The Global Learning Crisis and Educational Exclusion

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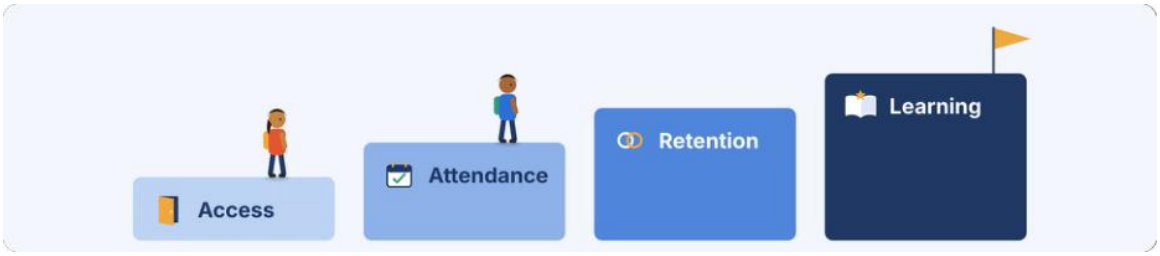
Abstract

Free and compulsory education is widely recognised as a right, yet many children still do not benefit fully from schooling. This study examines the reasons for that gap. It brings together country-level statistics for 91 countries, drawn from World Bank WDI and EdStats indicators for 2015–2019, and a thematic reading of published research and institutional reports. The review considers four connected areas: socioeconomic conditions, family and community circumstances, geography and infrastructure, and education quality and governance. Learning poverty is the main quantitative outcome. Throughout the analysis, a distinction is made between gaining a place in school, attending regularly, remaining enrolled, and developing basic reading skills. The results suggest that these experiences cannot be understood separately from children's living conditions. Household costs and work responsibilities can interrupt attendance; distance and weak facilities can make schooling difficult to sustain; and poor teaching can leave children behind even when they are present. Across the countries studied, GDP per capita showed the strongest bivariate association with learning poverty ($R^2 = 0.71$), followed by the primary pupil–teacher ratio ($R^2 = 0.61$). These findings reflect statistical associations between the indicators and learning poverty, rather than evidence of direct causal effects. Education expenditure as a share of GDP showed a much weaker relationship. These are cross-country associations, not evidence that any one indicator independently causes learning poverty. The dataset also has gaps, including missing learning-poverty estimates for roughly half of low-income countries. Overall, the evidence points to a practical lesson: enrolment is only the beginning. Sustained participation and basic learning require attention to families' circumstances, local access to schools, and what happens inside classrooms.

1. Introduction



Education is a basic right, but the opportunity to learn is still unevenly distributed. Sustainable Development Goal 4 calls for inclusive, quality education. That commitment sits alongside a difficult reality: recent UNESCO estimates place the number of out-of-school children and young people at about 273 million. The persistence of this gap invites a question that is central to this study. Why does access to education remain unequal when many countries have formally committed to free and compulsory schooling?

This problem did not begin with the COVID-19 pandemic. Estimates from earlier years already placed around 258 million children and young people outside primary and secondary schooling. Moreover, school enrolment was never a reliable measure of learning on its own. The World Bank, UNESCO and UNICEF drew attention to the large number of ten-year-olds in low- and middle-income countries who could not understand a short, age-appropriate text. During the pandemic, school closures made existing differences harder to overlook. For children without electricity, internet access or a suitable device, remote lessons were often inaccessible. The figures cited here come from different years and use different definitions, so they describe the scale of the problem rather than a single comparable time series.

A child does not have to be officially out of school to experience educational exclusion. Some children enrol but attend irregularly; others leave before completing a level of education. Still others remain in classrooms without gaining the literacy skills expected for their age. These situations have different immediate causes, even though they often overlap. The discussion therefore focuses on four areas in which barriers commonly arise: household economic conditions, family and community responsibilities, geography and infrastructure, and the quality and management of schooling.

For a family with very little financial security, schooling involves more than the price of tuition. Transport, uniforms, books and the loss of a child's contribution to household work can all matter. Older children may earn wages, while some girls are expected to care for younger siblings, manage domestic tasks or work on farms. Early marriage can add another obstacle to continuing education. These are not identical experiences across countries or communities, and it would be misleading to describe every household in the same way. The journey to school can create further difficulties. A long walk, unsafe route or unreliable transport service may turn regular attendance into a daily challenge. Reaching a school is not the end of the problem either: children need teachers, usable facilities and lessons that help them progress. The disruption caused by COVID-19 brought many of these longstanding disadvantages into sharper focus.

This is why enrolment should not be used as a substitute for educational progress. A school system may become better at registering children without becoming equally effective at helping them attend and

learn. Where children are already dealing with poverty, distance or family responsibilities, shortcomings in teaching can make an existing disadvantage even worse.

The concern of this paper is the gap between access to school and access to learning. Studies commonly report on enrolment, dropout or test scores, but these measures do not always explain how one difficulty leads to another. Hence, this paper analyses the gap in administration and governance which leads to weak policy implementation. Furthermore it explores why policies with similar aims can have different results from one setting to the next. The argument is not that free education is ineffective everywhere. Rather, having a legal entitlement to schooling does not necessarily mean that children experience schooling on equal terms.

Four terms are used carefully throughout: access, attendance, retention and learning. They describe related stages, not interchangeable outcomes. A child may appear in an enrolment register while missing many school days. Another may attend most lessons but still struggle to read. Recognising these differences helps locate the problem more precisely, instead of treating every instance of educational exclusion as a failure to enrol.

The study draws on two kinds of secondary material. For the quantitative component, it compares learning poverty with a set of national indicators for 91 countries. For the qualitative component, it reads the findings of published studies and institutional reports alongside those patterns. The statistical comparisons show where indicators move together. The documentary evidence offers possible explanations, based on what researchers have observed in particular places.

National figures make broad inequalities visible, but they also average over differences within countries. They cannot tell us why an individual child misses school, drops out or struggles with reading. The findings are therefore interpreted with care: the aim is to connect the available evidence while being clear about what that evidence cannot establish.

