



English Language Learning among Students of Model Residential Schools in the Tribal Areas of Kerala: Evidence from Wayanad and Idukki Districts

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Abstract

English occupies a decisive position in academic progression and occupational mobility in India, yet learners from Scheduled Tribe communities continue to acquire it under conditions of acute linguistic, cultural and economic disadvantage. This paper examines English language learning among students of Model Residential Schools (MRS) situated in the tribal belts of Wayanad and Idukki districts of Kerala. A descriptive survey design combining quantitative and qualitative evidence within an action-research orientation was adopted. Data were collected from 350 students drawn from nine Scheduled Tribe communities and from 60 teachers working across twenty residential institutions, using a validated questionnaire, a classroom observation schedule and semi-structured interviews. Responses were analysed through percentages, means and standard deviations, chi-square, the Friedman test, independent samples t-tests, point-biserial correlation and one-way analysis of variance. The findings show that although students rate institutional amenities favourably, with means ranging from 3.94 to 4.24 on a five-point scale, and although they hold strongly instrumental attitudes towards English, 78.3 per cent report difficulty in understanding the language and productive skills remain conspicuously weak. Innovative classroom strategies did not significantly differentiate outcomes among slow learners, with t values between 1.00 and 1.12. School location was significantly associated with proficiency, and MRS students substantially outperformed peers in general schools, $t(343) = 11.72$, $p < .001$, $d = 1.26$. Community membership significantly conditioned vocabulary strategy use, $F(8, 329) = 7.80$, $p < .001$. Internet provision alone did not predict performance. The paper argues for mother-tongue-sensitive pedagogy, teacher preparation in multilingual instruction and culturally contextualised curricula.

Keywords: English language learning; Model Residential Schools; Scheduled Tribes; Kerala; multilingual education; language anxiety; vocabulary strategies

1. Introduction

1.1 Multilingualism and the Position of English in Indian Schooling

India is among the most linguistically plural societies in the world. Census enumeration has recorded more than ten thousand mother tongues, rationalised into 3,372 categories and eventually grouped into roughly four hundred distinct languages belonging to the Indo-Aryan, Dravidian, Austro-Asiatic and Tibeto-Burman families, together with a residue that resists such classification (Mohanty, 2019). The Eighth Schedule of the Constitution originally recognised fourteen languages; twenty-two are scheduled today. For the great majority of Indian schoolchildren, English is consequently a second or even a third language rather than a mother



Classroom practice reflects this plurality unevenly. Teachers routinely move between English and the regional language, and translingual practice is widespread even in nominally English-medium institutions (Anderson & Lightfoot, 2021). Where such practice is deliberate and principled it supports comprehension; where it is merely habitual it can displace the target language altogether. The pedagogical literature has for some time insisted that the linguistic resources children bring to school are an asset rather than a deficit, and that instruction which suppresses them produces subtractive rather than additive bilingualism (Cummins, 2021; UNESCO, 2016). Indian policy has formally absorbed this insight through the Three Language Formula, but implementation for minority-language speakers remains partial.

1.2 Indigenous Communities and Educational Disadvantage in Kerala

Kerala presents a paradox. The state reports an overall literacy rate of 93.91 per cent, yet literacy among its Scheduled Tribe population stands at 74.44 per cent. Scheduled Tribes constitute only 1.28 per cent of the state population, of which the hill district of Wayanad accommodates 35.94 per cent, the largest concentration in the state (Damu, 2018). Thirty-six indigenous communities are recognised in Kerala, five of them as Particularly Vulnerable Tribal Groups. Most inhabit settlements along the Western Ghats with strong kinship boundaries; a substantial number of habitations are reachable only by footpath, and several have no road connectivity at all.

Retention rather than enrolment is the central difficulty. Official estimates indicate that a very large proportion of indigenous children admitted to Class I leave school before completing the secondary stage, a pattern the administration itself describes as dropout syndrome (Integrated Rural Technology Centre, 2020). Repeated academic failure, distance, irregular parental income, first-generation learner status and experiences of caste-based humiliation compound one another (Panda & Behera, 2023). Language sits at the centre of this cluster: when the medium of instruction is the dominant regional language, children whose home speech is a community dialect must first master Malayalam before they can begin to approach English.

