Vol. 15, No. 04, pp. 2538-2568, 2025 DOI: 10.23960/jpp.v15i4.pp2538-2568

Jurnal Pendidikan Progresif

e-ISSN: 2550-1313 | p-ISSN: 2087-9849

http://jpp.fkip.unila.ac.id/index.php/jpp/

Bridging Cultural Identity and Digital Transformation in EFL Classrooms: A Sociocultural Perspective from Indonesia

Salsabila Nurhaliza*, Sofendi, & Soni Mirizon

Department of Doctoral Education, Universitas Sriwijaya, Indonesia

*Corresponding email: salsabilanur24@gmail.com

Received: 08 November 2025 *Accepted: 05 December 2025* *Published: 17 December 2025*

Abstract: Bridging Cultural Identity and Digital Transformation in EFL Classrooms: A Sociocultural Perspective from Indonesia. Small and Secondary Cities in Indonesia face specific challenges when implementing digital transformation in English Language Learning (ELL). This research investigates such challenges in Palembang, South Sumatra, Indonesia, where technology and local (culture-based) values are not well integrated into English language teaching. **Objectives:** This study aimed to explore the availability and use of digital technologies, the infusion of local culture into teaching-inspired materials and practices, and the challenges and opportunities faced by teachers in developing culturally responsive, digitally based English instruction across varied school types in Palembang. **Method:** Employing a descriptive qualitative design, data were obtained through semi-structured interviews conducted with five English teachers from urban public, suburban, private, semi-rural, and madrasah schools. The data were analyzed thematically. **Findings:** Three themes emerged from the interviews conducted with the participants. Inequality in access to and use of digital technology between urban and semi-rural schools is considerable due to infrastructural challenges that discourage effective pedagogical practices. There is little representation of Palembang's local culture in the English-language instructional materials developed for students, despite teachers believing it could serve as a valuable component of the educational process. **Conclusion:** This study shows that meaningful digital transformation in English language education cannot rely solely on technology. It requires a coordinated approach that strengthens both technological infrastructure and culturally relevant pedagogy. For digital integration to truly benefit students, schools need system-level support: curriculum reforms that allow space for regional content, ongoing professional development that blends digital skills with cultural pedagogy, and fair resource distribution that prioritizes underserved schools. Without these combined efforts, digital initiatives risk deepening rather than reducing existing educational inequalities.

Keywords: culturally responsive pedagogy, digital divide, teacher agency, english language learning.

To cite this article:

Nurhaliza, S., Sofendi, & Mirizon, S. (2025). Bridging Cultural Identity and Digital Transformation in EFL Classrooms: A Sociocultural Perspective from Indonesia. *Jurnal Pendidikan Progresif*, *15*(4), 2538-2568. doi: 10.23960/jpp.v15i4.pp2538-2568.

INTRODUCTION

21st-century education is no longer an option but a necessity worldwide and involves digital transformation, focusing on critical thinking, collaboration, creativity, and digital literacy (Voogt & Roblin, 2012). This sense of urgency has been acknowledged by Indonesia through national policies, particularly the Making Indonesia 4.0 roadmap and digitalization efforts within the Ministry of Education, aiming to mainstream technology at all levels of education (Rahayu et al., 2022). However, there are large differences in how the reforms are realized across areas. While core cities offer signs of progress in adopting digital gifts, peripheral places experience major infrastructural inequalities (Selwyn, 2016).

A central tension sits at the heart of digital education policy: widely cited learning theories, such as constructivism and sociocultural theory, and popular technology-integration models are largely developed and validated in well-resourced Western settings, where access to devices, stable internet, and culturally dominant curricula is taken for granted (Warschauer & Matuchniak, 2010). These theories often assume they can be applied anywhere. However, pedagogy is always shaped by local realities, by the infrastructure available, the cultural values communities hold, and the everyday practices that give learning its meaning (Paris & Alim, 2017). When digital transformation efforts overlook these sociocultural specifics, they risk reinforcing the very inequalities they were meant to reduce. This study takes up that tension by exploring how supposedly universal models of digital learning actually play out in Palembang's educational landscape, where limited infrastructure intersects with a culturally vibrant yet chronically marginalized local context.

This digital divide is especially acute in ESL, where technology serves as both a teaching tool and an avenue for global communication (Warschauer & Healey, 1998). Studies have found that digital literacy use is associated with greater language proficiency (digital and second-language skills), but mixed results for higher-order thinking skills (Chapelle & Sauro, 2017; Godwin-Jones, 2019). In Indonesian cities like Palembang, the contrast between policy ambitions and classroom realities is stark. Teachers encounter several obstacles: unreliable internet access, limited devices, low digital literacy, and a lack of institutional support (Hubbard, 2008; Argawati & Suryani, 2020). These issues are indicative of the wider disparities in Indonesia's digital education landscape, where geography and socioeconomic status determine access to technology-enabled learning experiences.