2. Literature Review



The term 'global learning crisis' refers to more than the number of children who are unable to attend school. It also covers those who spend years in education without developing basic skills. According to the World Bank (2022), learning poverty affected 57% of children in low- and middle-income countries in 2019. UNESCO's more recent estimate of about 273 million children and young people out of school describes a different outcome and population (UNESCO Institute for Statistics/Global Education Monitoring Report, 2026). This review asks why these problems persist in spite of commitments to universal schooling. It examines evidence under four themes: household poverty and work (Bodenhorn, 2006); family and community influences; accessibility and facilities (Marić and Kinoti, 2026; Espinosa Andrade et al., 2024); and the organisation and governance of schools (Aturupane et al., 2022; Nabiddo et al., 2022). Attention is paid to the outcome measured in each study. For instance, an increase in attendance should not automatically be described as an improvement in learning.

2.1 Socioeconomic Determinants

Bodenhorn (2006) studied school attendance and adolescent work in historical Baltimore and New Orleans. Children from poorer households attended school less often, and adolescents in poverty were approximately twice as likely to participate in the labour force as their better-off peers. These patterns suggest that households faced a choice between meeting immediate needs and investing time in education. The setting matters, however. Evidence from nineteenth-century American cities can help explain the possible relationship between poverty, work and schooling, but it cannot be treated as a direct estimate of present-day conditions in developing countries.

The project materials also describe a longitudinal study in which adolescents from less advantaged families, particularly those in paid work, were more likely to leave school. Kumar et al. (2023) report a relationship between lower maternal education and dropout. This adds a family-related dimension to the discussion: economic resources matter, but what parents have experienced through education may matter as well. The precise bibliographic details of this study require checking against the source.

The northern Karnataka case study, attributed in the project materials to Bandopadhyay (2019), followed 35 adolescent girls. Its account shows why costs cannot be understood only as money spent on school. When girls are responsible for younger siblings or agricultural work, attending school also means giving up time that their households depend on. Ainscow (2016) similarly approaches inclusion as the ongoing task of finding and removing barriers to participation and learning. Terzi, Unterhalter and Suissa (2023) consider the connection between child poverty and educational access, while Russell and Thompson (2025) identify risks operating at individual, household, school and societal levels. The studies differ in their focus, but together they encourage an understanding of disadvantage that goes beyond tuition fees.

The studies point to two distinct ways that household hardship may interrupt education. In Bodenhorn's historical data, paid employment competed with attendance. In the Karnataka study, girls' unpaid care and farm work restricted their time for school. Neither account, as presented in the project materials, evaluates a specific policy intervention. They support a narrower conclusion: financial pressure and responsibilities beyond the classroom are linked with difficulty staying in education.

2.2 Family and Community Factors

Families can shape children's educational experiences in ways that income figures alone do not capture. Bodenhorn (2006) considers whether households own their homes and how often they move. Other studies focus on parents' education, marriage and everyday responsibilities. These factors may overlap, but they are not the same measure of family circumstances. Treating them separately makes the evidence easier to interpret.

Bodenhorn (2006) considers wealth, parental work, family structure, housing and residential stability alongside household income. In that historical setting, the stability associated with owning a home or remaining in one neighbourhood appeared to moderate some disadvantages linked to poverty. The family-level evidence cited elsewhere in this review describes higher dropout among married girls and girls whose mothers had less education. It also identifies pressure from household tasks and finances. These studies direct attention to different aspects of home life: one examines economic and residential security, while the others emphasise education, marriage and expectations within the household. The inconsistent year attached to Kumar et al. in the project materials should be verified.

The Karnataka study describes girls taking on sibling care and agricultural tasks while boys faced fewer expectations to perform domestic work. In that setting, the time required to support

the household competed directly with school attendance. The pressure did not arise from income alone; it also reflected how work was divided among family members. A reported association between marriage and leaving school adds to this concern, although the studies reviewed do not establish which event came first. Maternal education may offer support for continued schooling, but it operates alongside income, local school availability and wider social conditions.

Bodenhorn (2006) also notes that neighbourhood circumstances and peers can affect attitudes and opportunities related to schooling. Two households with similar resources may therefore face different pressures in different communities. Caution is necessary when bringing these findings together. Bodenhorn's evidence comes from historical American cities, whereas the more recent research examines specific local populations. The studies suggest plausible links between dropout and wealth, employment, maternal education, household care and marriage; they do not provide a single estimate that applies everywhere.

2.3 Geography and Infrastructure

To examine the geography of educational access, Marić and Kinoti (2026) constructed an index for Kenya using school locations, travel time and population information. Their results indicate that only about one-fifth of the population could reach both a primary and a secondary school within a fifteen- minute walk. They also classified 30% of constituencies as having low or very low accessibility, describing these places as 'education deserts'. This shows why a national count of schools can give an incomplete picture of access.

Espinosa Andrade, Padilla and Carrington (2024) studied a different question. Using Ecuador's 2019 ERCE assessment, they examined how school facilities relate to achievement after accounting for

student, household and school characteristics. The contrast with the Kenyan study is important: one asks whether schools can be reached, while the other asks whether features such as sanitation, water, computer rooms and nursing facilities are associated with learning once children attend.

In Ecuador, some facilities were associated with better achievement, but the pattern differed across rural and urban schools. It would be premature to conclude that every infrastructure investment produces the same results. Equally, the Kenyan findings do not show that distance alone explains every case of dropout. Taken together, the studies favour a local diagnosis of barriers: the missing resource in one community may not be the main problem in another.

Regional reports describe further barriers. Accounts of Pakistan's 2022 floods refer to damaged schools and disruption to learning for about 2.9 million children. UNESCO, UNICEF and ECLAC (2024) estimate that 11.8 million children were out of school in Latin America and the Caribbean in 2022. UNICEF MENA (2025) reports at least 30 million out-of-school children across 12 countries, while UNICEF Nigeria (2024) reports approximately 18.3 million across primary- and secondary-school ages. A 2026 report attributed to the European Commission's Joint Research Centre estimates that around 200,000 African schools lack electricity. Reporting on Gaza in September 2026 described widespread damage to school buildings. These figures cover different places, age groups, years and definitions; they should not be ranked directly. They nevertheless show why responses to inaccessible schools, damaged buildings and unreliable power supplies must be tailored to local conditions. Several numerical claims and source details require checking against the cited reports.

2.4 Education Quality and Governance

Evidence on school governance is not entirely consistent, partly because the studies ask different questions. Aturupane et al. (2022) used a randomised controlled trial to evaluate Sri Lanka's Programme for School Improvement. The programme influenced some management and teaching practices, but the researchers did not find a statistically significant improvement in student learning. In Uganda, Nabiddo, Yawe and Wasswa (2022) found relationships between literacy and numeracy performance and practices such as school inspections and management committee meetings. The Ugandan findings identify associations; the Sri Lankan trial assesses the effect of a specific programme. They should not be interpreted as equivalent evidence.