1.3 Model Residential Schools as an Institutional Response

Ashram schooling for tribal children in India dates to 1939, and the model was substantially expanded through the Ekalavya Model Residential School scheme launched in 1997-98. Roughly 566 model residential schools now operate nationally, twenty of them in Kerala, five within Wayanad district (Ministry of Tribal Affairs, 2020). These institutions provide free education together with hostel accommodation, meals, books and uniforms, and are intended to neutralise the effects of remoteness, parental illiteracy and social segregation. The National Education Policy 2020 reaffirmed the closing of social-category gaps in access, participation and learning outcomes as a continuing priority (Ministry of Education, 2020).

Evaluative evidence is mixed. Residential provision demonstrably improves attendance and retention and offers a structured academic environment, but recurrent shortfalls in infrastructure, teacher availability, culturally responsive pedagogy and career guidance limit its effectiveness (Karmakar, 2024; Pandey & Kakati, 2022). The compulsory residential model has also met community resistance, since separation from the settlement is experienced by many families as a cultural loss rather than an opportunity.



1.4 Language Distance, Anxiety and the Affective Classroom

Tribal languages in Kerala are typically unwritten and blend elements of neighbouring Dravidian languages. The structural distance between such dialects and English is considerable, involving differences of phonology, word order and morphology that surface as literal translation, mispronunciation and uncertain word choice. Oral traditions of myth, folktale and song remain central to community identity, yet school assessment privileges written performance, which places learners from oral cultures at an immediate disadvantage.

These structural difficulties acquire an affective dimension. Fear of negative evaluation, peer pressure, introversion and apprehension about cultural misunderstanding combine to produce language anxiety, which functions as a cognitive block and depresses both willingness to communicate and measured achievement (Hajiyeva, 2024). Positive classroom emotion, conversely, correlates with sustained engagement and predicts outcomes independently of anxiety (Dewaele & MacIntyre, 2016). For displaced or acculturating communities the psychological burden is heavier still, since adaptation to an unfamiliar institutional culture generates stress that carries into academic performance (Baeza-Rivera et al., 2022; Sahoo & Pradhan, 2021).

1.5 The Study Setting: Wayanad and Idukki

Wayanad, the least populous district of Kerala, houses the largest tribal concentration in the state across 2,167 settlements. Its principal communities include the Paniyan, Adiyar, Kurichchan, Mullu Kuruman, Uraly Kuruman and Kattunayakan. Literacy varies sharply between them: the Kurichchan report about 78 per cent and the Kuruman about 77 per cent, while the Paniyan stand near 48 per cent and the Kattunayakan, a Particularly Vulnerable Tribal Group, near 40 per cent. Idukki, the second largest tribal district, is home to the Malai Arayan, Muthuvan, Mannan, Hill Pulaya, Palliyar and Uraly. Here too the spread is wide, from roughly 94 per cent among the Malai Arayan to about 41 per cent among the Muthuvan.

This internal heterogeneity matters analytically. Treating tribal learners as a single category obscures the fact that communities differ in landholding, occupational history, proximity to the regional language and exposure to formal schooling, and that these differences are reproduced in English attainment. The present study therefore disaggregates results by community as well as by district, and asks how far the residential school succeeds in compensating for inherited disadvantage.

2. Review of Literature

2.1 English Learning among Indigenous and Minority Learners

A consistent finding across South Asian research is that minority-language learners underperform in English not because of limited ability but because instruction is delivered in a language they are still acquiring. UNESCO (2016) estimated that a substantial share of the world's out-of-school and low-achieving children are taught in a language they neither speak nor understand at home, and argued that at least six years of mother-tongue instruction is required before a secure transition to a second medium. Cummins (2021) formalises the mechanism: conversational fluency in a dominant language develops quickly, while the academic register that schooling demands develops slowly, so learners who appear fluent may still lack the language needed for curricular content.



Indian evidence points in the same direction. Mohanty (2019) documents a double divide in which speakers of unscheduled tribal languages are disadvantaged relative to speakers of regional languages, who are in turn disadvantaged relative to those educated in English. Anderson and Lightfoot (2021) find that Indian English teachers already engage in extensive translanguaging practice but often regard it as a professional failing rather than a resource, which prevents them from using it systematically. Panda and Behera (2023) observe that tribal curricula rarely incorporate community knowledge, leaving learners unable to connect textbook content to lived experience. Affective consequences follow: language anxiety intensifies where cultural distance is greatest, and unchecked anxiety is associated with avoidance behaviour and eventual withdrawal from language study (Hajiyeva, 2024).

