

Ketimpangan Sosio-Ekonomi dan Spasial dalam Peluang Pembelajaran Bahasa Inggris di Bangladesh: Sintesis Data Sekunder yang Diharmonisasi

Socioeconomic and Spatial Inequalities in English-Language Learning Opportunities in Bangladesh: A Harmonized Secondary-Data Synthesis

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Abstrak

Meskipun bahasa Inggris merupakan mata pelajaran wajib di sekolah di Bangladesh serta kunci untuk akses pendidikan tinggi dan peluang kerja, hal ini tidak menjamin adanya kesempatan yang setara untuk mempelajari bahasa Inggris. Penelitian ini menggunakan sintesis data sekunder lintas sektoral (periode 2017–2022) dari empat sumber data sekunder nasional—yaitu MICS 2019, National Student Assessment, HIES 2022, dan sensus sekolah BANBEIS untuk memetakan kesenjangan nasional dalam hal kesempatan belajar bahasa Inggris (English-language learning opportunity atau ELLO) di lingkup sekolah, pembelajaran tambahan, dan rumah. Lima indikator ELLO (guru bahasa Inggris berkualifikasi, pendaftaran di sekolah dengan pengantar bahasa Inggris, bimbingan belajar bahasa Inggris swasta, perangkat rumah tangga yang terhubung ke internet, serta bahan bacaan bahasa Inggris di rumah) dipandang sebagai kondisi pendukung yang menjadi proksi bagi kesempatan belajar, bukan sebagai ukuran kualitas pengajaran. Estimasi prevalensi dengan pembobotan survei, interval kepercayaan 95%, dan rasio prevalensi dihitung berdasarkan kuintil kekayaan, wilayah tempat tinggal, serta jenis kelamin (sebagai analisis eksploratif). Ditemukan adanya kesenjangan kekayaan yang besar (rasio Q5:Q1 berkisar antara 6,3 hingga 57,4); pada semua indikator, prevalensi anak-anak di wilayah perkotaan lebih tinggi dibandingkan di wilayah perdesaan, dengan prevalensi terendah secara konsisten ditemukan pada rumah tangga perdesaan termiskin. Tren ini sesuai dengan perkiraan umum: sumber daya yang dibeli oleh rumah tangga terdistribusi secara lebih timpang dibandingkan sumber daya yang disediakan oleh sekolah. Implikasi kebijakan yang muncul berkaitan dengan pemerataan penempatan guru, penyediaan dukungan pembelajaran oleh pemerintah, inklusi digital, serta pemantauan kesempatan belajar yang menyajikan data terpilah.

Kata kunci: bangladesh, ketimpangan sosial-ekonomi, ketimpangan spasial, peluang pembelajaran bahasa inggris, sintesis data sekunder

Abstract

Although English is a compulsory school subject in Bangladesh and is a key to higher education and job opportunities, it does not ensure equal opportunity to learn English. This research uses a cross-sectional secondary data synthesis (2017–2022) from four national secondary data sources: MICS 2019, the National Student Assessment, HIES 2022, and the BANBEIS school census to map national disparities in English-language learning opportunity (ELLO) across school, supplementary, and home domains. Five ELLO indicators (qualified English teacher, English-medium enrolment, private English tutoring, household internet-connected device, English reading materials at home) are thought of as enabling conditions, which proxy opportunity to learn, not as measures of instructional quality. Survey-weighted prevalence estimates, 95% confidence intervals and prevalence ratios were calculated by wealth quintile and residence and by gender (exploratory). The wealth gradients were large (Q5:Q1 ratios ranged from 6.3 to 57.4), and on all indicators, the prevalence of children in urban areas was higher than in rural areas, with the lowest prevalence consistently found in the poorest rural households. This trend is similar to what would be expected: Household-purchased resources are more unequally distributed than school-provided resources. Policy implications are related to equitable teacher deployment, learning support publicly provided, digital inclusion, and disaggregated monitoring of learning opportunity.

Keywords: bangladesh, english-language learning opportunity, secondary-data synthesis, socioeconomic inequality, spatial inequality

1. INTRODUCTION

Bangladesh has always had a policy of language in education which has been a mixture of commitment to Bangla and pragmatism about English as the language of higher education, international communication, migration and skilled employment. English has been a mandatory subject since grade one and the National Education Policy 2010 reiterated the status of English (Hamid & Erling, 2016) while the National Development Agenda of the country has highlighted the skills needed for a knowledge and service-based economy (General Economics Division

[GED], 2020). Such promises increase the importance of English, but don't guarantee that children will face similar learning environments when they start school.

Formal access and meaningful opportunity are a key theme for this study. It is possible for one child to be in a school where English is listed on the timetable but is rarely taught, by a teacher who has not been prepared for it, and has limited resources. Another child, also on the same national curriculum, can be educated in an English-medium school that charges fees, has private English tutoring, has online resources, and reads English books at home. The extent to which they are given opportunities to learn English is very varied. The problems of teacher capacity, non-uniform implementation of communicative language teaching, examination-oriented teaching, and socially differentiated private tutoring are well documented in Bangladesh (Hamid, 2016; M. S. Islam et al., 2021; Mahmud & Bray, 2017; Rahman et al., 2019). What is not known is the distribution of these enabling conditions by household wealth and location of residence across the country.