Palembang is home to distinctive local cultures, such as gotong royong and religious customs, expressed through bidar boat races, pempek, riverside tourism and residences, traditional houses, and life along the Musi River. These factors can be important and relevant instruments in the applied teaching of English. Kristiawan (2012) argues that local culture enhances the significance of language acquisition through English Language Teaching (ELT) materials, constructing a bridge between students' underutilized language potential and their social activities. To stem the tide of cultural hegemony, incorporating Indonesian values into English learning materials is necessary to foster a sense of belonging and address the emotional needs of people living in a conflict-ridden world (Sudartini, 2024). Unfortunately, this potential in local culture integration education remains unmet. Preliminary surveys and conversations with English practitioners suggest that integrating localized culture into English instruction is a major gap. Studies on Indonesian English as a Foreign Language (EFL) textbooks illustrate an enduring cultural imbalance. The analysis has revealed that ELT materials in Indonesia contain 60-75% foreign cultural content, mostly from a Western background, whereas local cultural elements account for less than 15% (Hermawan & Lia, 2020; Widodo et al., 2020). Particularly in South Sumatra, reports on the curriculum implemented, for example, show that little regional culture is integrated into English-language material (Dinas Pendidikan Provinsi Sumatera Selatan, 2023). This gap is not in line with national curriculum policy, which emphasizes the integration of local wisdom, as stated in Permendikbud No. 37/ 2018, which requires that all school subjects, including English, be partially culture-localized. Teachers use foreign digital sources or national textbooks that provide insufficient localized cultural representation.

The lack of appropriate technology and the gap in its use across different types of schools tend to widen the digital divide in access to

various creative learning opportunities. Digital inequality compounded with cultural marginalization results in a double whammy for under-resourced learners. Literature shows that technology-engaged pedagogy and culturally affirming teaching are not exclusive but interrelated facets of educational equity (Gay, 2018; Ladson-Billings, 2014). When digital tools are imposed with little cultural relevance, students experience "technological alienation" and use devices to gather information that is disconnected from their lives (Marsh, 2016). In contrast, digitized cultural artifacts developed without digital enhancement hinder students' construction of the multimodal literacies needed for global engagement (Cope & Kalantzis, 2015). In the regional settings of Indonesia, this double gap has been acknowledged but seldom analyzed simultaneously. Existing studies have separately explored either digital access disparities (Bhakti & Meiningsih, 2022) or cultural representation issues (Zacharias, 2012), neglecting their interplay. However, looking at them together also shows how issues of technological and cultural exclusion reinforce each other, creating obstructions greater than the mere sum of two problems. Learning based on technology and digital tools, including interactive media, online learning resources, and collaborative projects, is unfortunately less available in schools that poorly integrate technology into instruction.

The literature reveals a significant gap between technological progress and cultural preservation in EFL teaching. While much of the academic literature demonstrates that digital technology can be used as a tool in language learning for interactivity and authentic communication (Blake, 2013; Golonka et al., 2014), some research raises concerns about whether such technologies are (accessible to) all learners fairly (Warschauer, 2004). There are two levels at which equity issues play out: "access disparities," in which under-resourced schools lack basic digital infrastructure (Lai & Widmar, 2021), and "representation gaps," in which standardized digital content excludes local cultural knowledge (Paris & Alim, 2017).

New studies begin to contradict the idea that mere technology integration enhances learning. Advocates of culturally responsive pedagogy claim that relevance, rather than the delivery mechanism, leads to engagement and comprehension (Gay, 2018; Hammond, 2015). The information is more operative in our minds when we learn content that triggers pre-existing cultural schemas, as research shows (Suh et al., 2017). In EFL situations, this requires learning English to be incorporated into local identity and message exchange, not only as an agent of foreign cultural adaptation (McKay, 2018; Matsuda, 2017).

However, the connection between these two bodies of work, digital equity and cultural responsiveness, is not often made. In technology studies, researchers examine infrastructure and digital skills (Hockly, 2016); cultural integration research centres on content and pedagogy (Byram et al., 2017), leaving underexplored how each of these experiences might be amplified or diminished by the use of digital tools. This study aims to fill the gap by examining both dimensions simultaneously in the Palembang educational context. Prior research on the subject has tended to focus either on the local cultural integration of materials or on digital transformation in a more abstract sense. It has lacked a focus on the intricate socio-cultural crossroads between the two. Within Palembang's rich, socio-culturally resonant tapestry, the underdeveloped digital landscape is a research topic that can help define the relationship between digital culture and local socio-cultural systems.

The importance of designing English Learning Plans that take into account Digital Tools and local culture should not be underestimated. This is likely to engage students and help advance

meaningful learning that links the local and the global. The integration of Constructivism and Vygotsky's socio-cultural theory provides a potent framework for learning and development in this context. According to Vygotsky, the social and cultural context of a person is a fundamental determinant of that person's cognitive development. Constructivism frames learning as a process in which an individual actively seeks meaning, most readily achieved through firsthand experience. In the same vein, the sociocultural perspective implicates community and social practices in education, as they pertain to learners' interactions with social objects (Alkhudiry, 2022). This collaborative learning approach fosters students' critical thinking, retention, and understanding (Kwarteng, 2025).