2.2 Residential Schooling and the Educational Outcomes of Tribal Students

Research on Ashram schools and Ekalavya Model Residential Schools generally reports positive effects on access and retention. Pandey and Kakati (2022), reviewing provision across the Sixth Schedule states, conclude that residential schooling reduces the influence of distance and seasonal migration and produces measurable gains in enrolment and continuation. Karmakar (2024), examining equity of access within the EMRS system, notes improved learning conditions relative to ordinary government schools but records persistent gaps in teacher recruitment, culturally responsive practice and transition to higher education.

Quality, however, is uneven. Swain and Roy (2024) find wide variation in Ashram school performance across Indian states and attribute it to differences in school-level resourcing, monitoring and implementation fidelity rather than to any weakness of the model itself. Panda (2017), documenting good practice in tribal education, identifies bilingual teaching materials, community participation and locally recruited teaching assistants as the features that distinguish effective institutions. Evidence specific to Kerala suggests that model residential schools raise attainment above that of comparable general schools while remaining below the levels achieved in well-resourced private and national institutions, largely because of differences in prior exposure and teacher quality (Integrated Rural Technology Centre, 2020).

2.3 Learning Strategies, Vocabulary Development and Teacher Preparedness

The strategy literature offers a route through these constraints. Oxford (2017) argues that strategic competence is teachable, that effective learners deploy combinations of memory, cognitive, metacognitive, social and affective strategies, and that strategy instruction is most productive when embedded in ordinary classroom tasks rather than delivered separately. Learners who rely on a narrow repertoire, typically rote memorisation, plateau early. This is precisely the profile reported for many tribal classrooms, where the grammar-translation method dominates and rote recall is rewarded by examinations.

Vocabulary is the component most directly affected. Nation (2022) demonstrates that meaningful comprehension requires coverage of a high proportion of running words in a text, and that growth depends on deliberate study combined with extensive meaning-focused input. Schmitt and Schmitt (2020) emphasise repeated, spaced and varied encounters, noting that incidental exposure alone is insufficient where out-of-class contact with the language is minimal, which describes the situation of residential tribal learners closely.



Teacher preparedness mediates all of this. Panda (2017) and Swain and Roy (2024) both identify the absence of training in multilingual and culturally responsive pedagogy as the principal constraint on instructional quality in tribal schools, a gap that the present study examines empirically.

3. Research Methodology

The study adopted a descriptive survey design combining quantitative and qualitative evidence within an action-research orientation. The quantitative component established the distribution of attitudes, facilities and attainment; the qualitative component, drawn from classroom observation, informal conversation and semi-structured interviews, supplied the interpretive context in which those distributions could be read.

The population comprised all students and English teachers of Model Residential Schools located in the tribal areas of Kerala. Twenty schools were selected from the districts of Wayanad and Idukki, the two districts with the largest Scheduled Tribe populations in the state. Because the accessible population was geographically bounded, a combination of cluster sampling, judgment sampling and multi-stage sampling was employed. Districts were selected purposively on the advice of education specialists and on the basis of repeated field visits; schools were then treated as clusters, and students were drawn at random within clusters. The final sample consisted of 350 students aged between 14 and 18 years, representing nine Scheduled Tribe communities, together with 60 teachers. All distributed questionnaires were completed and returned, giving a response rate of 100 per cent for both groups, an outcome attributable to in-person follow-up during school visits.

Three instruments were used. The principal instrument was a structured questionnaire, administered in two parallel forms for students and teachers, covering demographic particulars, school amenities, home and community circumstances, attitudes towards English and perceived instructional difficulties. Attitude items were scored on a four-point Likert scale and amenity items on a five-point scale. A classroom observation schedule recorded the use of English, learner participation, questioning opportunities and positive reinforcement. Semi-structured interviews with teachers, principals and hostel staff supplied qualitative depth. A Teaching Style Rating Scale was additionally circulated to principals, senior researchers and subject experts for appraisal, and their comments informed revision of the items.

Reliability was established by the test-retest method, the instrument being administered twice to teacher-educators in the study area at an interval of two months; the resulting stability coefficient was very high. Validity was addressed in two ways. Content validity was secured through expert review and supervisory guidance. Factorial validity was examined using Thurstone's centroid method, in which the highest correlation in each column of the correlation matrix was taken as the communality; the first factor accounted for 93.4 per cent of the variance and the second for 6.50 per cent, indicating that the instrument measures a single dominant construct.