Learning poverty combines two problems: children who are not in school and children who are in school but cannot read and understand a simple passage by roughly age ten (World Bank, 2022). The World Bank estimated a rate of 57% for low- and middle-income countries in 2019. It also modelled a possible rise to 70% following pandemic-related school closures. That later number is a simulation, not a directly observed post-pandemic rate, and neither percentage is a count of out-of-school children alone.

The RAPID framework places particular emphasis on finding children who have fallen behind, assessing what they know, concentrating on foundational skills, supporting effective teaching and attending to well-being. It offers a useful way to think about the difference between changing school administration and changing children's learning experiences. The Sri Lankan

trial illustrates that better-looking management processes may not translate into higher test scores. This becomes harder to evaluate where assessments are incomplete or where out-of-school children never appear in school-level records. Committees and enrolment registers can indicate activity, but they do not by themselves show whether pupils are learning.

3. Research Gap

Each strand of the literature captures a different part of educational exclusion. Bodenhorn (2006) examines household costs and adolescent work; Marić and Kinoti (2026) focus on whether schools are physically accessible; Espinosa Andrade et al. (2024) consider school facilities and achievement; and Aturupane et al. (2022) examine the results of a governance intervention. The household studies point to pressures outside school, including paid work and, in the Karnataka material, unpaid responsibilities often placed on girls. The infrastructure findings vary by location. Governance evidence also requires care: changing procedures is not the same as demonstrating better learning. Across these studies, enrolment, attendance, retention and achievement are measured in different ways, which limits direct comparison.

An important gap is the lack of evidence following the same children through the whole process of exclusion. A study of school distance cannot necessarily tell us whether a child who struggles to travel will later fall behind in reading. Similarly, a study of learning outcomes may not record earlier interruptions in attendance. The Kenyan, Ecuadorian, Sri Lankan and Ugandan studies therefore help explain particular stages without showing how those stages unfold for individuals over time. Available national data leave further blind spots. Administrative systems such as UDISE+ cannot fully capture children who never enrol; the World Bank (2022) notes missing learning-poverty estimates for many low-income countries; and ASER 2024 reports school attendance that is lower than enrolment. The project materials refer to a proposed synthesis of 42 studies identified through Scopus, Web of Science and ERIC, but do not provide a reproducible search and screening record for that number. Accordingly, the present contribution is best described as an integrated reading of available evidence, rather than a verified systematic review or a new longitudinal study.

4. Methodology



4.1 Research Design

This is a secondary-data mixed-methods study. It combines comparisons of published national indicators with a thematic examination of research articles and institutional reports. The statistical component describes how learning poverty varies alongside selected indicators. The documentary component considers how barriers have been experienced or explained in specific settings. Since the quantitative work consists of observational comparisons between pairs of variables, it does not establish cause and effect.

The material is arranged around four themes: socioeconomic conditions, family and community circumstances, geography and infrastructure, and education quality and governance. These themes are linked conceptually to entering school, attending and remaining in education, developing foundational skills, and possible longer-term consequences (Figure 1). Learning poverty is the outcome analysed quantitatively. Retention and later consequences are discussed from published evidence rather than measured directly in the country-level analysis. No survey, interview or field observation was conducted for this project.

4.2 Nature and Sampling

The quantitative work uses existing country-level data, rather than new measurements collected by the researchers. Its purpose is to describe differences and estimate simple associations. The qualitative evidence provides context for experiences that country averages cannot show directly, including care work, long travel distances, classroom conditions and local school management.

The country is the unit of analysis. The supplied dataset includes 91 countries and observations from the World Bank's World Development Indicators (WDI) and EdStats, taking the most recent available value within 2015–2019 for each indicator. Each comparison uses countries with data for both variables, so the number of observations ranges from 71 to 91. This is a sample determined by available data, not random selection. The source files do not specify an

additional formal selection procedure for the 91 countries. The estimates should therefore not be treated as representative of every country.

Published studies and institutional reports were selected because they addressed the four themes and provided evidence from a range of settings, including India, the United States, Kenya, Ecuador, Sri Lanka, Uganda and Nigeria. Their role is to help interpret the statistical patterns, not to represent all children or schools through a formal qualitative sampling design.

4.3 Data Sources and Variables

No questionnaires, interviews or other primary research instruments were used. Quantitative indicators came from WDI and EdStats, together with the World Bank's The State of Global Learning Poverty: 2022 Update. The documentary evidence draws on the studies cited in the literature review, including Bodenhorn (2006), Ainscow (2016), the northern Karnataka case study, Kumar et al., Marić and Kinoti (2026), Espinosa Andrade et al. (2024), Aturupane et al. (2022), Nabiddo et al. (2022), and relevant UNICEF and regional reports. Contributions from team members were combined by theme. The available project records do not provide reproducible database search strings, screening totals or a formal intercoder agreement procedure, so no such procedure is claimed.

Learning poverty is the primary outcome. It refers to children who are out of school or cannot read and understand a simple text at approximately ten years of age (World Bank, 2022). The primary out-of- school rate is used as a separate indicator of access. Retention and dropout are discussed through published studies but are not measured directly in the cross-country analysis. Accordingly, the statistical findings do not establish relationships with retention.

The socioeconomic measures are GDP per capita (purchasing-power parity, constant 2021 international dollars, displayed on a logarithmic scale) and the percentage of people living below $3.00 per day. Gender parity in gross primary and secondary enrolment is used as a limited quantitative indicator relevant to family and community inequalities; documentary evidence addresses maternal education, work responsibilities, household costs and marriage more directly. Rural population share and electricity access represent aspects of geography and infrastructure. The pupil–teacher ratio and education expenditure as a share of GDP provide partial indicators of educational resources, alongside documentary evidence on management, teaching conditions and disruptions.

4.4 Analysis Procedure

The first step was to describe differences between countries using summary statistics. Each proposed relationship with learning poverty was then examined using a scatterplot and a separate bivariate linear regression. The reported measures are the number of countries (N), correlation coefficient (r) and coefficient of determination (R^2). The comparisons do not account for other variables that may explain the same pattern, particularly national income. Indicators also refer to somewhat different years. The documentary findings were read alongside the numerical results to consider possible explanations, not to turn correlations into causal claims.

4.5 Ethics and Limitations

The study uses only published material and aggregated public data. It did not recruit participants or gather personal information, so no participant consent was required for this secondary analysis. Sources are acknowledged, and differences involving gender, conflict and marginalisation are discussed without assuming that national patterns describe every individual or community.