The study is based on the opportunity-to-learn (OTL) tradition, where OTL refers to the content students are exposed to, the time spent on instruction, and the quality of instruction (Scheerens, 2017; Schmidt et al., 2015). These dimensions are not measured in nationally representative secondary data in Bangladesh: weekly English contact hours, classroom discourse, and pedagogical quality are not measured. What they do note is whether a child has access to a qualified English teacher, if a child is in an English medium stream, if a child receives tutoring, if a child has access to an internet-connected device at home, and if a child has English books at home. For this collection of observable enabling conditions, we therefore refer to it as an English-language learning opportunity (ELLO) and consider the five ELLO indicators to be proxies for OTL, but not OTL itself. The distinction is important for interpretation and policy as an enabling condition is a necessary but not sufficient condition for exposure to English and learning.

Other resources (supplementary and home) are considered a separate domain. Private tutoring and digital access are heavily reliant on household purchasing power and on local markets and infrastructure and have long been theorised as potentially exacerbating rather than reducing inequalities that stem from the formal school system (Bray, 2023; Mahmud, 2021). The present study does not test that hypothesis; it simply describes whether or not these resources co-occur with school-based advantage across the wealth and residence distribution, the precondition for any causal analysis.

An additional conceptual problem is the worth of the English language. English serves as human capital in South Asia, as there are documented wage premia for English (Chakraborty & Bakshi, 2016), and as a positional resource, as the private returns to English partly depend on its relative scarcity, and the institutional prestige it signals (Hamid, 2016). These readings are not mutually exclusive: increased access can lead to an increase in the productive capacity of the disadvantaged learners even if the better resourced households continue to have a relative advantage. In this context, the study will answer four research questions:

RQ1: What are the differences in the five ELLO indicators between the different household wealth quintiles?

RQ2: What are the differences in the same indicators by place of residence (urban vs rural)?

RQ3: What is the mix of wealth and residence in the poorest rural and richest urban strata?

RQ4: How much do the harmonised estimates available show gender differences, especially in the poor rural households?

Prior research does not include formal hypotheses but rather four conceptual expectations that are used to interpret the descriptive results. First, it was expected that there would be a positive wealth gradient on all indicators, which would be greater on the fee-dependent and household-purchased indicators than on the school-side indicators. Second, it was thought that there would be an urban advantage on every indicator. Third, the prevalence of the poorest children in rural areas was expected to be lowest, and the richest children in urban areas were expected to be highest, with household resources partially compensating for the rural location for market-mediated indicators. Fourth, as Bangladesh is making strides towards gender parity in enrolment, gender gaps were likely to be limited for indicators related to school-based access, and may exist for indicators related to household-mediated access. Since the design is descriptive, no inferential model is estimated; results are presented in terms of being consistent or inconsistent with these expectations, rather than in terms of confirmation or rejection of tested models. The study has three contributions. First, it integrates and consolidates the various education, household, and technology interventions into a single ELLO framework that is equity-oriented and relevant for Bangladesh. Second, it distinguishes between school-based and supplementary and home resources, and thus allows for an analysis of inequality as a set of conditions, rather than an indicator. Third, it explicitly declares its measurement boundaries; that is, it reports on enabling conditions, not proficiency, and it reports on associations, not causal effects. In doing so, it adds to classroom- and learner-level work on motivation and home support and inclusion in language education (Firdaus Umar et al., 2023; Vania & Rizal, 2024) with national evidence of the conditions for such learning.

2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Prior Research on English-Learning Opportunity in Bangladesh and the Empirical Gap

There are 5 strands of research that are relevant to this study. The first one is about the inequities in learning English in Bangladesh. There is a disconnect between the vision of English-for-all and the ability of schools to provide it (Hamid & Erling, 2016), and recent reviews have revealed low levels of learning, examination-driven teaching, and the proliferation of urban English-medium schools, which has created further inequality (M. S. Islam et al., 2021; Rahman et al., 2019). Hamid (2016) describes English in Bangladesh as a 'linguistic market' where 'quality' is offered based on class and institutional lines. The second strand is private tutoring: there is widespread demand for English tutoring, which is linked to school-side deficits, is more prevalent in urban areas, and is more likely to be taken up by more affluent families (Mahmud, 2019, 2021; Mahmud & Bray, 2017; Mahmud & Kenayathulla, 2018), similar to regional trends for shadow education (Bray, 2023). The third strand is related to the digital divide. Household studies during school closures indicate that socioeconomic and gender disparities exist in access to smartphones, computers, and the internet, and that access to these technologies resulted in modest learning-time gains (Asadullah & Bhattacharjee, 2022); and student surveys and national analyses have identified a latent, multidimensional digital divide (Badiuzzaman et al., 2021; M. N. Islam & Inan, 2021).