Five hypotheses were formulated. H1: there is a significant relationship between innovative instructional strategies and the performance of slow learners of English. H2: the location of schooling influences performance in English. H3: the provision of internet facilities to library users, including teachers, promotes better performance in English. H4: students studying in Model Residential Schools have better proficiency in learning and writing English than other school children. H5: there is a significant relationship between learning strategies used in Model Residential Schools and the development of vocabulary skills.



Analysis proceeded through descriptive statistics, followed by chi-square tests of association, the Friedman test for ranked factors, independent samples t-tests, point-biserial correlation and one-way analysis of variance. The .05 level was adopted throughout. Permission was obtained from institutional authorities before administration, the purpose of the study was explained to participants, and responses were recorded anonymously. Two limitations should be noted. Institutional time constraints restricted the depth of interaction possible in some schools, and several rural respondents required bilingual clarification of questionnaire items, which lengthened administration and may have introduced minor variation in interpretation.

4. Results and Discussion

4.1 Profile of Respondents

Table 1 consolidates the demographic characteristics of both respondent groups. Among students, girls slightly outnumbered boys, and all participants fell within the 14 to 18 year band. Wayanad supplied 74.6 per cent of the sample, consistent with its share of the state's tribal population. The Kurichchan, historically the most socio-economically advanced of the Wayanad communities, accounted for a third of respondents, while the Kattunayakan, a Particularly Vulnerable Tribal Group, contributed only 4.3 per cent. Among teachers the sex ratio was exactly balanced, the great majority held a degree or diploma, and 83.3 per cent had more than three years of service.

Table 1. Demographic profile of student and teacher respondents

S. No.	Variable	Category/Response	Frequency	Percentage (%)
1	Age	14–18 years	350	100.0
2	Gender	Male	162	46.3
		Female	178	53.7
3	Tribal Affiliation	Paniyan	36	10.0
		Kurichchan	118	33.7
		Kurumah	42	12.0
		Kattunayakan	15	4.3
		Adiyan	50	14.3
		MalaiArayan	37	10.6



		Muthuvan	18	5.1
		Mannan	17	4.9
		Hill Pulaya	17	4.9
4	Students' Attendance	Yes	180	51.42
		No	170	48.58
5	Teachers' Attitudes	They are helpful	170	48.6
		They are sympathetic	133	37.1
		They do not pay any attention to us	30	8.6
		They are not at all helpful	20	5.7
6	Educational Incentives Received on Time	Yes	332	94.9
		No	18	5.1
7	Educational Incentives	Lump Sum Grant	60	17.1
		Scholarship	40	11.4
		Stipend	125	35.7
		Incentives for Brilliant Students	81	23.1
		Incentives for Proficiency in Sports	44	12.6
	Total		350	100.0

Figure 1 makes the compositional imbalance visible. Three communities, the Kurichchan, Adiyar and Kurumah, account for six of every ten respondents, while the two most vulnerable groups in the sample together contribute fewer than one in five. Any aggregate statement about tribal English attainment in Kerala is therefore weighted towards the relatively better-placed communities, and the position of the most marginalised learners is correspondingly understated.



4.2 Institutional Provision

Students were asked to rate nine categories of school amenity on a five-point scale. Table 2 and Figure 2 report the results. Every mean exceeded 3.90, indicating broad satisfaction, with library services rated highest and electricity lowest. The narrow standard deviations for laboratory and electricity provision suggest strong consensus, while the wider dispersion for desks and benches points to variation between institutions.

Table 2. Mean student ratings of amenities provided by the school (N = 350)

Amenity	Mean	SD	Rank
Library services	4.2356	0.5846	1
Facilities for co-curricular activities	4.1660	0.5643	2
Computer services	4.1236	0.4163	3
Teaching staff services	4.0957	0.4653	4
Desks and benches	4.0319	0.6126	5
Classrooms and buildings	4.0213	0.4231	6
Learning materials	4.0106	0.3737	7
Laboratory facilities	3.9685	0.1760	8
Electricity	3.9362	0.1700	9

Note. Five-point scale, where 5 indicates the highest level of adequacy.