Timely academic engagement with the educational landscape this study has in mind is essential, given the digital learning gap, the ethnocentricity of digital resources, and educational inequity in Indonesia. According to Arista (2020), the internet has changed the landscape of students' educational experiences, especially for Millennials and Generation Z, and of school attendance in contemporary times. People and communities, even with the least qualified teachers and limited learning materials, can access resources to learn English. This will require more attention during the new Emancipation Curriculum period, which aims to strengthen English instruction in elementary schools (Daud & Musigrungsi, 2024). In Palembang, the promises of the digital education system, with its educational and economic opportunities, are still diminished by underdeveloped support systems and culturally inappropriate English instruction. English and other global languages may help students access local and indigenous worldviews and values, while enhancing their sense of belonging.

This inquiry analyzes the integration of Palembang's local values and culture with English language teaching materials and practices, including the localized, culturally digital challenges and opportunities educators face in English instruction. More specifically, it evaluates the use and access to digital technology for English language instruction in Palembang schools. This inquiry seeks to provide relevant insights for curriculum developers, English language educators, and educational institutions to advance regionally geographically flexible, culturally and educationally integrated, safe, localized technological adaptations. This study investigates how schools in Palembang use and incorporate digital technology into English language learning, to what extent local cultural values are integrated into teaching materials and classroom practices, and the challenges they face that offer opportunities for teachers to design digital culture-based English lessons. By focusing on such interrelated issues, this research offers concrete examples from a local Indonesian context where digital transformation and cultural heritage converge. The results have practical implications for curriculum developers, teacher educators, and policymakers who seek to establish equal, meaningful, and culturally sensitive English language education in diverse communities.

METHOD

Participants

This study employed an intensity sampling technique (Patton, 2015) with five English teachers at the junior high school level in Palembang (7–9). The sample size is small; however, this is acceptable for a qualitative study where depth rather than breadth of data collection is emphasized (Vasileiou et al., 2018). In phenomenological and case study research, sample sizes of 5–10 participants are standard, provided that data saturation is achieved and participants offer rich/memorable information (Creswell & Poth, 2018; Malterud et al., 2016).

The sample size was justified in several respects. 1) Maximum variation sampling of the five key informants (see Table 1) who were

schooled in a different school type, urban public school, suburban public vocational high school, private junior secondary school, semi-rural public high school, and an Islamic Boarding School captured a broad range of digital-material and socio-economic contexts across Palembang (Palinkas et al., 2015). Second, saturation was reached early; from the fourth interview onward, no new themes emerged, and the fifth interview validated our observations (Guest et al., 2006). Third, the level of enquiry was in depth: each interview lasted for 45 to 60 min and throughout we had accounts that were not possible with a larger sample (Morse, 2015). Lastly, the focused sample enabled rigorous analytical work, such as in-depth document analysis and member checking, to further enhance the trustworthiness of the findings (Tracy, 2010).

The study used purposive sampling because not all teachers are knowledgeable about the phenomenon under study (Palinkas et al., 2015). Subjects were recruited using a two-stage selection method. In the initial phase, schools were purposively selected to obtain variations on a maximum of three dimensions: (1) geographic locations/region (urban center, suburban, semi-rural), (2) institutional types (public, private, and Islamic), and between high/medium/low levels of digital infrastructure. This strategy was employed to enable the study to sample a broad spectrum of experience with respect to digital technology and cultural integration in teaching English (Suri, 2011).

In the second phase, English teachers in individual schools were selected based on specific inclusion criteria. Teachers had to present the following characteristics: at least 3 years of teaching experience, so that they were familiar with curricula requirements and school constraints (Borg, 2006); use or intense struggle for limited access to digital technology in their practice in order to be information rich cases about digital divide (Morse, 2015); demonstrated consciousness about cultural integration issues that was assessed through a 15-20 minute initial screening conversation where teachers were asked three specific questions: (1) "Do you ever feel that textbook examples are too distant from students' daily lives?" (2) "Have you tried incorporating Palembang culture into your English lessons?" and (3) "What challenges do you face when localizing teaching materials?" Teachers who provided specific examples of cultural disconnect, such as students questioning the relevance of learning about London, described concrete attempts at localization, even unsuccessful ones, or articulated frustration with Western-centric content, were considered culturally conscious. The operational criteria required at least two affirmative responses indicating awareness of cultural relevance issues, accompanied by concrete classroom examples demonstrating reflective practice rather than generic statements about the importance of culture, and willingness to engage in extended interviews as well as to share related documents such as lesson plans and teaching materials.

These criteria helped ensure that participants were not merely convenient informants but actual "key informants" (Spradley, 2016) who could provide rich insights into the intersection of digital access and culturally responsive pedagogy. The study achieved both contextual breadth and analytical depth by maximizing variation through sampling across schools while relying on criterion-based selection within schools. The five schools were compared to each other in the following ways:

Table 1. Schools comparison

Code	School Type	Teaching Experience	Students/ Class	Computer: Student	Internet Speed	LCD Availability	Textbooks/ Student
G1	Urban Public	8 years	32	1:3	100 Mbps	All rooms	1:1

G2	Suburban Public	7 years	35	1:8	5 Mbps (unstable)	3/12 rooms	1:1
G3	Private	6 years	28	1:2 (BYOD)	20 Mbps	8/10 rooms	1:1
G4	Semi-Rural Public	9 years	38	1:15	<2 Mbps	1 shared	1:2
G5	Madrasah	10 years	30	1:10	3-8 Mbps	Teacher's laptop only	1:1

Having different school contexts allowed researchers to capture diverse experiences with the social and cultural dimensions of educational inequality related to digital access in Palembang.

