

Pakistan English language policy alignment with IDLE-informed policy model

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Article Info

Article history:

Received Jan 17, 2026

Revised Mar 9, 2026

Accepted Mar 28, 2026

Keywords:

Education reform

IDLE

Language policy

Learner autonomy

Pakistan

ABSTRACT

English controls academic and professional access in Pakistan, yet the National Education Policy Development Framework (NEPDF) 2024 completely ignores informal digital learning of English (IDLE), which refers to self-directed learning through digital tools: WhatsApp, YouTube, and chatbots. No prior study has examined this policy-practice gap within Pakistan's post-2024 framework, particularly across urban and rural communities in Khyber Pakhtunkhwa, Punjab, and Sindh. This qualitative case study gathered perspectives from 20 undergraduate students, 10 teachers, and 5 policymakers through semi-structured interviews, focus groups, and content analysis of NEPDF 2024 and provincial policy texts, analyzed using NVivo-facilitated STAP thematic analysis. Findings show that students and teachers actively use IDLE tools while policymakers remain largely unaware. The IDLE-informed policy model (IIPM), grounded in connectivism, sociocultural theory (SCT), and learner autonomy, is proposed as a practical policy framework that incorporates low-bandwidth tools like WhatsApp to expand access for under-resourced learners. This study contributes to educational evaluation by assessing the alignment between Pakistan's national language policy and grassroots IDLE practices, producing a transferable policy evaluation model for global south English as a foreign language (EFL) context.

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1. INTRODUCTION

Pakistan's education system makes English a mandatory subject from Grade 1 onward. It is often the language of instruction for science and mathematics and serves as the access point to tertiary education and the academic market [1], [2]. Digital technologies are transforming how we approach education, and mobile technologies and the internet are opening new opportunities in language learning. Self-directed, interest-driven English learning through YouTube, WhatsApp, and language apps is known as informal digital learning of English (IDLE). It is now recognized as both a global and local norm [3], [4]. In Pakistan, students are being drawn to IDLE outside the four walls of the classroom, learning English through social media and apps [5]. Yet, the existence of such practices is barely reflected in national language-in-education plans, including the National Education Policy Development Framework (NEPDF), which is therefore highly disconnected from classroom practices [6].

Very similar gaps between policies and practices, as well as digital divides, persist in South Asia and Southeast Asia. English proficiency is key to employability; however, informal digital learning (IDLE)

remains highly marginalized in formal curricula. Urban-rural disparities in India and Bangladesh are restricting access to IDLE for low socioeconomic status (SES), thus, the inequalities are getting deeper due to the increasing number of app-based English aspirations [7], [8]. The situations of Indonesia and Vietnam are not much different. Only the most privileged students are able to use social media and mobile tools for self-directed learning outside their strict school policies, which highlights the regional demand for formal IDLE integration, a gap this study addresses by evaluating Pakistan's post-2024 policy alignment and proposing the IDLE-informed policy model (IIPM) for global south English as a foreign language (EFL) contexts [9], [10].

The research problem stems from the misalignment between Pakistan's language-in-education policies and the grassroots emergence of IDLE practices among learners. According to NEPDF 2024, the tendency towards contextualized digital innovations is required, but without action stages to adopt informal digital learning practices, i.e., using mobile apps and social media like Duolingo [6]. This policy silence stands in stark contrast to the grassroots approach to digitization, in which teachers and learners follow instructions to research and practice digital tools even outside the formal, sanctioned realms, oftentimes with minimal pedagogical support [11]. This silence limits English promotion, a precondition for academic excellence and employability in Pakistan [5]. Second, it deepens educational inequalities [7]. Only urban, high-SES learners with reliable devices and internet engage in IDLE successfully. Third, the absence of policy support interferes with building of 21st century skills required in the current more globalized world, which include digital literacy for communication across the globe [12]. The absence of policy support burdens teachers who must integrate digital tools without guidance. Students face uneven outcomes due to unsupported, unstructured digital engagement [13].