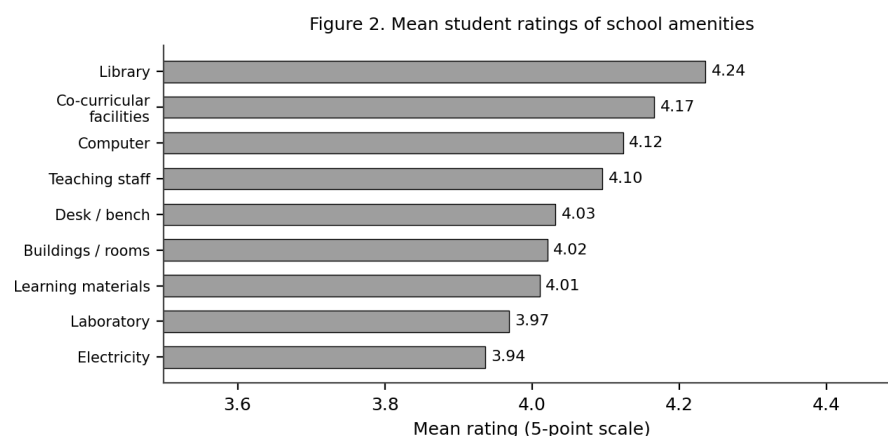


Figure 1. Mean student ratings of school amenities



These ratings are worth reading against the qualitative record. Teachers interviewed during field visits described shortages of audio-visual equipment, absence of functioning language laboratories and difficulty obtaining supplementary readers. The divergence is instructive rather than contradictory: students judge provision against the alternative available in their settlements, which is usually far poorer, whereas teachers judge it against pedagogical requirements. A favourable student rating should not therefore be read as evidence that provision is sufficient for effective language instruction.

4.3 Attitudes towards English

Table 3 and Figure 3 present mean scores on a four-point Likert scale, where values above 2.50 indicate agreement. The pattern is unambiguous and, in its way, encouraging. Students endorse the instrumental value of English strongly and reject the suggestion that they need not study it at all. What they deny is their own competence: the three lowest means in the entire set concern the ease of learning, speaking and writing the language.

Table 3. Student attitudes towards English language learning (N = 350)

Statement	Mean	SD	Interpretation
English promotes international understanding	4.17	0.923	Strongly agree
Speaking in English is difficult	4.09	0.781	Strongly agree
English is useful for the job market	4.01	0.747	Strongly agree
English is essential for operating a computer	4.01	0.664	Strongly agree
I like learning English through strategies	3.96	0.727	Agree
Pronunciation of English is difficult	3.73	0.854	Agree
Knowledge of English builds self-confidence	3.70	0.850	Agree
I like English	3.62	0.729	Agree
English is an easy subject	3.55	0.654	Agree
I like my English teacher	3.52	0.739	Agree
Hesitation to speak English is a major problem	3.04	0.979	Agree
English is not difficult for me	2.84	0.916	Disagree
I find English easy to speak	2.69	0.864	Disagree
I find English easy to write	2.39	0.717	Disagree



Statement	Mean	SD	Interpretation
English is not an interesting subject	2.38	0.951	Disagree
I find English easy to learn	2.03	0.167	Disagree
Students need not study English at all	1.65	0.825	Strongly disagree

Note. Four-point scale: 1 = fully disagree, 2 = disagree, 3 = agree, 4 = fully agree.