Research Design and Procedures

A descriptive qualitative method was used to examine gaps in access to digital technology and the absence of local cultural inclusion in the teaching of English in Palembang. This method was appropriate because it captures the teachers' lived experiences, understandings, and contextualized practices within a particular social and cultural framework (Creswell & Poth, 2018). Qualitative inquiry to understand and examine the phenomena of digital education and cultural integration within the educational system is appropriate, particularly because it is contextually focused.

The study was conducted in October 2024 in Palembang, South Sumatra Province, Indonesia. Palembang was selected as a place of study, given its history and culture, as well as its schools, digital technology-rich cultural heritage, and educational infrastructure relevant to the study.

Instrument

For gathering information, semi-structured interviews were primarily employed. This primarily indicates some participants' lived experiences while remaining attentive to the study's goals (Kallio et al., 2016). The semi-structured interviews followed a protocol developed based on previous studies on digital technology integration (Cahyono & Widiati, 2021; Nugroho & Mutiaraningrum, 2020) and culturally responsive pedagogy (Lengkanawati, 2020), which was later modified to match the educational setting in Palembang (Kallio et al., 2016). Section 1: Digital Technology Access and Use consisted of 4 questions: (1) What digital technology is available at your school for English teaching? (2) Which digital applications/media do you use? How frequently? (3) What obstacles prevent effective technology integration? (4) What institutional support exists for digital pedagogy?. Section 2: Local Cultural Integration consisted of 4 questions: (1) To what extent is Palembang culture reflected in your teaching materials? (2) Can you describe instances where you incorporated local cultural content? (3) What culturally relevant teaching resources are available? (4) How do students respond to local cultural content?. Section 3: Challenges and Strategies consisted of 4 questions: (1) What professional development have you received on technology and cultural integration? (2) What creative strategies do you use within existing limitations? (3) What barriers prevent culturally-based digital learning? (4) What support/ resources would enhance your teaching?.

Content validity of the interview guide was established by two researchers, both experts in qualitative research and EFL pedagogy, and the interview guide was then pilot-tested with a teacher not included in the main study. Two questions were reworded for clarity based on feedback from pilot participants, and the interview length (45–60 minutes) was deemed appropriate. All interviews were conducted in Bahasa Indonesia to enable participants to speak and

express their thoughts naturally, and translations were verified using the back-translation approach for accuracy (Galletta, 2013).

To triangulate the interview findings and enhance credibility or trustworthiness (Lincoln & Guba, 1985), two class observations were conducted for each participant, yielding a total of 10 observations. Creswell and Poth (2018) suggested that qualitative observation protocols were used. " Three areas were targeted by the semi-structured observation guide used in each 80-minute session: (1) technology use, the frequency and types of digital tools being employed, which included any second-language or socio-contextual challenges faced; (2) cultural integration, whether local references, examples based on culture, and student reception to content that was based locally were present; and (3) pedagogical strategies patterns in teacher–student interaction, language used for instruction, and methods of assessment.

Data Analysis

Data analysis followed Braun & Clarke's (2006) reflexive thematic analysis, implemented through the following contextualized process: (1) Familiarization. All interviews (n = 34) were transcribed verbatim by the lead author within 48 hours, yielding 127 transcript pages and enabling deep data immersion. Initial analytic memos were written to accompany the transcription. Transcripts were also read three times, along with the audio recordings, to hear tone, emphasis, and contextual cues (Poland, 1995). (2) Initial Coding. Line-by-line coding of all transcripts was performed by two researchers using *NVivo 12*. The codebook was developed inductively, based on 87 initial open codes (e.g., "*internet lambat*" [slow internet], "*siswa lebih antusias dengan contoh lokal*" [students more enthusiastic with local examples]). Coding meetings were held weekly to resolve discrepancies. For instance, one coder coded "*guru pakai laptop pribadi*" as "personal resources," while the other assigned it to "institutional neglect." Following discussions, dual coding was used to represent these dimensions (MacPhail et al., 2016). (3) Inter-coder Reliability. Upon coding 40% of the transcripts, inter-coder reliability was calculated using Cohen's kappa ($\hat{e} = 0.82$), indicating substantial agreement between coders (McHugh, 2012). Any remaining differences were resolved through consensus discussions and codebook refinement. (4) Theme Development. Codes were then organized in to 18 initial thematic clusters via visual mapping (Saldaña, 2016). For example, codes "*internet tidak stabil*," "*listrik sering mati*," "*komputer rusak*" were grouped under the higher order theme "infrastructural barriers". (5) Theme Refinement. All themes were fully discussed in relation to coded extracts and the full dataset. A few themes were collapsed; for instance, "teacher creativity" and "workaround strategies" were combined into a single theme, "teacher agency." Others were subdivided entirely or partially (for example, the original theme "cultural content" was divided into "absence in textbooks" and levels of "teacher-initiated integration"). (6) Finalization. Three additional themes were then developed, all drawing on 15–30 coded segments across the group in each case (Guest et al., 2012), confirming saturation. For example, G4's comment—"*Banyak anak tidak punya HP sendiri jadi kalau ada tugas online, saya sering ubah ke kerja kelompok supaya satu HP bisa dipakai lebih dari 1*" [Many students do not have their own phones, so when we have an online assignment, I often switch to group work so they can share one phone]—was initially coded as "lack of devices," then grouped under the cluster of "access inequity," and ultimately contributed to Theme 1: Digital Technology Access Disparities.

