although the present data cannot establish how those opportunities were in fact distributed between the two groups.

Private schools with few certified personnel may also find it harder to prepare data-based plans, operate reporting applications, and absorb quality programmes. Combined with their low spending on teacher quality, this is compatible with a loop between limited capacity and limited investment, a possibility that school-level data would be needed to confirm. Financial leadership among education leaders is one of the nodes that matter most in breaking such a loop (Klocko et al., 2022).

3.5 Two-Edition Comparison: Directional Change Rather Than Trend

Comparison of the 2024 and 2025 editions adds evidence unavailable in a single snapshot, although two observations can establish only the direction of change between editions and not a trend, which would require a longer series of editions. Figure 4 presents the movement of the facility gap and the facility index at both levels.

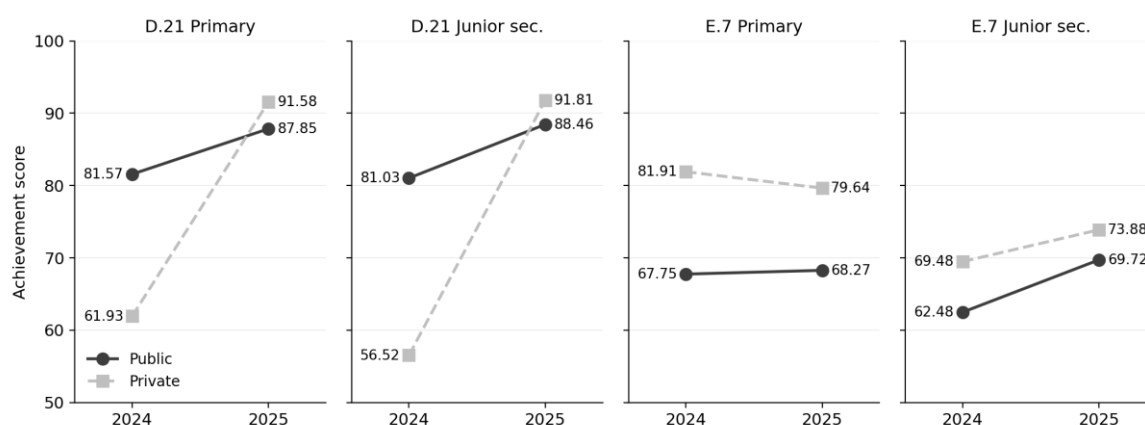


Figure 4. Movement of key indicators in 2024 and 2025

Source: compiled from the 2025 Gowa Education Report (Kementerian Pendidikan Dasar dan Menengah, 2025)

The facility gap in the private group rose most sharply, from 61.93 to 91.58 at the primary level and from 56.52 to 91.81 at the junior secondary level, while the public group moved at a far gentler pace, from 81.57 to 87.85 and from 81.03 to 88.46. A change of that magnitude warrants caution, since changes in data coverage, in the number of schools recorded, or in the composition of a small private group can produce a similar effect. Its direction is consistent with the 2025 snapshot but cannot by itself confirm it.

The facility index moved more subtly. Private primary schools declined from 81.91 to 79.64 while public ones rose slightly from 67.75 to 68.27, and at the junior secondary level the public group rose more, from 62.48 to 69.72, than the private group, from 69.48 to 73.88. The private facility advantage is therefore smaller in the later edition, and the recorded within-group gap is wider; both statements describe the change between two editions and are not evidence of a trend.

The budget indicators, which Figure 4 does not display, show the clearest directional change between the two editions. At the primary level, the share of resources used for quality improvement rose from 29.22 to 30.86 in public schools but fell from 22.72 to 20.73 in private schools, and spending on teacher quality rose from 11.66 to 12.78 in the public group while falling from 6.51 to 5.11 in the private group. At the junior secondary level both groups changed only marginally. Online spending of operational funds rose in every category: at the primary level from 12.63 to 26.30 in the public group and from 9.83 to 23.14 in the private group, leaving the distance almost unchanged, but at the junior secondary level the public increase of 10.48 points far exceeded the private increase of 5.76 points.