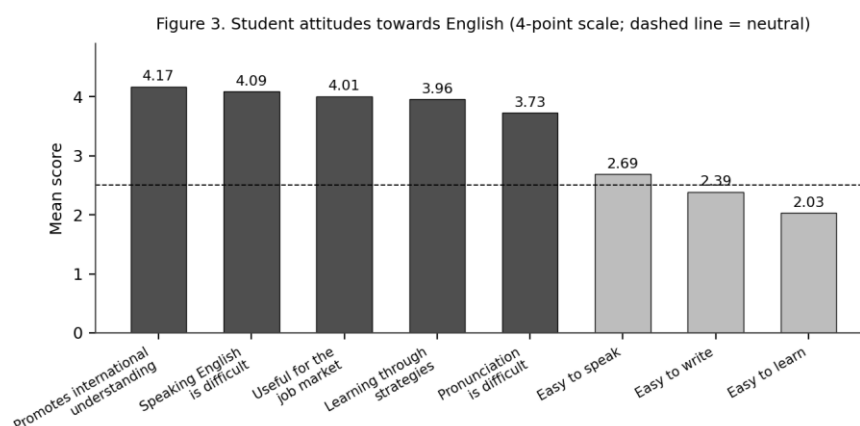


Figure 2. Selected student attitude means towards English

This combination of high motivation and low self-efficacy is diagnostic. It indicates that the obstacle in these classrooms is not indifference but a gap between aspiration and perceived capability, which is the condition under which language anxiety typically develops (Hajiyeva, 2024). The high mean for hesitation to speak, taken together with the finding that 78.3 per cent of students report difficulty in understanding English and that all respondents agreed the subject should be taught in a clearer and simpler manner, locates the problem squarely in classroom delivery rather than in learner disposition.

4.4 Constraints Reported by Students and Teachers

Table 4 summarises the barriers reported by students. Distance from home was the most frequently cited constraint, followed by the domestic consequences of poverty. Notably, only 4.3 per cent had been asked by parents to discontinue schooling, and 87 per cent reported active parental interest in their progress, which qualifies the common assumption that tribal families are indifferent to education.

Table 4. Constraints on English learning reported by students (N = 350)

Constraint	Yes (f)	Yes (%)	No (f)	No (%)
Distance from home to school is a constraint	296	85.0	44	15.0
Alcohol use and quarrelling at home affect study	300	85.7	50	14.3



Constraint	Yes (f)	Yes (%)	No (f)	No (%)
Difficulty in understanding English	274	78.3	76	21.7
Economic factors constrain education	196	56.0	144	44.0
Receive adequate help from teachers	226	64.6	124	35.4
Parents concerned about academic progress	305	87.0	45	13.0
Educational incentives received on time	332	94.9	18	5.1
Inadequate learning is affecting education	350	100.0	0	0.0
Parents asked child to discontinue schooling	15	4.3	335	95.7

Teachers were asked to rank five categories of factor said to impede tribal pupils' progress in English. The Friedman test reported in Table 5 confirms that these factors are not perceived as equivalent. Learner attitude and the present curriculum received the highest mean ranks, home-related factors the lowest. Supporting frequencies bear this out: 70 per cent of teachers identified customs and traditions as a cultural barrier, 58.3 per cent identified an inferiority complex linked to tribal identity as the principal social barrier, and 51.7 per cent of those who considered the current curriculum unsuitable attributed this to a mismatch between syllabus content and tribal culture. Every teacher in the sample agreed that educators in tribal areas require specific training to address language barriers, although 23.3 per cent had received no such preparation.

Table 5. Friedman test of factors affecting tribal pupils' understanding of English (N = 103)

Factor	Mean rank	Statistic	Value
Attitude towards English	3.50	N	103
Present curriculum	3.29	Chi-square	38.524
Cultural factors	2.85	df	4
Economic factors	2.76	Asymptotic significance	.000
Home-related factors	2.61	Decision	Significant

Note. A higher mean rank indicates a factor perceived as more obstructive.

4.5 Testing of Hypotheses

H1 proposed a significant relationship between innovative instructional strategies and the performance of slow learners. Table 6 reports the observation-based analysis. Although the strategies were widely present in classrooms, with roughly ninety-five per cent of schools permitting learners to ask questions and express

themselves, none of the five strategy categories produced a *t* value reaching significance. The hypothesis is therefore not supported.



Table 6. Innovative strategies and performance of slow learners of English (H1)

Innovative strategy	N	Mean	SD	SEM	t	Remark
Use of English language encouraged	335	186.95	21.006	2.06	1.12	Not significant
Both sexes involved in activities	347	189.25	20.258	2.01	1.08	Not significant
Opportunity to speak and ask questions	345	187.60	22.051	2.34	1.09	Not significant
Use of positive reinforcement	340	186.23	21.650	2.06	1.03	Not significant
Use of verbal activities to enhance learning	346	189.73	22.013	2.31	1.00	Not significant

Note. Critical value at the .05 level is 1.96. SEM = standard error of the mean.

The interpretation is not that such strategies are ineffective but that their presence is superficial. Observation showed that teachers regularly asked pupils to introduce themselves in English and offered praise and applause, yet rarely required sustained English use across the lesson. Encouragement without extended practice does not generate measurable gain, which is consistent with the strategy literature's insistence that instruction must be systematic rather than incidental (Oxford, 2017).