Against this backdrop, IDLE gives students control over when and how they study English. This flexibility reduces foreign language classroom anxiety compared to conventional settings [14], [15]. Research shows how informal digital settings, social networking sites (SNSs), encourage high willingness to communicate (WTC) among learners, as it is a significant factor in second language acquisition (SLA) [16]. However, without policy support, learners cannot maximize IDLE benefits, and errors may go uncorrected [10]. The digital divide compounds this issue. Only 35% of Pakistani households have reliable internet, primarily disadvantaging rural and low-income students [12], [17].

This study makes a distinct contribution to the field by being among the first to examine the policy-practice gap between IDLE and formal language-in-education policy, specifically within Pakistan's post-2024 NEPDF context. Unlike prior studies focusing on IDLE outcomes in isolation, this research triangulates learner, teacher, and policymaker perspectives. It proposes the IIPM, a locally grounded framework for Global South EFL contexts. This positions the study at the intersection of language policy research, digital pedagogy, and education equity. This research paper thus aims to evaluate how IDLE may be integrated into national and provincial language-in-education policies in Pakistan to address this policy-practice gap and advance learner autonomy. These questions are framed from a policy evaluation perspective, focusing on policy recognition, implementation gaps, and adaptive reform. The research is anchored in the following questions:

- How do current language-in-education policies in Pakistan recognize or support the incorporation of IDLE in English language teaching?
- What are the opportunities and challenges faced by teachers and learners in embedding IDLE practices alongside formal English instruction?
- How can national language policy be adapted to effectively harness IDLE for improving English proficiency and learner autonomy?

These questions were intended to assess policy penetration and reflect stakeholders' views. They also propose a framework for policy changes. Attention to these aspects indicates that the study evaluates pathways for aligning the educational policies of Pakistan with the requirements of digitally enhanced learning, with the assistance of indigenous best practices and international experience [18], [19].

This study addresses a clear research gap: no prior work has triangulated student, teacher, and policymaker perspectives to examine IDLE's policy-practice disjunction specifically within Pakistan's NEPDF 2024 context. Its novelty lies in the IIPM, which merges four theories to offer a locally grounded, actionable framework for Global South EFL policy reform. Connectivism helps explain IIPM's networked learning aspect, where digital tools like WhatsApp extend knowledge beyond the physical classrooms. Sociocultural theory (SCT) underpins the peer scaffolding component, as it is central to teacher-guided, IDLE-mediated practices [20]. Learner autonomy theory is the theoretical basis IIPM uses to argue for English as a self-directed learning goal through the use of an app-based learning approach [21]. Finally, connectivism places policy as the macro-system that needs to be in line with the learners' micro-level IDLE practices [22], [23] to bridge the gaps in Global South policy research.

2. THE COMPREHENSIVE THEORETICAL BASIS

2.1. Introduction to IDLE

The term IDLE was introduced by Lee [3] and embraces any type of digital experience (streaming, social media chats, video games, language apps), all involving the agency of the learners. It is the merger of extramural computer-assisted language learning (CALL) with truly informal practices, characterized by the use of apps such as WhatsApp, YouTube or Duolingo, and which is characterized by little to no teacher involvement [14]. Further, its 24/7 access has also stimulated the behavior of learning and enabled students to engage other outside the four walls of the classroom [4].

2.2. Language-in-education policy in Pakistan

The tension between English and Urdu has long shaped language in Pakistan over the years, because the issue became internalized as the subject to be taught and as the vehicle of learning science and mathematics in schools at early levels and higher years [24], [25]. Following Pakistan's National Education Policy (NEP) 2009 and its provincial implementation in Punjab, English was introduced from the early grades, and policies later specified a shift to English-medium instruction from Grade 4 onward [26]. However, in their opinion, there is little to no mention of informal digital learning in these policies and that the federal and provincial policies have remained silent about the English-based learning carried through the concept of technology [6].

Contextualized digital innovations are guaranteed in the NEPDF 2024. However, there is no planning according to which the tools such as an app or even social media are to be included [6]. Approaches like the digital Pakistan policy (2018) make broad commitments without taking any steps towards actual engagement with informal learning of digital English in the country [27], [28].