The proportion of certified personnel rose in every category without closing the distance. Public primary schools moved from 42.88 to 47.60 and private ones from 5.59 to 7.83, so the absolute difference widened slightly, while at the junior secondary level the public group rose from 37.86 to 46.20 and the private group from 18.44 to 22.19. Training experience moved differently: the private

group fell from 61.86 to 45.60 at the primary level and from 63.70 to 34.00 at the junior secondary level, whereas the public group changed little. The report notes that the instruments for both indicators differed between editions, so these movements indicate direction rather than precise change.

3.6 Reading the Gaps as Warning Signals of Local Governance Reach

Taken together, the three dimensions of findings form a consistent pattern, but its interpretation requires care. What is observed is that public schools, which sit inside the administrative chain of command, record higher values on the budget and teacher certification indicators, while private schools record lower values on precisely those indicators where government systems and programmes are the principal levers. One plausible interpretation is that local governance reaches schools within the chain of command more fully than schools outside it. This interpretation is not directly measured, since the study observes outcomes rather than supervision intensity, and it competes with explanations rooted in financing structures, foundation capacity, staffing arrangements, school size, and student composition. Formal oversight is in any case no guarantee of equity, as the experience of federal oversight of school districts in the United States demonstrates (Knight et al., 2022). Table 6 sets out, for each principal finding, the observed disparity, the alternative explanations that could produce it, and the signal that remains for follow-up verification.

Table 6. *Observed disparities, alternative explanations, and signals for follow-up verification*

Finding	Observed disparity (measured)	Alternative institutional explanations	Signal for follow-up verification (interpreted)
Spending on teacher quality (E.2.1)	Primary: 12.78 vs 5.11, with the private share falling from 6.51; junior sec.: 7.62 vs 5.28	Smaller share of government funds in private budgets; small school size; spending handled at foundation level	Possible weaker accompaniment in planning teacher development; review support programmes
Operational funds spent online (E.3.1)	Primary: 26.30 vs 23.14; junior sec.: 18.79 vs 8.88	Fewer government-funded transactions; no dedicated administrative staff; network constraints in highland areas	Lower traceability of spending through government systems; priority for reporting accompaniment
Facility index and facility gap (E.7, D.21)	Higher index but wider gap in private schools at both levels; private gap rose sharply between editions	Heterogeneous foundation resources; socioeconomic composition of families; changes in data coverage	Composite index may mask uneven provision; monitor the gap alongside the index
Teacher certification (C.1)	Primary: 47.60 vs 7.83; junior sec.: 46.20 vs 22.19	Staffing arrangements, eligibility, length of service, and turnover in private schools	Possible unequal access to certification opportunities; quota allocation data needed to confirm

Source: developed by the authors from Tables 3–5 (2026)

Read as warning signals rather than verdicts, the patterns in Table 6 indicate where institutional design deserves scrutiny. In Gowa Regency, private schools receive public funds and are obliged to report through the same system as public schools, yet the outcomes linked to government instruments are distributed unevenly between the two groups. Whether this reflects a difference in the intensity of professional support cannot be settled with aggregate data alone. Within-district inequity escaping aggregate oversight is a risk already identified in other contexts (Bleiberg et al., 2023), and Education Report data give local government a means to flag it without any additional instrument. Reparative planning of school facilities likewise demands a commitment stated explicitly in policy documents rather than merely uniform treatment of all schools (Rodriguez, 2025).

The implications follow from treating the gaps as a screening device, so that what follows identifies areas for follow-up verification rather than policy deficiencies already established. The education office could first verify, using its own records on supervision visits, training allocations, and certification quotas, whether support has in fact been distributed unevenly. Should that verification show an uneven distribution, accompaniment for the online management of operational funds in private schools would be one candidate response, with particular attention to the six highland sub-districts that contain every

recorded point without signal. Whether an affirmative certification scheme for teachers in private schools is warranted is a question for the same verification to settle, since the present data record the size of the certification gap but not how certification opportunities were allocated between the two groups. Only one suggestion here does not depend on that verification, and it concerns measurement rather than policy: the facility gap indicator can be read routinely alongside the facility index, because the two can move in opposite directions and reading only one of them may produce a mistaken conclusion. Strengthening internal school financial processes, as designed for public schools in South Africa, offers a framework adaptable to the support of private schools receiving public funds (Garcer et al., 2024).