The 4th strand is OTL literature. International assessment research indicates that a significant portion of the relationship between SES and achievement is transmitted via differential exposure to content (Schmidt et al., 2015), although there is some controversy regarding the validity of OTL measures (Yang Hansen & Strietholt, 2018), and reviews emphasize that content, time, and quality are separate dimensions (Scheerens, 2017). The fifth strand relates to the urban–

rural and wealth disparities in Bangladeshi education as a whole, which is reported in national survey and administrative data on attendance, outcomes, and school resources (Bangladesh Bureau of Educational Information and Statistics [BANBEIS], 2023; Bangladesh Bureau of Statistics [BBS] & UNICEF Bangladesh, 2019; Directorate of Primary Education [DPE], 2023).

These strands are summarized in Table 1 along with the gaps in the strands. The existing work is mostly qualitative or institutional, single-domain, city/region specific or international in scope, and is oriented towards mathematics or literacy, and not towards English. There is no study that has yet offered a national-level descriptive baseline in a common equity frame with common definitions of school, supplementary, and home conditions for learning English. The present study fills that gap, but does not attempt to answer the causal questions which the previous literature poses.

Table 1: Mapping of Prior Research Strands and the Gap Addressed by This Study

Research strand	Representative studies	Scope and design	What remains unaddressed
(a) Disparities in English learning in Bangladesh	Hamid & Erling (2016); Hamid (2016); Rahman et al. (2019); M. S. Islam et al. (2021)	Policy analysis, reviews, qualitative accounts	National quantification of enabling conditions by wealth and place
(b) Private tutoring	Mahmud & Bray (2017); Mahmud & Kenayathulla (2018); Mahmud (2019, 2021); Bray (2023)	School/household surveys, mainly secondary level; Dhaka and selected districts	Tutoring placed alongside school and home resources nationally
(c) Digital divide	Asadullah & Bhattacharjee (2022); Badiuzzaman et al. (2021); M. N. Islam & Inan (2021)	Household/student surveys during COVID-19; national factor analyses	Digital access as a language-learning condition, by wealth and residence
(d) Opportunity to learn	Schmidt et al. (2015); Scheerens (2017); Yang Hansen & Strietholt (2018)	International assessments; conceptual reviews	Application to English in a low- and middle-income context
(e) Urban–rural and wealth disparities	BBS & UNICEF Bangladesh (2019); DPE (2023); BANBEIS (2023); Mahmud (2019)	National reports on attendance, resources and outcomes	English-specific indicators and wealth-by-residence strata
(f) Gap addressed	—	—	A harmonized national ELLO baseline across three domains with common strata and explicit measurement boundaries

2.2 Opportunity to Learn and ELLO as Enabling Conditions

OTL connects macro-level inequality to concrete educational inputs by posing the question of whether students are exposed to the intended content, how much time they are exposed to it, and how good the instruction is (Scheerens, 2017). The dimensions are different: a school can provide a lot of hours for English but have a poor quality of English teaching; a school can have a qualified English teacher, but he/she is overloaded; a school can be English-medium but not have English-medium instruction. Thus, there is caution regarding the content exposure that OTL measures (Yang Hansen & Strietholt, 2018), alongside evidence that content exposure plays a meaningful role in the socioeconomic achievement gap (Schmidt et al., 2015).

This study uses ELLO as 5 enabling conditions across three domains (Table 2), as no national-scale dataset exists for content coverage, time, and quality for English in Bangladesh. The school-based domain includes access to a postgraduate-qualified English teacher and enrolment in an English-medium/English-version stream (proxy for institutional capacity and potential for

exposure intensity). The supplementary domain is private English tutoring. The home domain consists of an internet-connected device and a minimum English print environment, where exposure can take place outside of the classroom. The indicators are not observations of teaching and learning, but rather credentials, status, or possession, and are necessary but not sufficient for OTL.

Table 2: Mapping of Observed ELLO Indicators to Opportunity-to-Learn Dimensions

Observed indicator	ELLO domain	OTL dimension proxied	What the indicator does not measure
Qualified English teacher	School-based	Potential instructional quality and curriculum coverage	Teacher English proficiency, pedagogy, class assignment, and time
English-medium/version schooling	School-based	Potential exposure intensity and content breadth	Actual weekly contact hours or classroom quality
Private English tutoring	Supplementary	Additional instructional time and guided content	Hours, tutor quality, regularity, household burden
Internet-connected device	Home/digital	Potential access to supplementary content and practice	Individual use, data affordability, learning intensity, device sharing
≥3 English-language children's books	Home/print	Potential exposure to English print	Reading frequency, comprehension, parental support

Note. ELLO = English-language learning opportunity; OTL = opportunity to learn. The indicators are enabling conditions and are not interpreted as measures of proficiency or instructional quality.

2.3 Supplementary and Home Resources as Resource-Dependent Opportunities

The private tutoring sector has a unique place in the country of Bangladesh. In urban Dhaka, English is one of the most sought-after subjects for tutoring at secondary level (Mahmud & Kenayathulla, 2018); there is a perceived gap between the demand for learning English and the provision of the school (Mahmud & Bray, 2017); and the implications for learning are different for urban and rural students (Mahmud, 2019). The shadow-education literature suggests that the mechanism is that households who can afford to pay for extra time, feedback, and examination preparation do so, while households who cannot afford do not. The effect of tutoring on inequality is thus an empirical issue, which will depend on who is offered tutoring.