Analysis is grounded primarily in Vygotsky's Sociocultural Theory and Constructivism, which

highlight the significance of social interaction, cultural context, and meaning-making in teachers' lived experiences and practices.

Data Reliability and Validity

To strengthen the findings, various approaches were employed: (1) Triangulation. For source triangulation, the researcher consulted five teachers from various school types and geographic locations. For method triangulation, the researcher also analyzed teaching materials, lesson plans, and curriculum guides, where available, as additional evidence. (2) Member checking. Once transcription and preliminary analysis were completed, a summary of the key findings was forwarded to respondents to verify the researcher's interpretations and to allow them to clarify or elaborate on their answers (Lincoln & Guba, 1985). A two-stage member-checking process also enhanced the credibility of this study (Birt et al., 2016). First, participants received their verbatim transcripts within a week of each interview and were asked to confirm accuracy or explain any ambiguity. Four teachers made relatively minor corrections, including changes to software and school statistics. Second, a personalized two-page summary in Bahasa Indonesia was provided to individual participants following the initial thematic analysis. The abstractions were composed of: (1) some direct quotations from their interviews, (2) an interpretation by the researcher of what they think about and would change in the future, and, finally, both participants' ongoing comments or updatable replies to add information or adjust certain thoughts (Candela, 2019). Using narrative summaries of evidence rather than raw codes made findings easier for teachers to relate to and respond to (Harvey, 2015). Feedback was provided through email or brief follow-up telephone calls (15–25 min). Their comments led to three major revisions: G3 noted that "moderate resources" were still not enough compared to international schools; G5 mentioned religious curriculum needs as a challenge that allows less time for secular projects; and G1 proposed emphasizing teacher creativity despite the lack of resources, which re-oriented the analysis toward an agency-focused interpretation. These additions were included in additional analytic memos and subtle theme adjustments that allowed the findings to speak to participants' lived experiences rather than only from the researcher's perspective (Koelsch, 2013). All participants verified that the final themes were congruent with their experiences.

Ethical Considerations

This study followed the ethical guidelines devoted to educational research. Prior to the start of the study, all participants were fully informed of the approach, the study purpose, voluntary participation, and their right to withdraw at any time without any consequence, and thus consented to participate. In reporting results, confidentiality was maintained, and all participants and schools were anonymized, referred to as G1-G5. Access to the audio recordings and transcripts was restricted to the researcher to further guarantee confidentiality. Participants were informed of the intended publication of the results in academic journals.

■ RESULT AND DISCUSSION

The thematic analysis results derived from interviews with five English teachers across different educational institutions in Palembang specifically a public junior high school located in the city center (G1), a public junior high school on the outskirts (G2), a private junior high school (G3), a semi-rural public junior high school (G4), and a Madrasah Tsanawiyah (G5) highlighted three key themes: (1) discrepancies in access and utilization of digital technology; (2) absence of local Palembang culture within the context of English language teaching; and (3) challenges and

strategies teachers employ to construct culturally relevant digitally mediated instruction.

To illustrate how these various challenges are linked and affect the actions teachers take, we present a flow from structural barriers to teacher strategies (and results) in Figure 1. The visualization illustrates how teachers navigate a series of hurdles, ranging from poor infrastructure and culturally inappropriate materials to narrow curricular demands. However, despite these simultaneous pressures and a lack of institutional support, teachers often find ways to get creative and make it work for their students.