Two limits bear repeating. Every figure is a district aggregate, and private schools with well-ordered governance certainly exist in Gowa Regency, although aggregate figures can show neither how many they are nor what part of the group average they account for. The indicators also sit within the domain of governance and say nothing about learning quality or about whether local government action caused the disparities. What the data do show is that two groups of schools receiving public funds under the same reporting obligation differ systematically on indicators tied to government instruments, as recorded in an official government document. That record is best used as a starting point for examining governance reach, not as its final measure.

4. CONCLUSION

Public schools in Gowa Regency recorded higher values than private schools on every budget governance accountability indicator at both levels. The widest ratios appeared in spending on teacher quality improvement at the primary level and in the online spending of operational funds at the junior secondary level, each exceeding two to one, while the reporting index was almost equal, indicating that the use of the government procurement channel is distributed more unevenly than reporting itself. At the primary level, the private share of spending on teacher quality also declined between editions. Private schools recorded a higher facility index together with a wider between-school facility gap, a combination that the aggregate data record but cannot explain, since identifying the distribution behind it would require school-level observation, and certified personnel showed the widest disparity, at more than six to one in primary schools.

These disparities are observed at the group level; they do not directly measure oversight intensity or show that local government performance caused them, and financing structures, foundation capacity, staffing arrangements, school size, and student composition remain plausible contributors. Their consistency on indicators tied to government instruments nevertheless makes them useful warning and monitoring signals that local governance may reach schools unevenly across provider types. Education offices can use such signals to decide where to examine supervision and support more closely, with reporting accompaniment, access to teacher certification, and joint monitoring of the facility index and facility gap as the first areas for such verification. Further research should combine school-level data, direct measures of supervision and support, and a longer observation window so that the proposed interpretation can be tested rather than inferred.

AI USAGE STATEMENT

During the preparation of this manuscript, the authors used AI as an assistive tool for language editing, restructuring sections of the manuscript in response to reviewer comments, and redrawing the analytical framework figure based on the authors' original specifications. The tool was not used to generate research data, conduct data analysis, interpret results, or produce citations. All content generated or modified with assistance from the tool was critically reviewed and verified by the authors, who retain full responsibility for the accuracy, integrity, and final content of the published article.