There are several important limitations. Because the statistical analysis is cross-sectional and bivariate, it cannot establish causation or separate factors that are related to one another, such as income and infrastructure. Reference years also vary: learning-poverty estimates mainly concern 2016 and 2019, pupil–teacher ratios largely refer to 2018, and the UDAYA survey waves cover 2015–16 and 2018–19. Documentary sources span additional periods and age groups. These differences restrict direct comparison.

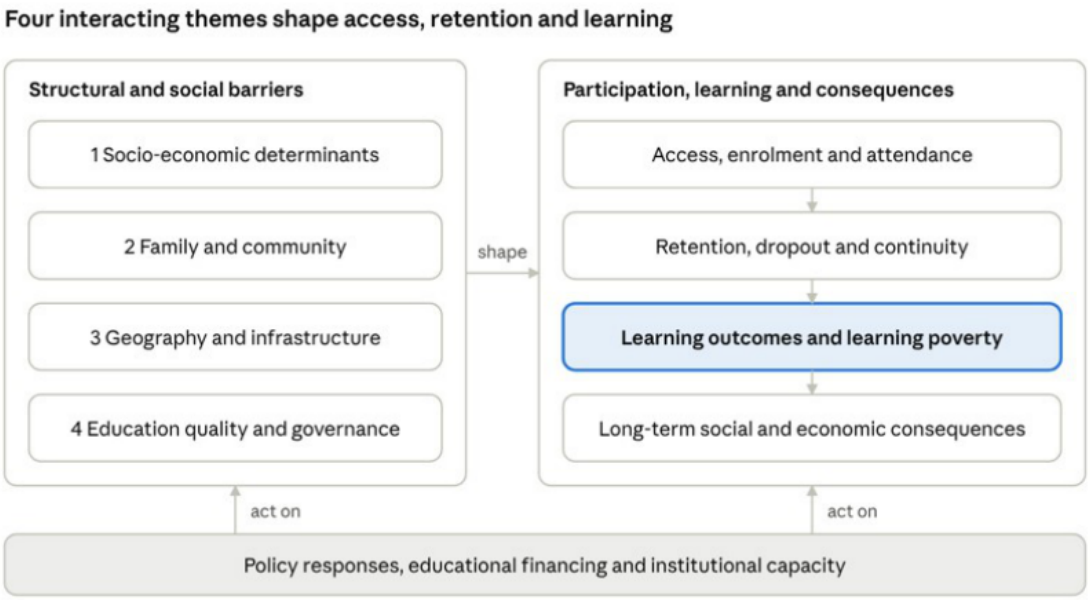
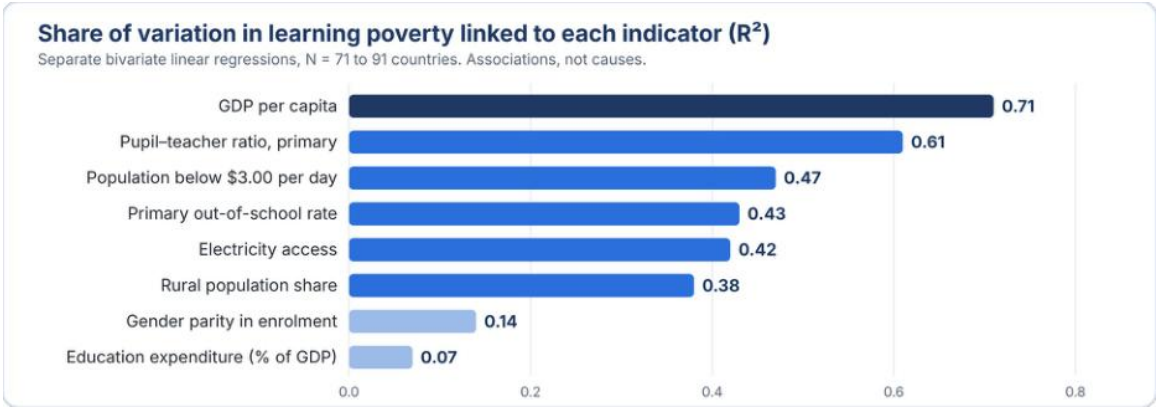


Figure 1. Conceptual framework connecting four themes with access, retention, learning and longer-term

consequences. Source: authors' framework based on the thematic literature review.

5. Data Analysis and Results

The following results describe relationships between learning poverty and the indicators available in the supplied dataset. The figures are useful for comparing broad country patterns, but they do not isolate the effect of any single condition. Sample sizes also differ because some indicators are missing for particular countries.



Summary. R^2 values reported for the separate bivariate regressions in this section (Figures 2–6, S1 and S2, and the

education-expenditure result in Section 5.5). These are associations, not causal effects.

5.1 School Access and Learning Poverty

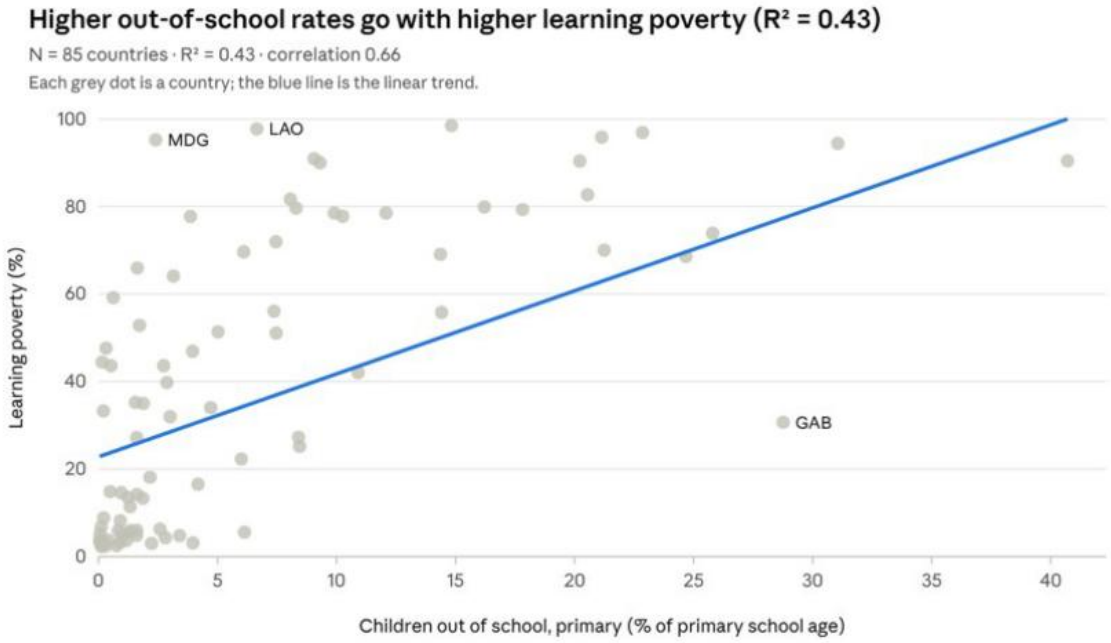


Figure 2. Primary out-of-school rate and learning poverty (N = 85, R^2 = 0.43, r = 0.66). Source: WDI/EdStats, latest

values 2015–2019.