2.3. Pakistan's problems and prospects of IDLE

One of the major barriers is insufficient digital skills. Not every Pakistani English teacher is sufficiently knowledgeable about the methods of organizing the informal learning based on technologies [29], [30]. It was revealed during the transition to online learning that followed the COVID-19 pandemic: both faculty and students struggled to operate with basic tools [31]. Furthermore, the digital divide persists; 35% of the Pakistani households have reliable internet, leaving rural students without consistent access [5]. The difference is leading to low educational achievement even urban students lose IDLE access in areas with poor connectivity. Pakistani learners are not waiting for policy direction; however, on WhatsApp and YouTube, they actively build vocabulary, motivation, and the peer network, the key pillars of IDLE [2], [4], [28].

2.4. Policy-practice gaps

The NEPDF 2024 addresses the call to the system to give contextualized digital transformations but fails to say anything on integration of IDLE in teaching English [6]. The structural issue in this case is bureaucratic inertia and fragmented government to drag policy into the future [32], and funding allocation, which is biased towards hardware compared to teacher preparation in digital pedagogies [33]. The policymakers are also less aware of IDLE research [4]. However, these are not continuous and sustainable when the state does not assist them [2].

2.5. Theoretical framework

The socio-cultural theory established by Vygotsky [20] is a sufficient background behind which the interactive nature of IDLE may be explainable. Rather than emphasizing individual effort, this framework views learning as socially mediated. Cultural tools, peer scaffolding, and contextual affordances all shape the learning process. This aligns with Vygotsky's zone of proximal development. Learning is most effective when a learner receives support slightly beyond their current capability. As shown in Figure 1, the theoretical framework positions SCT, connectivism, and learner autonomy as the guiding theories through which stakeholders: learners, teachers, and policymakers, operate within and interact with the broader context of digital platforms, institutional support, and policy environment.

What is herein defined as learner autonomy construct is not less important in this study because this construct marks the philosophical core in IDLE. Benson [21] argues that autonomy means controlling one's learning within given constraints. In Pakistan's rigid institutional settings, this form of contextualized autonomy is especially significant [4], [21].

Taken together, these findings point to broader patterns, which are synthesized in the IIPM. These theoretical strands converge in the IIPM of IDLE integration that is a learner-centered approach designed to address the policy-practice gap in digital learning of English. It is grounded in connectivism and describes that knowledge is a product of networks of people, tools as well as communities. The IIPM functions as a policy evaluation framework. It translates informal learning practices into assessable policy dimensions.

This enables policymakers to diagnose misalignment and design targeted interventions. As illustrated in Figure 2, the IIPM positions learners at the center of a dynamic ecosystem. Educators, policymakers, and researchers interact through structured feedback loops, with IDLE practices bridging observed digital behaviors and policy reform.