REFERENCES

- Bartl, W. (2022). Governing spatial disparities in school infrastructure by numbers: Investments in form, tensions, new compromises? *Education Sciences*, 12(3), 167. <https://doi.org/10.3390/educsci12030167>
- Bennell, P. (2024). Missing the target? Government commitment to education sector funding in sub-Saharan Africa 2000–2023. *International Journal of Educational Development*, 108, 103057. <https://doi.org/10.1016/j.ijedudev.2024.103057>
- Bleiberg, J. F., Lyon, M. A., & Schueler, B. E. (2023). State takeover of school systems and within-district fiscal equity. *Journal of Education Human Resources*, 41(1), 172–204. <https://doi.org/10.3138/jehr-2021-0059>
- Bovens, M., Goodin, R. E., & Schillemans, T. (2014). *The Oxford handbook of public accountability*. Oxford University Press.
- Cyna, E. (2023). Paper trails: Exposing racism in the history of school finance. *History of Education Quarterly*, 63(4), 467–491. <https://doi.org/10.1017/heq.2023.30>
- Ding, Y., Lu, F., & Ye, X. (2020). Intergovernmental transfer under heterogeneous accountabilities: The effects of the 2006 Chinese education finance reform. *Economics of Education Review*, 77, 101985. <https://doi.org/10.1016/j.econedurev.2020.101985>
- Farayibi, A. O., & Folarin, O. (2021). Does government education expenditure affect educational outcomes? New evidence from sub-Saharan African countries. *African Development Review*, 33(3), 546–559. <https://doi.org/10.1111/1467-8268.12588>
- Gallagher, R. M. (2021). Income segregation's impact on local public expenditures: Evidence from municipalities and school districts, 1980–2010. *Regional Science and Urban Economics*, 90, 103710. <https://doi.org/10.1016/j.regsciurbeco.2021.103710>
- Garcer, A., Mestry, R., & Motala, S. (2024). A blueprint for implementing internal financial processes in public schools. *South African Journal of Education*, 44(S1), S1–S11. <https://doi.org/10.15700/saje.v44ns1a2585>
- Gusnardi, Riadi, R. M., & Hendripides. (2021). School financial management based on accountability and transparency. *International Journal of Early Childhood Special Education*, 13(2), 538–550. <https://doi.org/10.9756/INT-JECSE/V13I2.211091>
- Hallak, J., & Poisson, M. (2007). *Corrupt schools, corrupt universities: What can be done?* International Institute for Educational Planning, UNESCO.
- Hogan, A., & Creagh, S. (2025). A philanthropic misnomer: How “other private sources” of income conceals inequity in school funding data. *Australian Educational Researcher*, 52(5), 3585–3610. <https://doi.org/10.1007/s13384-025-00868-8>
- Kementerian Pendidikan Dasar dan Menengah. (2025). *Laporan Rapor Pendidikan Kabupaten Gowa Tahun 2025*. Kementerian Pendidikan Dasar dan Menengah Republik Indonesia.
- King, J., & Mestry, R. (2023). The oversight functions of school governing bodies in the management of budgets. *Perspectives in Education*, 41(4), 177–193. <https://doi.org/10.38140/pie.v41i4.7512>
- Klocko, B. A., Dionne, G., Justis, R. J., Patrick, K., Davidson, J., & Ampaw, F. (2022). Public school superintendent sagacity: A foundation for financial leadership. *Journal of School Administration Research and Development*, 7(1), 1–21. <https://doi.org/10.32674/jsard.v7i1.3364>
- Knight, D. S., Karcher, H., & Hoang, T. (2022). School finance equity through accountability? Exploring the role of federal oversight of school districts under the Every Student Succeeds Act. *Peabody Journal of Education*, 97(4), 458–478. <https://doi.org/10.1080/0161956X.2022.2109916>
- Knight, D. S., & Mendoza, J. (2019). Does the measurement matter? Assessing alternate approaches to measuring state school finance equity for California's Local Control Funding Formula. *AERA Open*, 5(3). <https://doi.org/10.1177/2332858419877424>
- Konte, M. (2021). How do education resources respond to the quality of local governance in Africa? *Review of Development Economics*, 25(3), 1538–1557. <https://doi.org/10.1111/rode.12770>
- Mardiasmo. (2018). *Akuntansi sektor publik*. Penerbit Andi.