The same line of reasoning holds true for digital access. An internet-connected device provides access to dictionaries, video, language applications, and English-language media, but the ownership of the device does not ensure that the device is used for learning: devices are shared, internet connection is not always available, data costs limit use, and norms in the household dictate who uses the device. During the school closures, evidence from Bangladesh revealed a significant socioeconomic and gender gap in access, and limited learning time gains from access (Asadullah & Bhattacharjee, 2022). The indicator employed here thus reflects a minimum digital opportunity, and a household-level indicator might mask intra-household differences. The English print environment is kept as a home-domain indicator, as home conditions more generally (learning environment and parental support) are associated with learners' motivation and achievement in language education (Firdaus Umar et al., 2023). The conceptual model is summarized in Figure 1: structural stratifiers are linked to the three ELLO domains that in turn are hypothesized to affect learning outcomes not measured in this study.

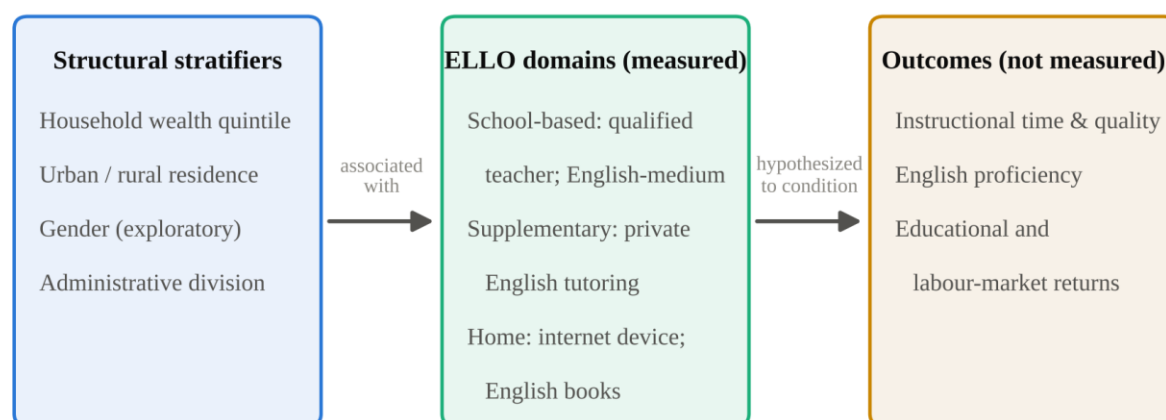


Figure 1: Conceptual Model of Stratifiers, ELLO Domains and Unmeasured Learning Outcomes

Note. Supplementary and home resources are shown separately because their availability depends on household resources and local markets. Arrows are conceptual and do not represent causal estimates.

3. METHOD

3.1 Design and Data Sources

The study is a cross-sectional secondary-data synthesis study and has a descriptive purpose, not a causal one. It is based on four nationally representative or nationally extensive sources collected in the last five years, from 2017 to 2022: the Bangladesh Multiple Indicator Cluster Survey (MICS) 2019 (61,242 households interviewed), the National Student Assessment (NSA) 2017 and 2022 waves, the Household Income and Expenditure Survey (HIES) 2022 (14,400 households), and the BANBEIS school census for 2022 (BANBEIS, 2023; BBS, 2023; BBS & UNICEF Bangladesh, 2019; DPE, 2023). There are variations in the sampling frame, unit of observation, and reference period of the sources. Harmonization is thus done at the level of indicator definitions and common equity strata, not at the respondent level: No linkage is made between individuals across sources, and no person-level multivariate dataset is created. Table 3 provides, for each indicator and stratifier, source, year, population, original variables, harmonized definition, and calculation procedure.

Table 3: Data Harmonization — Sources, Original Variables, Harmonized ELLO Indicators and Calculation Procedures

Indicator / stratifier	Source (year)	Population and unit	Original variable(s)	Harmonized definition	Calculation procedure
Qualified English teacher	BANBEIS census (2022) linked to NSA school sample (2017, 2022)	All recognized schools; students in NSA-sampled schools	Teacher records: subject taught, highest qualification	School has ≥ 1 English teacher with a master's degree in English or equivalent postgraduate qualification	School-level flag attached by institution code; student-weighted proportion of children in flagged schools, by stratum
English-medium/version enrolment	MICS (2019)	Children 6–15 currently attending school	Type of school attended (current school year)	Enrolled in an English-medium or English-version stream	Weighted proportion of attending children, by stratum

Private English tutoring	MICS (2019); HIES (2022)	Attending children 6–15 (MICS); households with school-age children (HIES)	Child receives private English tutoring (current school year); household expenditure on tutoring/coaching (12-month recall)	Any participation in private English tutoring during the reference school year	Expenditure item recoded to any positive spend; participation item gives the English-specific share; weighted proportion by stratum
Internet-connected device	HIES (2022); MICS (2019)	Households with children 6–15, attributed to children	Ownership of smartphone, computer or tablet; household internet access	Household owns ≥1 device with internet access	Household flag attributed to each attending child; weighted proportion by stratum
≥3 English-language children's books	MICS (2019)	Children 6–15; household level	Number and language of children's books in the home	≥3 English-language children's books in the home	Weighted proportion by stratum
Wealth quintile	MICS (2019); HIES (2022)	Households	Asset-based wealth index (principal components) of each source	National quintiles; children assigned their household's quintile	Source-provided quintile retained; no re-estimation
Residence; gender; division	All sources	Households, children, schools	BBS urban/rural frame; child's sex; administrative division	Urban vs rural; girls vs boys; eight divisions	Stratifying variables for all estimates

Note. Reference periods differ across instruments (current school year in MICS and NSA; 12-month recall in HIES; academic year in the census). All indicators are aligned to 'status during the reference school year'; residual non-comparability is acknowledged in Section 5.6.