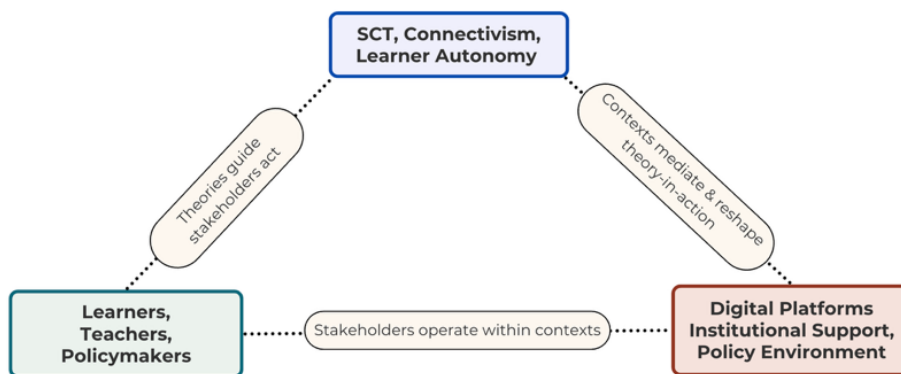


Figure 1. Theoretical framework

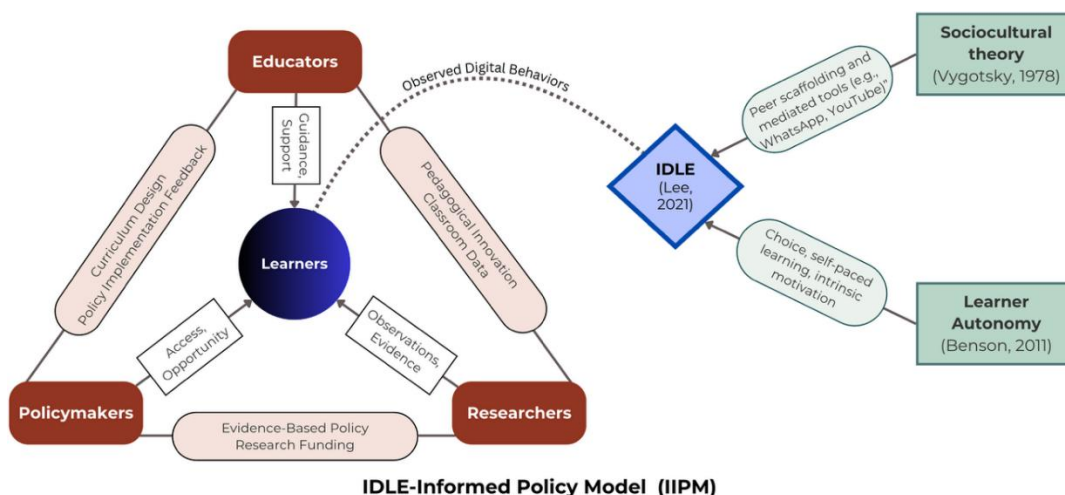


Figure 2. IIPM for Pakistan’s English language education

3. METHOD

The study adopts an interpretivist paradigm and qualitative design. This allows for understanding the subjective experiences of participants within their own cultural settings [34]. The study uses the Pakistani educational system as a bound system, allowing for an in-depth investigation of the integration of IDLE within its specific language and policy context [35]–[37].

Purposeful sampling targeted participants meeting specific inclusion criteria: students actively using at least one IDLE tool (YouTube, WhatsApp, or Duolingo) for English study; teachers with a minimum of one year of digital tool integration experience; and policymakers holding active roles in provincial or federal curriculum development [38]. The snowball technique was also used to generate further interviewees, namely policymakers, who may not be readily available [39], [40]. Our sampling approach is consistent with research examining language policies and digital learning that have stressed the significance of stakeholder diversity [28], [36], [39]. Table 1 presents a summary of participant demographics, including group, gender, age range, and contextual notes [31], [41].

To facilitate triangulation and strengthen the reliability of the findings, the study analyses both interviews and policy documents. Policy texts were analyzed (as critical documents) including the NEP 2024 and provincial language policies, to compare official position on IDLE and digital learning. Explicit and implicit references to digital tools and informal learning within policy frameworks were identified using content analysis [42]. Semi-structured interviews with teachers and policymakers explored questions such as:

“how do you currently incorporate digital tools in English instruction?” and “what institutional barriers prevent you from adopting IDLE practices?” Focus groups with students documented engagement with tools like YouTube and WhatsApp. These techniques were selected due to their efficacy in other studies [24], [29], that used interviews for examining perceptions of digital learning. Interviews were audio-recorded with consent and transcribed, providing a rich set of data for analysis.

Table 1. Participants’ demographics

Participant group	Number (n)	Gender (M/F)	Age range	Additional notes
Students (undergraduates)	20	9M/11F	18–24	The 12 from urban, 8 from rural; enrolled in English language programs.
Teachers (lecturers/school teachers)	10	6M/4F	28–45	Average 9 years teaching experience; mix of public and private institutions.
Policymakers (officials, curriculum developers)	5	4M/1F	35–52	Roles in provincial/federal education bodies; policy and curriculum units.
Total(n)	35	19M/16F		

Data analysis employed the systematic thematic analysis process (STAP), as shown in Figure 3. It extends Braun and Clarke’s conventional thematic analysis by adding an audit trail, reflexivity checks, and cross-data validation steps. This makes it more rigorous for policy-oriented multi-stakeholder research [43]. Familiarization with the data, initial coding, identifying themes and refinement of the themes were part of a dynamic to ensure that themes were coherent and relevant. For the policy documents, content analysis was applied to identify policy language aligned with STAP criteria [42]. Data were categorized and coded using NVivo software, which facilitated systematic organization and retrieval of coded data. This two-track approach enabled a thorough analysis of both policy documents and narratives, which is in line with the study’s objective to connect policy and practice. Trustworthiness was established using four criteria. These were credibility, transferability, dependability, and confirmability [44]. The process is illustrated in Figure 4.