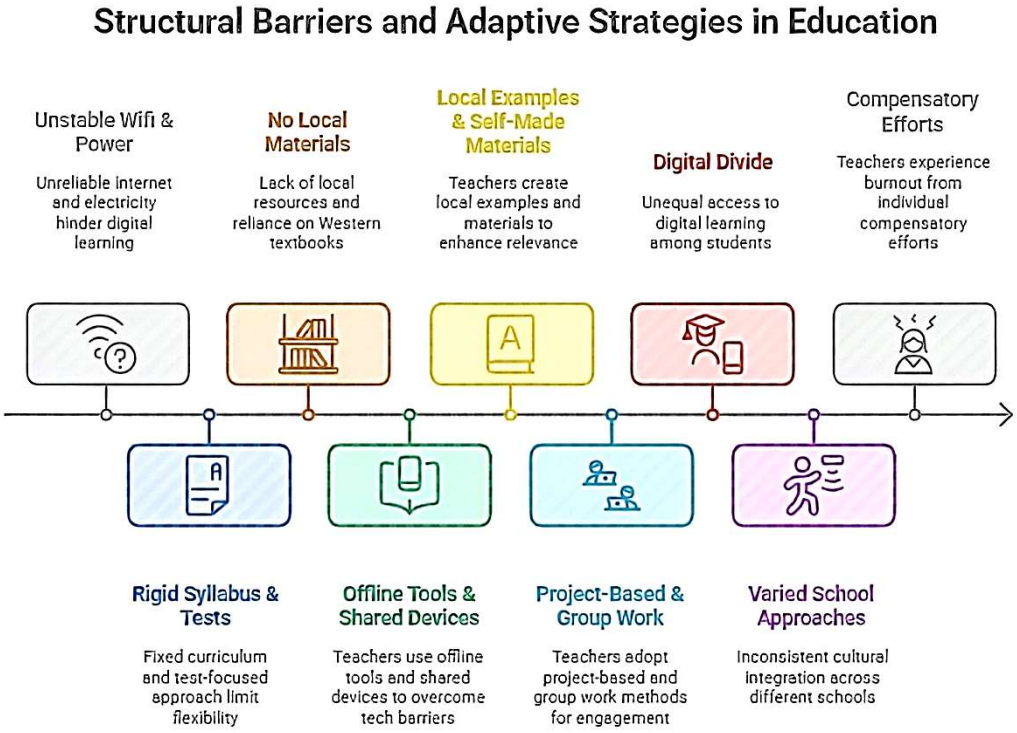

Figure 1. Structural barriers and adaptive strategies

Figure 1 illustrates how the challenges teachers face create a domino effect that shapes their classroom responses. At the top are the structural barriers unstable digital infrastructure, limited locally relevant materials, and rigid curriculum guidelines. These constraints push teachers to adopt a variety of adaptive strategies, such as using offline resources, creating their own teaching materials, or incorporating project-based learning. However, at the bottom of the cascade, these individually driven efforts often remain isolated and unsustainable, leading to teacher burnout and deepening inequities in learning opportunities across schools.

The diagram highlights a clear chain of causation: when systemic failures persist, teachers are forced to compensate for them through personal effort. Their creative solutions, while innovative, remain scattered acts of improvisation rather than scalable practices. This pattern emerged through open coding of interview and observation data. Table 2 outlines how the analysis progressed from participants' actual words (raw codes) to more abstract thematic categories, reinforcing the conceptual grounding and credibility of the findings.

While Table 2 outlines how the qualitative data were developed into thematic categories, a

Table 2. Theme and codes of interview

Raw Codes (Teachers' Words)	Categories	Main Theme
"*Internet lambat*"; "*WiFi mati*"; "*Video tidak streaming*"; "*Cuma 5 laptop*"; "*Laptop saya sendiri*"; "*Sekolah tidak beli*"	Unreliable connectivity; Insufficient devices; No institutional support	Theme 1: Inequality in access to and use of digital technology
"*Buku tentang London*"; "*Festival Amerika*"; "*Pempek cuma satu halaman*"; "*Saya ubah jadi Ampera Bridge*"; "*Siswa lebih semangat*"	Western-dominant content; Minimal local representation; Teacher-created adaptations	Theme 2: Low Cultural Integration
"*Pelatihan cuma aplikasi*"; "*Waktu tidak cukup*"; "*Kurikulum padat*"; "*Proyek video wisata*"	Non-contextual training; Time constraints; Creative strategies	Theme 3: Teacher Challenges & Strategies

closer look at the quantitative frequency analysis shows clearer patterns in how these codes appear across different participants and school settings. Table 3 presents these code frequencies, offering stronger support for the study's claims about digital inequality, cultural marginalization, and unequal teacher workloads between urban and peripheral schools.

Table 3. Frequency distribution of key codes across participants

Key Codes	G1	G2	G3	G4	G5	Urban (G1+G3)	Semi-Rural/Peripheral (G2+G4+G5)
Theme 1: Digital Access							
Unreliable connectivity	2	8	1	12	7	3	27
Insufficient devices	3	9	2	15	10	5	34
No institutional support	4	11	3	14	12	7	37
Personal device reliance	1	6	2	9	8	3	23
Subtotal	10	34	8	50	37	18	121
Theme 2: Cultural Integration							
Western-dominant content	7	9	6	11	8	13	28
Minimal local representation	8	10	7	13	9	15	32
Teacher-created adaptations	12	3	14	2	4	26	9
Student enthusiasm for local content	9	5	11	8	6	20	19
Subtotal	36	27	38	34	27	74	88
Theme 3: Teacher Challenges							
Non-contextual training	5	8	4	10	9	9	27
Time constraints	9	11	8	14	13	17	38
Rigid curriculum	7	9	6	12	11	13	32
Lack of ready-made materials	6	10	5	13	10	11	33
Creative/adaptive strategies	11	4	13	3	5	24	12
Teacher burnout/exhaustion	3	7	2	11	9	5	27
Subtotal	41	49	38	63	57	79	169
TOTAL CODES PER PARTICIPANT	87	110	84	147	121	171	378

The frequency patterns highlight several clear trends that reinforce the qualitative interpretations. Teachers in semi-rural and peripheral schools (G2, G4, G5) produced 121 coded segments about digital access barriers, compared with only 18 from urban schools (G1,

G3). This 6.7-fold gap confirms that digital inequality is highly concentrated in certain contexts rather than evenly spread.