3.2 Analytic Population, Stratifiers and Indicator Alignment

The analytic population is the school-going children (6–15 years). Wealth is defined using the asset-based wealth index developed by each source, which is ranked in national quintiles (Q1 being the poorest, and Q5 the richest) (BBS, 2023; BBS & UNICEF Bangladesh, 2019), and children are assigned the quintile of their household. Residence is based on the urban–rural classification of the BBS sampling frame, gender is the sex recorded for the child, and administrative division is used to look at spatial concentration beyond the urban–rural dichotomy.

Definitions of indicators are given after Table 3. Qualified-teacher access is not a measure of proficiency or pedagogy, English-medium opportunity is a proxy for potential exposure to English medium, digital access is based on the presence of at least one device with internet connectivity in the home, and print is based on the presence of at least three English-language children's books. The HIES item was used to record spending on tutoring over a 12-month recall period; the MICS item was used to record participation in tutoring during the current school year, and required explicit alignment of reference periods, in that the subject of tutoring was identified. The HIES item was therefore re-coded to include any positive expenditure, and the harmonized definition was the most general common reference (status during the school year) to ensure that estimates could be compared at the definitional level.

3.3 Statistical Procedures

The survey (svy) estimation suite was used to compute all estimates in Stata 17. Each survey source was analysed separately, using the appropriate sampling weights (child weights for MICS, household weights for HIES, student weights for NSA), where primary sampling units were

defined as clusters and sampling strata as strata, and the BANBEIS census is a full enumeration and is only used as a school-level flag. Standard errors were calculated using Taylor-series linearization, which takes into account the clustering and stratification (Heeringa et al., 2017). The prevalence was calculated for each stratum, and 95% confidence intervals (CIs) were computed on the logit scale and back-transformed to obtain intervals that remain within the 0-100% range for the very low prevalences seen in disadvantaged strata.

Prevalence ratios are used to summarise inequality, which are the weighted prevalence in the advantaged group (Q5:Q1 and urban: rural). The design-based variance–covariance matrix of the two proportions was used to obtain the standard error of the log ratio, and the 95% CI was obtained as $\exp[\ln(\text{ratio}) \pm 1.96 \times \text{SE}]$. Absolute percentages should always be used in conjunction with ratios, as a ratio of 50 from 0.5% and 25% is very different policy-wise to a ratio of 50 from 1% and 50%. The analysis was done in four stages: (1) national prevalence for each indicator; (2) prevalence by wealth quintile and by residence and ratio; (3) cross-classification of wealth and residence (Q1-rural, Q1-urban, Q5-rural, Q5-urban); and (4) exploratory gender and division contrasts where the harmonized outputs allow. No regression models, adjusted effects, or interaction tests or significance tests were estimated, as the sources are not connected at the respondent level. Comparisons are descriptive, made with reference to the width and overlap of confidence intervals, and the patterns are presented as hypotheses for microdata analysis for each source.

3.4 Missing Data and Ethics

Less than 5% of the respondents did not answer the key variables in each source. Multiple imputation by chained equations (van Buuren, 2018) was used with the survey design variables included in the imputation models; the item-level missingness rates and complete-case sensitivity tables are not presented here. All data sources are public or official data that are de-identified and collected under ethical and data-governance procedures of the data sources. No new human subjects were recruited, and there were no direct identifiers to the investigator; it is a secondary analysis of anonymized data.

4. RESULTS

4.1 National ELLO Profile

The national estimates are given in Table 4. Approximately 23.1% (95% CI 20.2–26.0) of children in the school-going age group were enrolled in a school that had a qualified English teacher and 7.3% (95% CI 5.1–9.5) were enrolled in an English-medium or English-version stream. 31.2% (95% CI 28.4–34.0) of the students were reported to be taking private English tutoring, which is higher than English-medium enrolment. Thirty-eight percent (34.1–42.7) of children had an internet connected device in their homes, and 12.3% (10.1–14.5) had three or more children's books in English.

Table 4: Weighted National Estimates of English-Language Learning Opportunity Indicators

Indicator	Prevalence (%)	95% CI
School has a qualified English teacher	23.1	20.2–26.0
English-medium/English-version enrolment	7.3	5.1–9.5
Private English tutoring	31.2	28.4–34.0
Internet-connected device in household	38.4	34.1–42.7
≥3 English-language children's books	12.3	10.1–14.5

Note. Population: school-going children aged 6–15. Estimates are survey-weighted; CIs are design-based (logit scale).