Across the sample, countries with larger shares of primary-age children out of school also tend to have higher learning poverty. Yet school access and learning are not the same. Among 52 countries with out- of-school rates below 5%, 17 still have learning poverty above 30%, including six above 50%. The

findings show why improvements in enrolment cannot be assumed to represent improvements in basic reading.

5.2 National Income and Learning Poverty

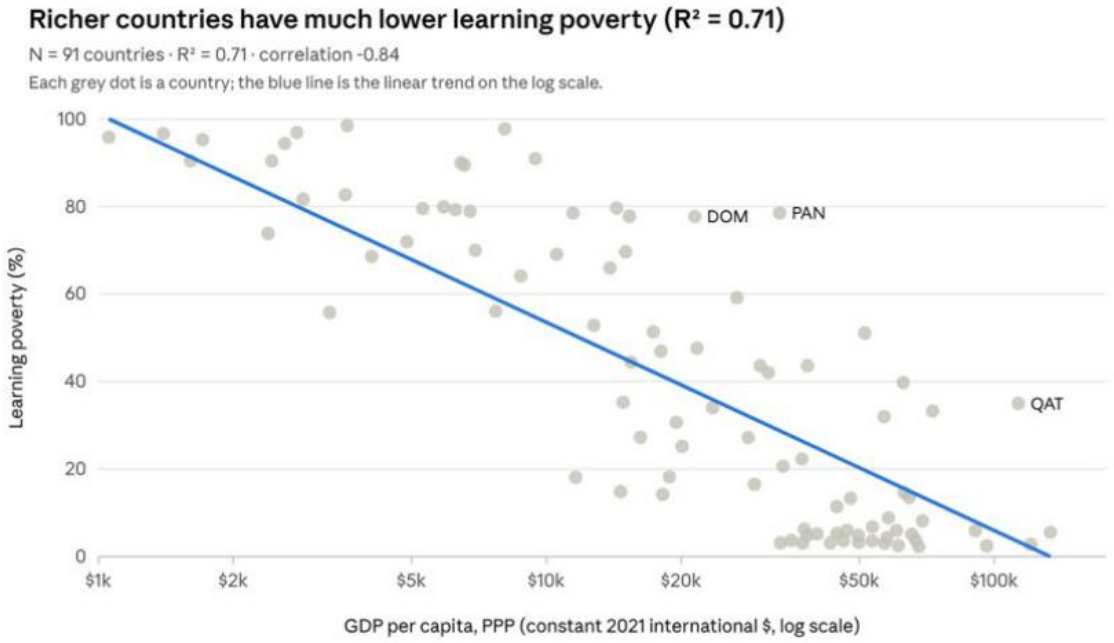


Figure 3. GDP per capita and learning poverty (N = 91, $R^2 = 0.71$, r = −0.84). Source: WDI, 2015–2019.

Learning poverty tends to be lower in countries with higher GDP per capita. This is the strongest reported relationship among the indicators examined ($R^2 = 0.71$). Household studies suggest possible links involving schooling costs and children's work (Bodenhorn, 2006; Ainscow, 2016), but the national- level analysis cannot determine which processes explain the association.

5.3 Gender Parity and Household Barriers

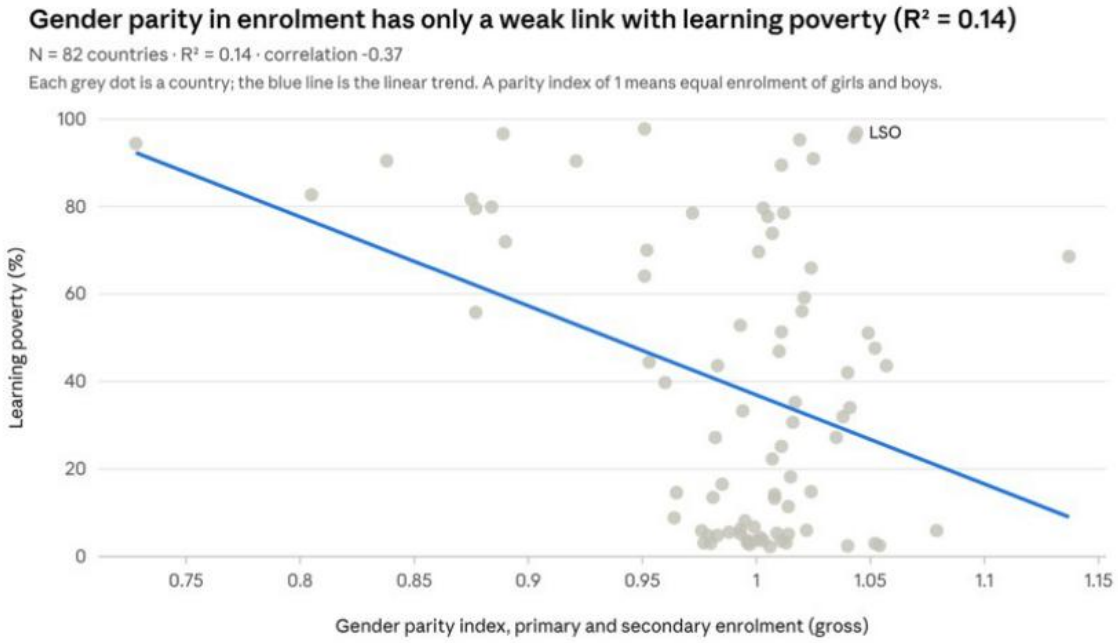


Figure 4. Gender parity in enrolment and learning poverty (N = 82, R^2 = 0.14, r = −0.37). Source: WDI, 2015–2019.