This study conforms to the principles outlined in the Declaration of Helsinki, and ethical approval was obtained from the Institutional Review Board of each institution, and informed consent was obtained for all participants who were informed of the purposes, their rights, and the use of the data in this study. To ensure confidentiality and anonymity, data were anonymized and secured, and remained confidential in conformity with research ethics [45]. Participants were guaranteed anonymity, which enabled high levels of trust, and candid discussions of views and beliefs.

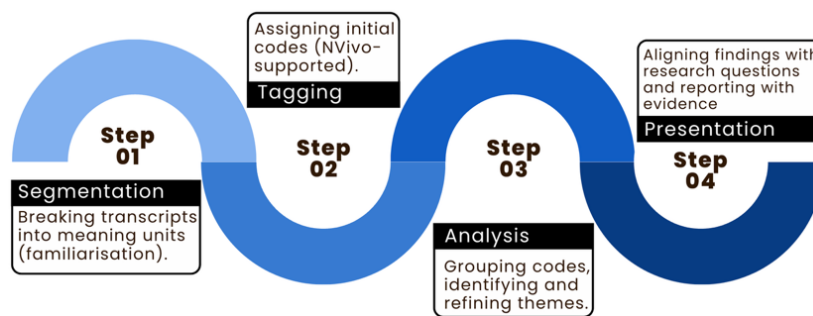


Figure 3. STAP Workflow for data analysis



Figure 4. Strategies to ensure trustworthiness

The sample size is justified by information power. Each participant was purposively selected for study-relevant experience. Given the study’s evaluative aim and stakeholder diversity, depth of insight was prioritized over sample size. To ensure trustworthiness, transcripts were returned to eight participants for member checking, and both authors independently coded 20% of the data, reaching strong intercoder agreement before proceeding. Self-reported data may introduce social desirability bias. Additionally, the context-specific nature of the study may limit generalizability. To address these concerns, the study employed triangulation of data sources to enhance trustworthiness of the findings [38]. The interpretivist qualitative methodology allows for a richer examination of policy-practice gaps and of the experiences of stakeholders.

4. RESULTS AND DISCUSSION

This section moves from findings (4.1–4.3) to interpretation (4.4) and policy implications (4.5), as shown in Figure 5. Pakistan’s policy-IDLE mismatch stems from bureaucratic resistance, ideological distrust of informal learning, and limited knowledge of digital pedagogy, as reflected across all three research questions, as seen in Table 2. Students feel empowered by IDLE; teachers feel blocked by institutions; policymakers feel peripheral. The IIPM brings these voices together, bridging evidence and reform.

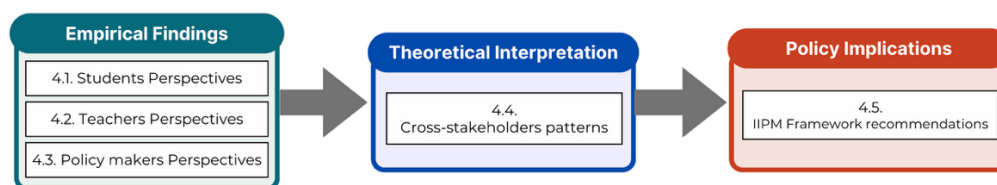


Figure 5. Analytical structure of chapter 4 (results and discussion)

Table 2. Major themes from interviews

Theme	Student quote example	Teacher quote example	Policymaker quote example
Learner autonomy	“I study English on Duolingo...”	“WhatsApp groups work better...”	“NEPDF mentions digital innovation...”
Policy–practice gap	“Teachers don’t recognize our...”	“Policy treats us like we’re in 2005”	“Budget focuses on hardware...”
Infrastructure	“Hard when internet stutters...”	“No internet in villages...”	“ICT labs and coding emphasized...”
Need for training	—	“Digital Competency Standard is just on paper.”	“We’re drafting revision...”
Pilot and innovation	—	“I went to a TeleSchool webinar...”	“Pilot districts tested blended modules.”