4.2 Differences by Household Wealth

The five indicators are all increasing monotonically with wealth quintiles (Table 5; Figure 2). The percentage of access to a qualified English teacher goes up from 8.2% in Q1 to 51.3% in Q5 (ratio 6.3). English-medium/version enrolment increases from 1.2% to 68.9% (ratio 57.4), private tutoring from 4.8% to 72.3% (ratio 15.1), digital access from 9.1% to 71.4% (ratio 7.8) and the home English print environment from 0.9% to 44.7% (ratio 49.7). The ratios are highest for indicators which rely on household purchasing power or on school sectors that are selective, and lowest for the school-side qualified-teacher indicator. The gradients are not threshold, but rather Q2 and Q3 are well below Q5 on each of the indicators, and the largest differences are between Q4 and Q5 for English-medium enrolment, tutoring and books.

Table 5: ELLO Indicators by Household Wealth Quintile (%) and Q5:Q1 Prevalence Ratio

Indicator	Q1 (poorest)	Q2	Q3	Q4	Q5 (richest)	Q5:Q1 ratio
Qualified English teacher	8.2	14.5	22.3	38.7	51.3	6.3
English-medium/version enrolment	1.2	2.8	5.1	18.4	68.9	57.4
Private English tutoring	4.8	12.3	22.1	48.5	72.3	15.1
Internet-connected device	9.1	21.5	35.8	58.2	71.4	7.8
≥3 English-language children's books	0.9	2.3	6.7	22.1	44.7	49.7

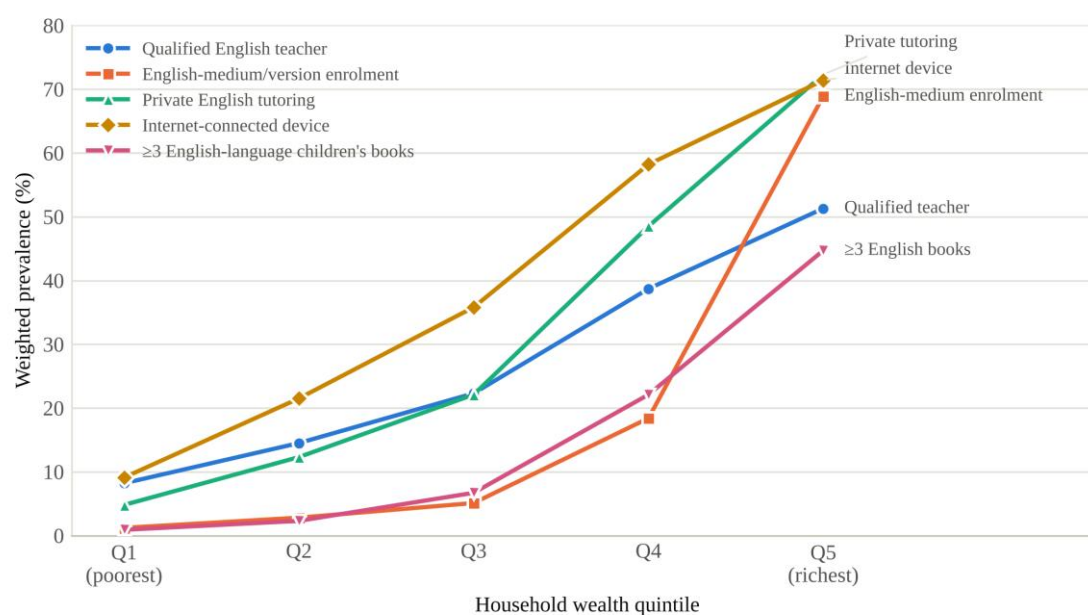


Figure 2: ELLO Indicators by Household Wealth Quintile, School-Going Children Aged 6–15
Note. Points are survey-weighted prevalence estimates (%). Quintiles are of the national household wealth index (Q1 = poorest, Q5 = richest).

4.3 Differences by Residence

For all indicators, there is higher prevalence in urban areas than in rural areas (Table 6). Access to a qualified English teacher was 34.6% in urban and 14.2% in rural areas (ratio 2.44, 95% CI 2.10–2.78). English-medium/version enrolment had the highest relative difference (12.8% compared to 2.3% or a ratio of 5.57, 95% CI 4.15–7.98). Private tutoring was 53.2% versus 18.4% (ratio 2.89, 95% CI 2.58–3.20), digital access 61.3% versus 24.1% (ratio 2.54, 95% CI 2.32–2.76),

and the English print indicator 18.2% versus 7.9% (ratio 2.30, 95% CI 1.98–2.62). All of the ratio intervals are below 1.

Table 6: English-Language Learning Opportunity by Urban–Rural Residence

Indicator	Urban (%)	Rural (%)	Urban: rural ratio	95% CI for ratio
Qualified English teacher	34.6	14.2	2.44	2.10–2.78
English-medium/version enrolment	12.8	2.3	5.57	4.15–7.98
Private English tutoring	53.2	18.4	2.89	2.58–3.20
Internet-connected device	61.3	24.1	2.54	2.32–2.76
≥3 English-language children's books	18.2	7.9	2.30	1.98–2.62

4.4 Wealth by Residence

When wealth and residence are cross-classified (Table 7), it can be seen that the lowest prevalence on each indicator is among Q1-rural children (qualified teacher 0.8%, English-medium 0.4%, tutoring 1.3% and digital access 8.1%), while the highest prevalence is among Q5-urban children (58.3%, 74.2%, 78.9% and 82.7% respectively). There are two intermediate strata, which vary according to domain. Q1-urban children (31.8%) have a higher prevalence compared to Q5-rural children (28.1%) for qualified-teacher access. The prevalence is reversed when looking at tutoring and digital access: Q5-rural children (53.4% and 48.2%) have higher prevalence than Q1-urban children (24.6% and 42.3%). There is a higher proportion of English-medium children amongst the Q5-rural children (18.7%) than amongst the Q1-urban children (7.2%).