The relationship between the enrolment gender-parity index and learning poverty is relatively weak. The index does not measure maternal education, early marriage or the division of work within households, all of which appear in the documentary evidence. These factors remain possible explanations from the literature, not pathways tested by the regression.

5.4 Electricity and Local Infrastructure

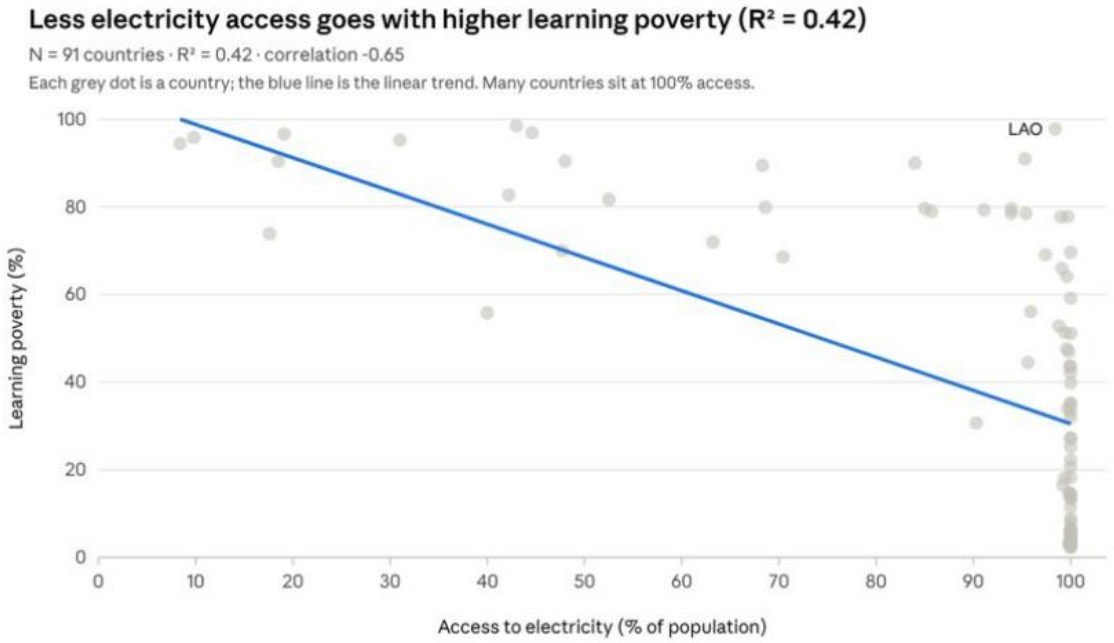


Figure 5. Electricity access and learning poverty (N = 91, $R^2 = 0.42$, $r = -0.65$). Source: WDI, 2015–2019.

Countries with lower electricity access generally report higher learning poverty. However, many countries in the sample have close to universal electricity access, and this measure may also reflect wider differences in national development. The literature identifies additional local concerns, including transport, sanitation and the condition of schools (UNICEF Nigeria, 2024; Espinosa Andrade et al., 2024).

5.5 Pupil–Teacher Ratio and Educational Resources

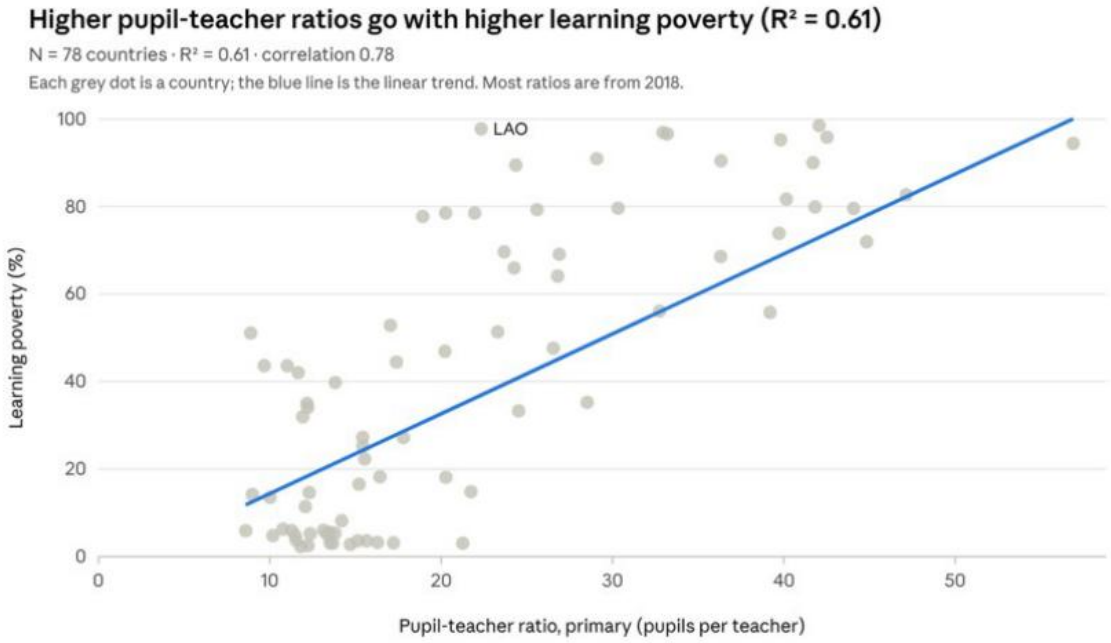


Figure 6. Primary pupil–teacher ratio and learning poverty (N = 78, R^2 = 0.61, r = 0.78). Source: WDI, 2015–2019.

A higher primary pupil–teacher ratio is associated with higher learning poverty (R^2 = 0.61). By contrast, education expenditure as a percentage of GDP has a much weaker reported relationship (R^2 = 0.07; N = 87). Studies from Sri Lanka and Uganda suggest that administration and classroom practice also deserve attention, although these comparisons cannot determine their separate effects (Aturupane et al., 2022; Nabiddo et al., 2022).