4.1. IDLE-student experiences

4.1.1. Autonomy and motivation in the learner

The students repeatedly stated that self-directed digital learning was a form of empowerment that made them remain motivated. As a learner said, “I can feel I am managing my own self-development when I learn English on YouTube late at night,” which says much about the flexibility of IDLE. These descriptions match well with the fact that Lee [3], [4] explains that informal digital spaces sustain autonomy enabling learners to exercise choice over content, pace, and tools. According to students, WhatsApp study groups were a type of personalized learning community, “when I am absent, my classmates send me voice messages with corrections about my mistakes.” Peer-driven scaffolding strengthens language learning and builds confidence. Learners engage in language negotiation and receive immediate feedback in non-formal settings. This focus on choice and community underscores the human factor, which is frequently ignored in the top-down curricula. The voices of learners put to the fore also show that autonomy in IDLE is not only some ideal in the abstract but instead a way of life.

4.1.2. Accessibility and inequity

Although most students are adopting IDLE, there exist sharp gaps in the accessibility of devices and connectivity. A respondent complained, “half of my class do not have access to our WhatsApp group due to the lack of smartphones,” and this is how socioeconomic realities influence digital inclusion. One of them highlighted, “when the internet is down at my village, I would be deprived of English tutorials days to come, which shows the lapses in infrastructure in villages.” Policy must differentiate: broadband expansion

addresses access; teacher upskilling tackles use; IIPM curriculum integration empowers transformative IDLE. Studies have still shown that just about 34% of homes can boast of reliable internet connectivity which disadvantages remote learners even further. These testimonies illustrate that the promise of IDLE is contingent on fair infrastructure which is yet to be attained in Pakistan. This manifests as a three-tier digital divide. First, the access divide, where rural learners lack devices or internet, as reflected in the testimony, *“internet down at my village.”* Second, the use divide, where connectivity exists but teachers and learners lack the skills for effective IDLE engagement due to insufficient training. Third, the empowerment divide, where transformative autonomy, such as peer scaffolding via WhatsApp, remains accessible only to more privileged learners. Such measures are necessary to ensure that attempts to utilize the IDLE risk do not exacerbate but alleviate existing educational disparities. These three tiers reveal a structural misalignment between policy intent and classroom-level digital realities.

4.1.3. Peer support and informal scaffolding

The students pointed out the role of peers several times in mediating language development. There was also peer-to-peer vocabulary acquisition as one student used English subtitles sent to him by a friend via YouTube clips and discussed new words every day. The other response was, *“at our WhatsApp group we record reading aloud then we correct the pronunciation of each other.”* These exercises are in line with Lev Vygotsky linguistic or SCT that uses social interaction as the core element in learning. Informal electronic worlds are therefore transformed into areas of proximal learning in which more skilled peers steer learners through co-constructed meaning. In addition, this interaction creates a supportive community which breaks the loneliness that is common in low resource rooms. This type of scaffolding is not provided in textbooks and school syllabus but flourish in online peer networks. These grassroots practices reveal what formal policy has yet to recognize: social interaction is central to language acquisition.

4.2. Views of teachers about IDLE

4.2.1. Lack of institutional support

Instructors in both the public and semi-state sector schools voiced their frustration several times by mentioning the empty enactment of policy documents. Although the national frameworks like the digital competency standard refer to professional development and digital pedagogy, the real situation elsewhere is different. One of the teachers noted the following, saying that, *“there was form, digital skills information that they asked us to complete, (however), no training was received after.”* The other one replied, *“it is as though they want us to check the boxes, rather than learn something new.”* This contradiction is not only bureaucratic; it has a practical implication in the classroom. The teachers should incorporate IDLE tools, but they do not get technical or conceptual orientation. These accounts confirm a systemic gap between policy language and institutional practice.

4.2.2. Grassroots innovation vs formality-binding

A lot of teachers are not waiting to be directed to innovate, they are already innovating, usually in an unpublicized, and occasionally tentative way. Some would share the examples of how they modified WhatsApp to conduct vocabulary tests, video discussion and corrections in real-time. One of the teachers confessed, stating, *“I would send writing prompts through WhatsApp but was advised that it is not among the official platforms,”* and another teacher said, *“We have tried to introduce an app that organizes a quiz, but it was blocked by the school because it was not mentioned in the plan of the year.”* Such limitations, that are usually intended to be beneficial, kill creativity. Teachers adapt to ground realities: students share devices, have limited bandwidth, and keep unpredictable schedules. Yet, these adaptations conflict with rigid policy demands requiring approved platforms and outdated software.