H2 proposed that the location of schooling influences English performance. Table 7 cross-classifies the 350 students by district and by the proficiency category assigned to their community. The association is significant, chi-square (1, *N* = 350) = 27.50, *p* < .001, with Cramer's *V* = .280, indicating a moderate effect. Idukki students were disproportionately located in the average category. The hypothesis is accepted.

Table 7. Chi-square test of school location and performance in English (H2)

District	Average (f)	Below average (f)	Total	Expected average	Expected below
Wayanad	128	133	261	149.14	111.86
Idukki	72	17	89	50.86	38.14
Total	200	150	350	200.00	150.00
Chi-square = 27.50	df = 1	<i>p</i> < .001	Cramer's <i>V</i> = .280	Decision	H2 accepted

Two mechanisms plausibly account for this. Wayanad contains both the largest and the most linguistically distant communities, including the Kattunayakan, whose dialect draws on four Dravidian languages and whose

settlements are frequently forest-bound. Idukki's tribal population includes the Malai Arayan, a community with high literacy, sustained missionary and state educational contact and Malayalam-proximate speech. Location, in other words, is not simply geography; it indexes the linguistic and historical position of the communities that a school serves.

H3 proposed that internet provision for library users promotes better performance in English. Table 8 pairs the proportion of library users with internet access in each participating institution against the proficiency category recorded for its dominant community. The point-biserial correlation is small and negative, $r = -.324$, $t(7) = -0.91$, $p > .05$, and does not approach significance. The hypothesis is rejected.

Table 8. Internet facility for library users and performance in English (H3)

School location	Internet access (%)	Performance category
Wayanad	71	Average
Wayanad	61	Below average
Wayanad	44	Average
Wayanad and Malappuram	50	Below average
Wayanad	47	Average
Idukki	36	Average
Idukki	58	Average
Idukki	62	Below average
Idukki	48	Average
Point-biserial $r = -.324$	$t(7) = -0.91$, $p > .05$	H3 rejected

This null result deserves care rather than dismissal. Connectivity is a necessary condition for digital learning but plainly not a sufficient one. Field observation indicated that where bandwidth existed, digital literacy among both students and library staff was limited, most accessible content was in English and therefore inaccessible to the learners who most needed it, and no structured programme linked library access to the English curriculum. Access without mediation produces no measurable gain, a conclusion that mirrors broader findings on technology in under-resourced schools.

H4 proposed that students in Model Residential Schools achieve better proficiency in learning and writing English than students in other schools. Table 9 reports the comparison. The difference is large and highly significant, $t(343) = 11.72$, $p < .001$, with Cohen's $d = 1.26$. The hypothesis is accepted.



Type of school	N	Mean	SD	df	t	p	Cohen's d
Model Residential Schools	180	49.40	10.31	343	11.72	< .001	1.26
General / public schools	165	34.08	13.85				

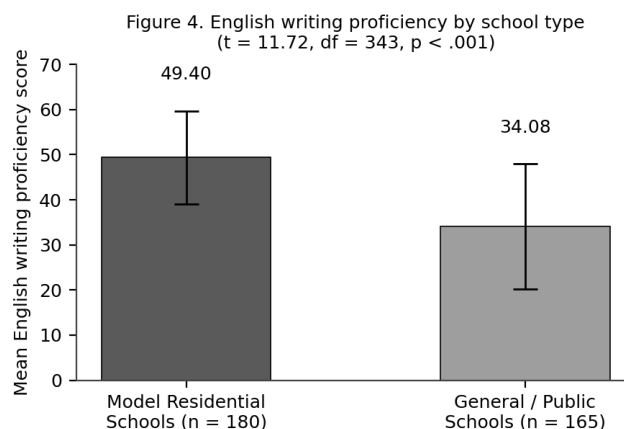


Figure 3. English writing proficiency by type of school

The residential environment supplies continuous contact with peers and teachers, removes the daily travel burden that 85 per cent of students identified as a constraint, and offers structured study time that the home setting cannot provide. The smaller standard deviation in the residential group is as telling as the higher mean: the institution compresses variation, lifting weaker learners rather than merely extending the range at the top. This corroborates the comparative findings of Pandey and Kakati (2022) and Karmakar (2024). It should nonetheless be read with restraint, since the residential mean of 49.40 remains modest in absolute terms and grammatical accuracy, tense control and subject-verb agreement continued to be weak in the written scripts examined.