5.6 Additional Indicator Comparisons

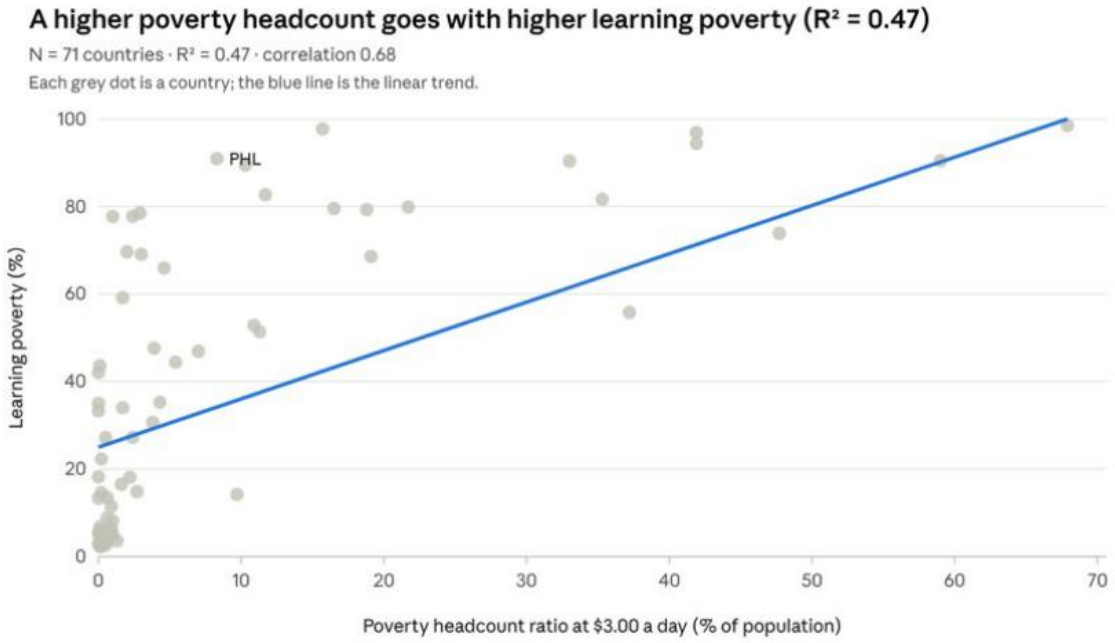


Figure S1. Population below $3.00 per day and learning poverty (N = 71, R^2 = 0.47, r = 0.68). Source: WDI, 2015–

2019.

Countries with larger shares of residents living below $3.00 per day tend to report higher learning poverty. This comparison includes 71 countries; poverty-rate data are unavailable for the other 20 countries in the sample.

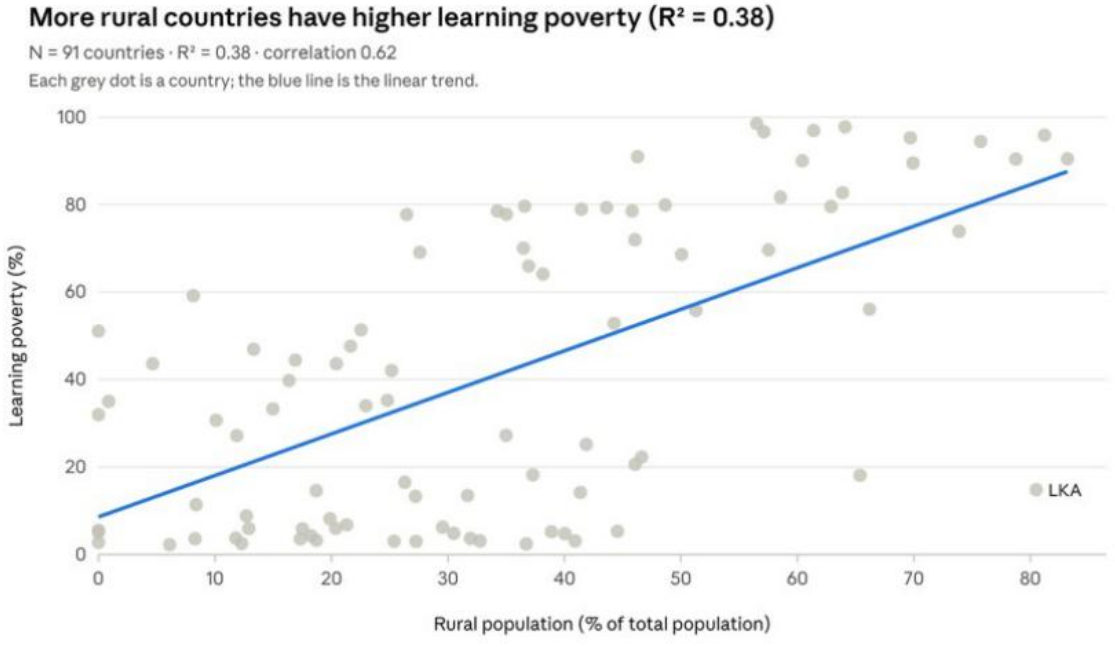


Figure S2. Rural population share and learning poverty (N = 91, R^2 = 0.38, r = 0.62). Source: WDI, 2015–2019.

Learning poverty also tends to be higher where a larger proportion of people live in rural areas. This may partly reflect differences in national income rather than an effect of rural residence itself. The Kenyan study offers a more local perspective by identifying substantial geographical inequalities in access to schools (Marić and Kinoti, 2026).

An exploratory comparison classified countries into two conflict-related groups and found average learning-poverty rates of 51.7% (n = 27) and 37.1% (n = 64). The Welch test gave p = 0.06, which does not meet the conventional 5% significance threshold. More importantly, missing observations for battle- related deaths were treated as evidence of no conflict, making the grouping unreliable. The result is therefore retained only as an example of a data limitation, not as evidence of a dependable difference between conflict and non-conflict settings.

5.7 Interpretation of the Combined Evidence

Looking across the figures and published studies, educational exclusion appears less like one event and more like a sequence of difficulties. A child may first struggle to reach school, then miss lessons, fall behind and eventually leave. Other children remain enrolled but do not acquire basic reading skills. The evidence considered here points to four broad sets of pressures: household resources, family responsibilities, the location and condition of schools, and what schools provide in terms of teaching and management. These pressures can overlap, although the study cannot establish a single causal pathway linking them in every country.

The household literature helps explain why access to a free school may still be difficult to use. A family can face expenses for travel and school materials while also losing time or income when a child attends classes. The northern Karnataka account shows that these costs may be distributed unequally inside households: girls assigned care or agricultural responsibilities may have less time to attend than their

brothers. Geography creates another layer of difficulty. Where schools are distant or hard to reach, attendance may be disrupted before learning begins. Once pupils arrive, limited facilities or ineffective instruction can compound the problem. These are plausible connections drawn from different sources, not a sequence demonstrated through tracking the same children.