4.2.3. School level barriers in infrastructure

Poor infrastructure is one of the biggest challenges of successful implementation of IDLE particularly in the rural and semi-urban areas. These technical limitations make it almost impossible even to the teacher who is eager to utilize digital tools. Some of them stated that the internet gets cut off after 12pm daily, *“the internet goes off after 12pm each day, what do I do with YouTube then,”* asks one rural teacher; another one replied, *“We have one damaged PC and fifty learners, I use my phone more than what the school provides.”* This is not an isolated case. National assessment data and Asian Development Bank (ADB) reports show that a large proportion of schools in Pakistan have poor or no connection or rely on insecure, and privately funded, networks. Another teacher told me about, *“We have no projectors even speakers and they require us to prepare multimedia lessons.”* Such mismatches between the imagined and the real bring massive pressure and hamper creativity to a great extent. Infrastructure gaps thus remain the most immediate barrier to IDLE implementation in underserved Pakistani schools.

4.3. Insights on the policymakers

4.3.1. IDLE regarded as peripheral

Policymakers frequently mention digital innovation, yet IDLE remains absent from formal plans. As one senior official admitted to me, he writes in his NEPDF 2024, the need to have interactive whiteboards, ICT laboratories but does not mention WhatsApp or YouTube as language learning tools. One other policy expert confessed, “*We are dealing with IDLE as a second thought, peripheral activity, not as our main plan of action.*” This excludes a strongly centralistic attitude, instructions only move down, the bottom-up practices, where students and teachers discover the full potential of apps and social media, are not sought after or justified. As one civil servant noted, “*We are oriented to national curricula and exams; the informal learning is an aspect that does not exist in our system.*” The result is a policy environment driven by top-down mandates. Emergent, context-sensitive solutions remain invisible to formal systems. This top-down orientation reflects a structural blind spot in Pakistan’s current policy architecture.

4.3.2. Planning gaps and budget constraint

When policymakers are enthusiastic about using technology, it is clear from the records that money is spent overly on hardware, instead of people. One of the finance officers admitted, “*our most recent budget did not allow spending on computer labs or on teacher pedagogical training in digital lessons.*” Another one said, “*We have sufficient numbers of projectors in the school in urban regions but there is no provision of workshops about how to use social media or AI as a teaching tool.*” Such problems are stressed by UNESCO in its e learning readiness report on uil.unesco.org: in most of the countries, infrastructure is financed, but no attention is paid to professional development. One policy maker lamented, “*We bought tablets to the rural schools, yet the teachers refused to take them home since they had not been trained.*” This first hardware mindset does not consider the necessity of educators in mediating digital learning. Unless capacity building and continued support budgets are allocated and earmarked, the teachers are ill equipped to utilize the IDLE resources.

4.4. Theoretical interpretation: inter stakeholders dynamics

Across all three stakeholder groups, common aspirations and persistent disengagements emerge. Students underline autonomy and peer scaffolding, they say, “*We learn better when we can select our own YouTube tutorial and WhatsApp groups make learning English practice come alive.*” Teachers share this aspiration and remark that the lessons are becoming livelier with students bringing digital tools into classrooms only to complain that policy sees them as optional extras. Meanwhile, policy makers are aware of digital innovations in general terms; they state, “*We have ICT labs and in our blended modules, but they do not notice the informal studying of English in general.*” This forms a dilemma between policy and autonomy: learners need flexibility, teachers need the institutional support and policymakers follow centralization decree. Infrastructure gaps further deepen the divide. Rural teachers report internet outages at noon, while officials frame the problem as financial rather than structural. Nevertheless, synergies exist where shared understanding develops; particularly around the belief that informal digital practices enhance language learning. As one senior policymaker noted, “*the only thing we would change is what teachers and students show us is working.*” Their visualization in a stakeholder alignment diagram, Table 3 shows where they converge (on value of IDLE) and where they still differ (formal recognition and resource allocation). This shared ground calls for collaborative action; one that integrates informal digital learning while respecting grassroots creativity.