- Matos, S., Jorge, S. M., & Moura e Sá, P. (2023). Measuring local public expenditure effectiveness using sustainable development goals. *International Journal of Public Sector Management*, 36(4–5), 440–462. <https://doi.org/10.1108/IJPSM-01-2023-0003>
- Mboutchouang Kountchou, A. (2025). Beyond allocation: Assessing public school efficiency of financial resource tracking and management in Cameroon. *International Review of Public Administration*, 30(4), 381–406. <https://doi.org/10.1080/12294659.2025.2519555>
- Mitra, R. (2020). COVID-19 is killing education budgets: Are educational public-private partnerships an answer? *Journal of Professional Capital and Community*, 5(3–4), 255–264. <https://doi.org/10.1108/JPC-07-2020-0056>
- Mohanty, R. K., & Bhanumurthy, N. R. (2021). Assessing public expenditure efficiency at the subnational level in India: Does governance matter? *Journal of Public Affairs*, 21(2), e2173. <https://doi.org/10.1002/pa.2173>
- Molén, J., Kadefors, A., & Troje, D. (2023). Integrating facilities management knowledge in municipal school building: Swedish case studies. *IOP Conference Series: Earth and Environmental Science*, 1176(1), 012033. <https://doi.org/10.1088/1755-1315/1176/1/012033>
- Nhlapo, V. A. (2020). The leadership role of the principal in fostering sustainable maintenance of school facilities. *South African Journal of Education*, 40(2), 1–9. <https://doi.org/10.15700/saje.v40n2a1790>
- Omoeva, C., Menezes Cunha, N., & Moussa, W. (2021). Measuring equity of education resource allocation: An output-based approach. *International Journal of Educational Development*, 87, 102492. <https://doi.org/10.1016/j.ijedudev.2021.102492>
- Önder, M., & Ayhan, E. (2022). Research methodology in comparative public administration: Significance, applications, trends, and challenges. In *The Palgrave handbook of comparative public administration* (pp. 101–142). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-1208-5_5
- Peraturan Menteri Pendidikan Dasar dan Menengah Republik Indonesia Nomor 8 Tahun 2026 tentang Petunjuk Teknis Pengelolaan Dana Bantuan Operasional Satuan Pendidikan. (2026). Kementerian Pendidikan Dasar dan Menengah.
- Peraturan Pemerintah Republik Indonesia Nomor 48 Tahun 2008 tentang Pendanaan Pendidikan. (2008). Sekretariat Negara.
- Raharjo, T. J., Yulianto, A., Arief, S., & Pendriana, Y. (2024). A conceptual model of Internal Audit Capability Model (IACM) development to improve accountability of education funding management in private high schools in Semarang City. *Edelweiss Applied Science and Technology*, 8(6), 6313–6324. <https://doi.org/10.55214/25768484.v8i6.3376>
- Rangkuti, M. R., Sihombing, M., Kusmanto, H., & Ridho, H. (2024). Fiscal decentralization and community participation in education services in Deli Serdang Regency, Indonesia. *International Journal of Sustainable Development and Planning*, 19(5), 1639–1653. <https://doi.org/10.18280/ijstdp.190502>
- Richards, J. (2022). Why are school systems in South Asia seriously under-performing? *International Journal of Educational Development*, 95, 102672. <https://doi.org/10.1016/j.ijedudev.2022.102672>
- Rodriguez, A. D. (2025). Reparative-advocacy planning to address racialized inequities in public school facilities. *Journal of Race, Ethnicity and the City*, 6(2), 132–157. <https://doi.org/10.1080/26884674.2025.2465561>
- Sahnoun, M., & Abdennadher, C. (2022). Returns to investment in education in the OECD countries: Does governance quality matter? *Journal of the Knowledge Economy*, 13(3), 1819–1842. <https://doi.org/10.1007/s13132-021-00783-0>
- Sakamoto, J. (2022). Financing public schools with private funds: Efficiency–equity trade-off of multi-stakeholder school financing in Punjab, Pakistan. *Education Policy Analysis Archives*, 30, 75. <https://doi.org/10.14507/epaa.30.6828>
- Sebidi, S. D. (2023). Financial management decision-making of school finance committees in public primary schools in Mpumalanga Province, South Africa. *South African Journal of Education*, 43(3), 2268. <https://doi.org/10.15700/saje.v43n3a2268>
- Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional. (2003). Sekretariat Negara.

- Zhang, Y., Pang, Z., Lv, Y., & Tang, H. (2023). Impact of “expanding powers and strengthening counties” reform on basic public education services: Empirical evidence from Sichuan, China. *Heliyon*, 9(1), e12880. <https://doi.org/10.1016/j.heliyon.2023.e12880>
- Zwane, T. T., & Mestry, R. (2025). (Dis)empowering school management teams of non-fee-paying schools to collaborate with school governing bodies to manage school finances effectively. *Perspectives in Education*, 43(4), 152–169. <https://doi.org/10.38140/pie.v43i4.9482>