The case studies make the broader argument more concrete. In historical Baltimore and New Orleans, Bodenhorn (2006) observed lower attendance and more adolescent work in poorer

households. The Kenyan accessibility study by Marić and Kinoti (2026) found that only about 20% of people could walk to both a primary and a secondary school within fifteen minutes, while 30% of constituencies were in the low-access categories. This draws attention to inequalities that national school totals may hide. Evidence from Ecuador adds a different perspective: Espinosa Andrade, Padilla and Carrington (2024) found associations between selected facilities and achievement, with variation between rural and urban schools. The studies are not measuring the same outcome, but together they suggest that both reaching a school and the learning conditions inside it deserve attention.

The governance findings require a careful reading. Nabiddo, Yawe and Wasswa (2022) report that measures of school governance in Uganda are related to literacy and numeracy outcomes. Aturupane et al. (2022), by contrast, found that a school-improvement programme in Sri Lanka changed some management and teaching practices without producing a statistically significant learning gain. This is not necessarily a contradiction. One study reports associations; the other evaluates a particular intervention. The comparison raises a useful question for policymakers: do administrative changes reach everyday teaching, and can any improvement be seen in what children learn?

The evidence does not support treating enrolment campaigns as a complete response. Families may need help with transport costs or other practical burdens, and measures should take account of the unpaid work expected of children, particularly girls in the settings discussed. Local mapping can identify places where schools are difficult to reach, while school-level evidence can show which facilities are most needed. Governance reforms should be assessed through classroom practice and learning, not merely through the creation of committees or new procedures. The RAPID approach offers one framework for reconnecting children with learning and focusing on basic skills. Brazil's Active School Search is also noted in the project materials as an example of locating children who are outside school; its relevance to other settings would need to be assessed rather than assumed.

Two directions for future study follow from these gaps. One is to follow a group of children over several years, linking household circumstances, school access, attendance records and learning assessments. Such a design could show whether irregular participation precedes weak learning and dropout, and for which children. The second is to examine the pathway between governance reform and classroom change more closely. Building on the Sri Lankan trial, a study could measure not only whether management practices change, but whether those changes affect instruction and, eventually, learning outcomes.

Several limitations affect how these findings should be interpreted. The study uses existing data rather than information gathered directly from children, parents, teachers or school leaders. It can therefore compare patterns across studies but cannot independently determine their causes. In addition, the sources cover different countries and school systems, including India, Kenya, Ecuador, Uganda, Sri Lanka and the United States. Economic circumstances, social expectations and education policies differ between these settings. The four-theme framework should therefore be treated as a way of organising evidence, not as a universal explanation for each child's experience.

The reviewed studies also use different designs. Some describe statistical associations, while others assess a particular programme. Their findings carry different levels of causal evidence and cannot be interpreted in the same way. Moreover, access, attendance, dropout and learning are often measured in separate datasets rather than tracked for the same children. This limits understanding of how barriers may develop over time. The literature covered here may also underrepresent experiences related to disability, displacement, conflict, gender discrimination or language. More inclusive and context-sensitive research would help identify which approaches work best for different groups. Finally, several national indicators are closely related to a country's overall development. The bivariate models cannot separate those overlapping influences.

The statistical relationships should not be read as separate explanations for learning poverty. National income, electricity access, rural population and pupil–teacher ratios are related to broader conditions of development and may overlap with each other. A large R^2 indicates how closely an individual indicator fits the pattern in this particular sample; it does not tell us how much educational exclusion that indicator caused. Similarly, the weak association reported for education spending as a percentage of GDP is not proof that money is unimportant. The measure does not show how funding is distributed or used in classrooms.

The two evidence sources contribute in different ways. Country-level comparisons help locate broad patterns of learning poverty, while smaller studies suggest reasons those patterns may arise—for example, work obligations, distance or school management. Because they cover different people, places and periods, their findings cannot simply be combined into one universal causal account. The value of reading them together lies in identifying connections while keeping those limits visible.

6. Conclusion



The question guiding this study was why educational exclusion persists despite widespread promises of free and compulsory schooling. The literature and the country comparisons suggest that there is no single explanation. Financial insecurity, care responsibilities, distance from school and weaknesses in teaching and governance can all restrict educational opportunity. The burden becomes especially difficult when more than one obstacle affects the same child.

One finding deserves particular attention: being able to attend school does not necessarily mean learning to read. Across 85 countries, the primary out-of-school rate was positively associated with learning poverty ($R^2 = 0.43$), yet the measures did not move together in every country. Of the 52 countries where fewer than 5% of primary-age children were out of school, 17 still recorded learning poverty above 30%, including six above 50%. This matters because an increase in enrolment may be genuine progress while still leaving an important part of the educational problem unresolved.

The strongest country-level association in the supplied analysis was between GDP per capita and learning poverty ($R^2 = 0.71$; $N = 91$). Pupil–teacher ratios also showed a substantial relationship ($R^2 = 0.61$), followed by electricity access ($R^2 = 0.42$) and rural population share ($R^2 = 0.38$). The reported relationship with education spending as a share of GDP was much smaller ($R^2 = 0.07$). These figures describe separate country-level associations rather than a ranking of causes. Although GDP per capita showed the strongest association with learning poverty among the indicators examined, this analysis cannot establish that higher income causes lower learning poverty or identify the independent effect of income. Wealthier countries may also differ in infrastructure, public services, educational resources and other socioeconomic conditions that influence learning outcomes. Therefore, the observed relationship should be interpreted as an association rather than evidence of a direct causal effect.

The findings also have limits. The cross-country indicators refer to different years, and the analysis cannot determine causation. Approximately half of low-income countries lack learning-poverty estimates in the cited World Bank source, which may leave some severe

disadvantage outside the available data. The exploratory conflict comparison was not statistically significant at the 5% level and was affected by unreliable missing-data coding. Documentary studies also differ in period, location and design. Important experiences, including those of queer learners in South Asia, are not adequately represented in the evidence reviewed here.

The policy implications are therefore practical rather than narrowly statistical. Efforts to bring children into school should be matched by efforts to help them attend consistently and learn once there. Fee-free education may still leave families paying for transport or giving up income and household help. Decisions about roads, school locations and basic facilities need local evidence. Teacher support and

school management should be judged by changes children experience in their classrooms, rather than by the existence of a policy on paper.

Further research could track individual children across enrolment, attendance, learning and school completion, while collecting information about their households and local schools. Analyses that consider several national indicators together could also help separate income-related patterns from other conditions. The main conclusion of this study is modest but important: exclusion is not just the moment a child leaves school. It can develop gradually, and it can persist even while a child remains enrolled. Understanding it requires looking at the whole educational experience.

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