Table 3. Convergence and divergence among stakeholders on IDLE value, recognition, and resource allocation

Dimension	Students	Teachers	Policymakers
IDLE value	High	High	Moderate
Formal recognition	Not needed	Needed	Peripheral
Resource allocation	Devices/connectivity	Training/support	Hardware/ICT labs
Infrastructure concern	Rural connectivity	Low bandwidth	Budget constraints
Policy reform readiness	Eager	Supportive	Cautious

4.5. Policy and practice implications

Building on these findings, the IIPM serves as a practical evaluation tool. Policymakers can apply it during policy revision cycles. It helps assess whether proposed digital initiatives reflect actual learner practices. First, it is time to revise NEPDF to reflect these informal digital practices, including the following statement: Informal digital practices, such as WhatsApp peer groups and YouTube tutorials, are part-and-parcel of language mastery. Second, professional development must reflect real classroom conditions.

Training should focus on how teachers can organize and lead digital learning environments. Hypothetical, aspirational frameworks are not enough. In other words, professional development should reflect field realities, not educational dreams. Third, rural infrastructure should emphasize quality connectivity and access to devices, which are issues of the digital divide discussed in sustainable development goals 4 (SDG 4) and reflected in national plans such as pid.gov.pk. Fourth, effective grassroots pilots such as “Taleemabad” must be replicated nationwide, and there must be clear incentives to participate and evaluation criteria beyond exam scores. Scaling innovative modules needs both flexibility and accountability. Lastly, a feedback loop between students, teachers and policymakers is critical. Such consultations can bring emergent practice to the fore and support immediate policy maintenance. Incorporating these recommendations into the existing SDG 4 protocols and digital inclusion programs will help Pakistan shift its aspirational discourse into practical reality. As an evaluation tool, the IIPM identifies where policy falls short. It guides decisions on infrastructure, training, and curriculum reform. Pakistan’s case demonstrates its applicability across comparable Global South contexts.

5. CONCLUSION

This study provides a basis for more equitable, learner-centered English education in Pakistan. By reframing IDLE as evaluative evidence, it advances policy evaluation approaches for the Global South. As the results indicated, although NEPDF 2024 in Pakistan refers to digital innovation in general, it did not specifically support IDLE, leaving a significant gap between policy and actual informal student practices. The evidence presented by students and teachers revealed high levels of motivation and innovative applications of digital resources such as WhatsApp and YouTube, but these actions lacked the institutional support and professional training documented in similar studies across the developing world. Policymakers recognized the potential of IDLE but cited budget and centralization as obstacles, which differs from similar IDLE-responsive policies in other Asian EFL contexts. The IIPM model offers a replicable framework for linking top-down policies with bottom-up IDLE practices in ESL/EFL contexts across the Asia-Pacific region, addressing shared digital divides and institutionalizing learner autonomy through peer scaffolding and digital input. Asia-Pacific language policies in the 21st century must integrate informal digital learning as essential infrastructure for equitable English proficiency and global competitiveness, or risk becoming obsolete.

The limitation is that the qualitative design has limited generalizability. However, the detailed, location-specific information improves transferability. It should then be investigated how reforms that provide information about IDLE affect English proficiency longitudinally across various Pakistani settings.

ACKNOWLEDGEMENTS

The authors gratefully acknowledge the research participants who volunteered for this study and the insight they provided into their practices.

FUNDING INFORMATION

This study was supported by Universitas Sebelas Maret Surakarta Indonesia.

AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

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C : Conceptualization

M : Methodology

So : Software

Va : Validation

Fo : Formal analysis

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R : Resources

D : Data Curation

O : Writing - Original Draft

E : Writing - Review & Editing

Vi : Visualization

Su : Supervision

P : Project administration

Fu : Funding acquisition

CONFLICT OF INTEREST STATEMENT

No potential conflict of interest was reported by the author(s).

INFORMED CONSENT

We have obtained informed consent from all individuals included in this study.

DATA AVAILABILITY

Derived data supporting the findings of this study are available from the corresponding author [WA] on request.




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