H5 proposed a significant relationship between the learning strategies used in Model Residential Schools and the development of vocabulary skills. Table 10 reports a one-way analysis of variance of vocabulary strategy scores across the nine communities. The effect is significant, $F(8, 329) = 7.80$, $p < .001$, with eta squared = .159, indicating that community membership accounts for approximately sixteen per cent of the variance. The hypothesis is accepted.


Table 10. One-way ANOVA of learning strategies and vocabulary skills by community (H5)

Community	N	Mean	SD	Source	SS	df	MS	F
Paniyan	36	35.71	26.20	Between groups	21619.47	8	2702.43	7.80
Kurichchan	51	34.63	22.51	Within groups	113974.94	329	346.43	
Kattunayakan	31	19.50	18.45	Total	135594.41	337		
Adiyan	45	17.28	16.61	p	< .001			
Muthuvan	42	17.23	16.61	Eta squared	.159			
Malai Arayan	40	16.41	17.34	Decision	H5 accepted			
Kurumah	44	16.28	16.24					
Hill Pulaya	26	16.24	12.45					
Mannan	23	15.19	13.50					

Note. Grand mean = 21.60. Higher scores indicate broader use of vocabulary learning strategies.

The dispersion behind this result is substantial. The Paniyan and Kurichchan groups record means above 34, more than twice those of the remaining seven communities, and their standard deviations are correspondingly wide. Interview evidence suggests that most learners rely on one or two strategies only, predominantly rote memorisation, and that this dependence is reinforced by examinations which reward recall rather than use. Memory strategies are not in themselves defective, but a repertoire confined to them produces recognition without production, which is exactly the profile displayed in Table 3, where learners agree that they like English while denying that they can speak or write it. Broadening the repertoire towards contextual guessing, word journals, reading aloud, word walls, role play and structured group discussion is the most direct pedagogical implication of this finding (Nation, 2022; Schmitt & Schmitt, 2020).

5. Conclusion

This study set out to examine English language learning among students of Model Residential Schools in the tribal areas of Wayanad and Idukki. Three of the five hypotheses were supported. Model Residential Schools deliver a clear proficiency advantage over general schools, school location is significantly associated with attainment, and community membership significantly conditions the use of vocabulary learning strategies. Two hypotheses were not supported: innovative classroom strategies, as currently practised, did not produce measurable gains among slow learners, and internet provision alone did not predict performance.

Taken together, the results describe an institution that succeeds on the dimensions it was designed to address and falls short on the one it was not. The residential model neutralises distance, stabilises attendance, supplies amenities that students rate favourably and compresses the variation in attainment that characterises tribal



schooling elsewhere. What it has not yet altered is the language regime inside the classroom. Instruction continues to run through Malayalam and translation, learners approach English through a second language rather than their first, and assessment privileges written recall over the oral competence that these communities bring in abundance. The result is the pattern documented throughout this paper: strong instrumental motivation combined with low confidence, favourable attitudes combined with self-reported incapacity, and encouragement in the classroom that is real but too thin to change outcomes.

Four implications follow. First, teacher preparation must include multilingual and culturally responsive pedagogy; every teacher in this sample endorsed the need, yet nearly a quarter had received no such training. Recruiting from within indigenous communities, or appointing mentor teachers familiar with community dialects, would materially reduce the distance between teacher and learner. Second, strategy instruction should be embedded in routine classroom work rather than assumed, with explicit attention to contextual inference, spaced revision and oral production. Third, curriculum and assessment require contextualisation: syllabus content that draws on forest ecology, oral narrative, song and craft would convert the learners' existing expertise into a resource for language learning, and oral assessment components would allow that expertise to be demonstrated. Fourth, digital provision must be accompanied by digital literacy training, localised bilingual content and structured integration with the English curriculum, since connectivity by itself yielded no advantage in these data.

The limitations of the study should temper its conclusions. The sample is drawn from two districts and is weighted towards the more advantaged communities; the institution-level analysis underlying H3 rests on a small number of units; and the proficiency categories used in the location analysis are coarse. Future work would benefit from longitudinal tracking of individual learners, direct measurement of the four language skills separately, and controlled trials of mother-tongue-based multilingual instruction within the residential setting. The broader finding, however, is unlikely to be disturbed. Residential provision has solved the problem of access. The task now is to solve the problem of language, and that will require changing what happens in the classroom rather than only where the classroom is situated.

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