Table 7: Selected Wealth-by-Residence Strata (%)

Stratum	Qualified teacher	English-medium/version	Private tutoring	Digital access
Q1-rural	0.8	0.4	1.3	8.1
Q1-urban	31.8	7.2	24.6	42.3
Q5-rural	28.1	18.7	53.4	48.2
Q5-urban	58.3	74.2	78.9	82.7

4.5 Exploratory Gender and Division Patterns

The two school-based indicators are the only indicators for which gender-disaggregated estimates are available. The availability of qualified English teachers was 22.8% for girls and 23.4% for boys and enrolment in English-medium/version was 7.1% and 7.5% respectively. The differences (0.6 and 0.4 percentage points) are not large enough to be statistically tested, as is appropriate to a descriptive design. Digital access for girls was 8.2%, and boys was 9.7% (difference of 1.5 percentage points) in the poorest rural stratum. The harmonised outputs do not provide estimates for tutoring and books by gender, or gender by wealth or by residence.

Results at the divisional level suggest that there is spatial concentration which goes beyond the urban–rural dichotomy. The Dhaka division had 24.1% of the school-going population aged 6-15 but 38.4% of the English-medium school-going population, while Chattogram division had 16.8% of the population and 22.3% of English-medium students, and Rangpur and Mymensingh collectively had 18.2% of the population and 8.7% of English-medium students.

5. DISCUSSION

5.1 Reading the Results against the Conceptual Expectations

The results are in line with all four conceptual expectations as stated in the Introduction, with one caveat. The wealth gradient is positive for all indicators and is largest for English-medium enrolment and books and tutoring (household-side resources) and smallest for qualified-teacher access (school-side resource) (Expectation 1). The prevalence in urban areas is higher than rural prevalence throughout (Expectation 2). The lowest and highest values are found among Q1-rural and Q5-urban children, respectively, on all indicators, with the exception of teacher access (Expectation 3), where Q5-rural children score higher than Q1-urban children. Gender gaps on school-based indicators are small, and the only available comparison at the household level, digital access by the rural poor, reveals a small difference in favour of boys (Expectation 4). The qualification is that the gradient of teacher access is the shallowest, but it's still a six-fold gradient: a resource that's provided by the state, and not bought by households, is still patterned by wealth. These statements are about the relationship between observed patterns and previous expectations, and are not tests of hypotheses.

Overall, the results suggest that English-learning opportunity in Bangladesh is a bundle: school-based access to English is clustered in the same rich, urban layers as is supplementary tutoring and home-based support; and the same poor, rural layers are the same layers of low access to English. This co-occurrence is what the cumulative-advantage accounts of educational inequality would predict (Schmidt et al., 2015), and is reminiscent of Hamid's (2016) stratified language market. The cross-sectional design does not allow for the identification of mechanisms, but does show that preconditions for cumulative advantage are fulfilled at the national level.

5.2 Human-Capital and Positional Readings

The results help to inform, but not resolve, the debate on the nature of English as human capital or positional good. The tutoring gradient (4.8% in Q1 and 72.3% in Q5) is consistent with the existence of a shadow system, where households with higher purchasing power purchase more tutoring, with tutoring being a skill that is valued in education and employment (Bray, 2023; Mahmud, 2021). This does not mean that tutoring leads to greater labour-market inequality later in life, but that opportunities are different prior to outcomes. Meanwhile, English remains to have a direct productive significance for tertiary study and certain segments of the labour market (Chakraborty & Bakshi, 2016). The policy aim is not therefore to reduce the value of English, but to increase the ways in which it can be learnt, bearing in mind that relative advantages may remain or re-emerge as provision grows.

5.3 Household-Mediated and Place-Based Domains

The comparisons of wealth by residence indicate that there are domain-specific patterns and not a single answer to the question of which is more important, place or wealth. Poor urban children outperform rich rural children on the one indicator that is a place-based constraint in the school domain, qualified-teacher access, which suggests that rural schools may have less access to qualified English teachers and fewer supports for intensive English instruction. In contrast, tutoring and digital access are higher for rich rural than poor urban children, and thus the strongest correlate in market-mediated domains is household purchasing power. These interpretations are in line with the descriptive cross-classification, and the independent and joint association of wealth and residence can only be estimated using the source-specific microdata.

Thus, the equity contribution of supplementary and home resources is dependent on the distribution. They can make up for the lack of qualified teachers in schools where they are found

in households; and they can reinforce the school-based advantage in schools where they are found in households with that advantage. The present data indicate that the second pattern is predominant in the country and thus the distribution and quality of tutoring and digital resources and the availability of public alternatives are at the heart of the policy discussion below.

5.4 Gender: What the Evidence Can and Cannot Show

This is in line with the progress of Bangladesh towards gender parity in enrolment as documented by BBS & UNICEF Bangladesh (2019). It does not indicate that there is equal learning of English by girls and boys. The small rural poor digital divide is in line with the household-level evidence of gendered access to technology (Asadullah & Bhattacharjee, 2022), but this study does not measure either time spent on devices or the autonomy of use, nor does it have gender estimates for tutoring and print resources. Thus, conclusions regarding gender are kept to a minimum. Before more definitive conclusions can be drawn, individual-level measures of device use, tutoring participation and time use must be analysed using models of gender-by-wealth and gender-by-residence within the survey design.

5.5 Policy Implications

The pattern of enabling conditions results in four priorities. The first is the allocation of teachers. Qualified-teacher access of 14.2% in rural areas and 8.2% in Q1 compared to 34.6% in urban areas and 51.3% in Q5 suggests that increasing the number of trained English teachers in disadvantaged schools, via rural-posting incentives, hardship allowances, structured professional development, and transparent deployment rules, would help improve access in the one domain in which the state is the primary provider. The aim is not just to increase the number of English teachers in the country, but to reduce the access gap.

The second priority is the provision of additional support that is publicly provided. Even if all private tutoring is regulated, the Q5:Q1 tutoring ratio is 15.1 and the urban: rural ratio is 2.89, which means that those children who are in schools with little English would not be reached. It would be more equitable to have publicly funded after-school English support in schools with low levels of resources and minimum quality and transparency requirements for private provision, with evaluation of the possibility of replacing these programmes with better ones as better-off families switch to more intensive tutoring. Here, inclusive approaches to language-learning provision that are offered to all learners, not only those who can supplement at home (Vania & Rizal, 2024), are relevant.

Digital Inclusion is the third priority. Digital access in rural areas was 24.1%, and in Q1 it was 9.1%, which means that there is a need to invest in connectivity and in low-bandwidth, offline-capable English learning materials (Asadullah & Bhattacharjee, 2022); however, distributing devices does not equate to creating learning time. Programmes should focus on the sharing of devices, data costs, relevance of content, and teacher engagement and usage trends by gender (Badiuzzaman et al., 2021; M. N. Islam & Inan, 2021).

The fourth priority is to monitor. A dashboard of opportunities for English would measure teacher preparation and deployment, time spent on scheduled and delivered English instruction, print and digital materials for English, participation in tutoring, and English proficiency, disaggregated by wealth proxy, residence, gender, disability and school sector. Connecting opportunity indicators to outcomes would help differentiate between the lack of resources and lack of use of resources.

5.6 Limitations and Future Research

There were six restrictions on the interpretation. First, it is a cross-sectional, descriptive design, and the associations are not causal estimates. Second, the sources vary in their sampling frames, instruments, and reference periods; harmonization is done at the definition and strata level, but not at the respondent level, and there are still some elements that are not comparable, notably tutoring. Third, the indicators are proxies, which means that a credential doesn't necessarily show how a teacher teaches, a device doesn't necessarily show how much a child uses it, books don't necessarily show that a child reads, and tutoring status doesn't necessarily show how intense or how good it is. Fourth, the use of school-level flags to child-level strata poses an ecological error problem if there is a lot of variation within schools or areas. Fifth, the COVID-19 disruption and the technological acceleration in the use of technology during the 2017–2022 period may not reflect the current situation. Sixth, the adjusted models, complete gender tables, and missingness diagnostics are not reported, but are required with the native microdata.

Future studies should use source-specific microdata to estimate the independent and joint associations of wealth and residence with each indicator under the survey design; measure English outcomes by individual-level device use and tutoring participation; measure the quality and intensity of tutoring and relate to English outcomes by wealth; and replicate the ELLO framework in other LMIC contexts.

6. CONCLUSION

This study offers the first national-level descriptive baseline of English language learning opportunity in Bangladesh in a single equity frame, which includes school, supplementary, and home conditions. Opportunity is concentrated amongst the wealthier and more urban children: the Q5:Q1 ratio ranges from 6.3 to 57.4 and the urban:rural ratio ranges from 2.3 to 5.6 for access to qualified English teachers, English-medium streams, private tutoring, internet-connected devices and English books. The distribution of resources used or chosen by households is even more unequal than the school-side teacher resource, which is also heavily skewed by wealth. These patterns are in line with what was expected from the OTL, shadow-education and digital-divide literatures, but are not causal and indicators are enabling conditions, not measures of learning. The four policy priorities are: equitable distribution of qualified English teachers, publicly provided additional English support in under-resourced schools, digital inclusion and monitoring of use as well as access, and English-specific opportunity monitoring disaggregated by wealth, residence and gender. English has both human-capital and positional value, and increasing the baseline provision could lead to a relative advantage being created or enhanced rather than eliminated; therefore, an equity agenda needs to monitor the distribution of learning opportunity and, over time, of the returns to learning English, to ensure that universal entitlement to the curriculum translates to universal opportunity to learn it.

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