A "capacity-versus-need" paradox also appears in cultural integration efforts. Urban schools (G1 and G3) contributed 26 segments on teacher-made cultural adaptations, while peripheral schools produced only 9. In other words, the teachers who *most* need localized materials, those in peripheral contexts, are actually the *least* able to create them. In contrast, resource-rich urban teachers have more capacity to do so.

Patterns in the teacher-challenge codes further underline these inequalities. Peripheral schools accumulated 169 challenge-related segments compared to 79 from urban schools (a 2.1:1 ratio). The distribution is inverted for "creative strategies" (24 urban vs. 12 peripheral) but sharply reversed for "teacher burnout" (5 urban vs. 27 peripheral). This suggests that peripheral teachers shoulder a "triple burden": they must compensate for weak digital infrastructure, confront cultural misalignment in the curriculum, and navigate rigid policies with far fewer resources.

At the individual school level, G4 (semi-rural) stands out as an outlier. With 147 total coded segments (68% above the overall average), it appears to face the most intense convergence of constraints. In contrast, G3 (private) recorded the lowest total (84) but the highest proportion of creative strategies (15.5%), showing how adequate resources shift teachers from survival mode to genuine innovation.

These frequency patterns align with the document analysis: schools with higher counts of "teacher-created adaptations" (G1 and G3) were the only ones to produce culturally integrated lesson plans (Table 5 shows that 4 of 6 came from these groups). Taken together, the consistency across data sources indicates that these findings represent real systemic patterns rather than isolated cases.

The following sections build on these quantitative insights by presenting detailed qualitative evidence for each theme, illustrating how teachers' lived experiences reflect the disparities shown in Table 3.

Theme 1: Inequalities in Digital Technology Use and Access

Digital inequality in Palembang creates divergent learning experiences, as illustrated by contrasting teacher narratives that reveal how the three themes intersect in daily practice.

Case 1: G1 Teacher Digital Privilege Enabling Cultural Innovation

G1's teacher, with 8 years' experience in an urban public school, demonstrates how adequate digital infrastructure (Theme 1) enables culturally responsive pedagogy (Theme 2), though not without challenges (Theme 3). Her school's reliable 100 Mbps internet and 1:3 computer ratio allow routine use of Google Classroom, Quizizz, and YouTube. However, she encountered a critical problem:

"*At our school, we regularly use Google Classroom, and sometimes Quizizz and YouTube for listening exercises. The children are already accustomed to this, especially since the pandemic. However, the textbooks are about London, New York, or festivals abroad. Rarely do they discuss Palembang.*" (G1). Recognizing this cultural disconnect, she leveraged her digital capacity to create solutions:

"*I once tried to change the descriptive material to be about the Ampera Bridge, and the children were even more enthusiastic. But I made the source myself.*" (G1)

This vignette reveals the three-theme intersection: (1) Digital access provided tools for content creation (*PowerPoint*, online images); (2) Cultural gap in mandated materials necessitated adaptation; (3) Teacher agency

bridged the gap, but individually and unsustainably signals a lack of institutional support. Classroom observation confirmed students' heightened engagement with local content, yet the teacher spent personal time developing materials without recognition or compensation.

Case 2: G4 Teacher Compounding Deprivations and Creative Resilience

G4's teacher, working in a semi-rural school for 9 years, experiences the three themes as compounding barriers. With a 1:15 computer-to-student ratio and unreliable <2 Mbps internet plagued by power outages, digital pedagogy becomes an aspiration rather than a reality:

"*Many children do not have their own cell phones, so when there are online assignments, I often change them to group work so they can share one cell phone.*" (G4)

This device scarcity (Theme 1) intersects with cultural alienation (Theme 2). During a lesson on "My Holiday in London," students struggled to engage with content depicting experiences radically distant from their lives:

"*They ask, 'Bu, what is Hyde Park? Why do we learn about England when we have never left Palembang?' I do not have good answers.*" (G4)

Facing this dual exclusion technological and cultural the teacher demonstrated remarkable agency (Theme 3), creating a low-tech, high-relevance project:

"*Without internet, we can still learn English through our own culture. The students interviewed family members about bidar boat races and wrote reports. They were so proud.*" (G4)

This innovation required no technology but deep cultural grounding. However, observation revealed its limitations: the project occurred once per semester due to curriculum pressures, preparation consumed the teacher's school holiday, and there was no institutional support for scaling or sharing the practice. Post-observation, the teacher expressed exhaustion: "*I want to do more, but there is no time, no training on cultural integration, and the curriculum demands we follow the textbook sequence for exams.*"

Contrasting Patterns Across Cases

Comparing G1 and G4 reveals how digital inequality amplifies cultural marginalization and shapes teacher agency differently:

Table 4. Contrasting patterns across cases

Dimension	G1 (Digital Privilege)	G4 (Digital Deprivation)
Technology access	Regular, reliable integration	Rare, unreliable access
Cultural response	Digital materials (PowerPoint with local images)	Analog projects (interviews, written reports)
Teacher workload	Enhancement of existing practice	Compensation for systemic failures
Sustainability	Repeatable but unsupported	One-time, personally exhausting
Student outcome	Culturally relevant and digitally mediated	Culturally relevant or digitally mediated

G1's teacher exercises agency by integrating cultural content into digital pedagogy. G4's teacher exercises agency through compensation, creating workarounds for absent infrastructure and irrelevant materials. Both demonstrate professionalism, yet G4's approach

is unsustainable and inequitable, placing a disproportionate burden on the teacher.

The compounding effect is stark: G4's students experience double deprivation, technological exclusion from digital learning and cultural exclusion from textbook content, while their teacher faces a triple burden: teaching the mandated curriculum, compensating for infrastructure deficits, and creating culturally relevant alternatives without support. This illustrates how the three themes form a mutually reinforcing system of inequality rather than discrete challenges.

According to Vygotsky's Sociocultural Theory (Lantolf & Thorne, 2006), Digital Technology may also serve as a potential tool to enhance learner interaction, cooperation, and construction of meaning in a second language. Students' social interaction becomes a hindrance to the six mediation processes. Learning become unfulfilling through zero interaction with peers.

Disparities in access to digital technology affect students' educational outcomes, particularly in rural and semi-urban areas of Indonesia, where limited infrastructure makes integrating technology into education challenging (Wijaya et al., 2023). A similar conclusion was reached by Nugroho & Mutiaraningrum (2020), who found that students from digitally well-endowed schools demonstrated higher levels of digital literacy and collaborative learning competencies, highlighting inequitable access to digital technologies as a key contributor to gaps in 21st-century skills development opportunities in schools in Indonesia.

Infrastructure limitations also negatively affect students' participation in collaborative learning. In constructivist learning, the emphasis is on student-to-student interaction, which is particularly lacking in schools with fewer resources, where students predominantly experience passive, teacher-centered learning (Dewi & Budiono, 2021). This aligns with Putri et al. (2022), who showed that technology-mediated collaborative activities enhance language learning when the infrastructure supports continuous use, but become weak or abandoned when persistent technological barriers persist.

Not having access to technology also means students miss out on learning important 21st-century skills, such as teamwork, communication, and digital literacy. The inequalities in the schools in Palembang show the limitations of inclusive digital transformation. While schools in the downtown area embrace technology, those in the outlying, semi-rural regions wait for development and education policies to change. The work of Rahmawati & Ertin (2020) is relevant here, as it explains how the educational system in Indonesia is divided rurally and urbanely, which means inequities in education are compounded as technology becomes more available and advanced.

The inequities in educational digital infrastructure are also seen in other Southeast Asian countries. Cahyono & Widiati (2021) demonstrated this in East Java, where internet connectivity and device access increased student participation in English classes. The inequitable distribution of educational resources, acknowledged by the Indonesian educational research community (Sulistyo et al., 2020), is also evident in G5 when triangulated with the explanation of teacher reliance on personal devices.

Thus, the effects of the digital divide in Palembang extend the impacts of teaching English on students' socio-cultural inequalities even further. Given the established correlation between digital literacy and research skills among EFL students in Indonesia, this is particularly problematic (Indah et al., 2022). It suggests that limited digital access additionally constrains students' opportunities to develop academic skills, which is problematic when coupled with limited access to technological skills.

Theme 2: Low Cultural Integration

The third theme concerns the lack of representation of local culture in the materials and approaches to English language education in Palembang. Most teachers commented that the materials used are still heavily influenced by Western culture. G3 offered clarification:

"*The textbooks are about London, New York, or festivals abroad. Rarely do they discuss Palembang*." (G3). G1 discussed an example of someone trying to contextualize the materials:

"*I once tried to change the descriptive material to be about the Ampera Bridge, and the children were even more enthusiastic. But I made the source myself*." (G1). Also, a semi-rural school teacher (G4) said:

"*When I use examples from Palembang culture, they immediately connect. The only obstacle is that there are no ready-to-use teaching materials*." (G4)

The teachers' quote above recognizes the potential of contextualized teaching and culturally relevant pedagogy for local instruction, and they do so commendably despite limited resources. Support for localized instruction is uneven across the local curriculum and is distributed by local governments, resulting in inadequate instructional materials.

By doing so, this finding supports Sukma and Sari's (2022) argument that culturally inappropriate materials tend to reduce student motivation in Indonesian EFL settings. Our data, however, show a crucial difference: cultural marginalisation is not experienced homogeneously. Teachers in G1 and G3 in digitally privileged schools partly offset the Western focus of textbooks by creating digital cultural materials (such as PowerPoints and videos). In contrast, teachers in G4 and G5, under-resourced schools, do not have the capacity to produce these materials. This leads to "double deprivation" of students in resource-poor environments being deprived of both textbook cultural bias and access to cultural resources through digitalization. While Sukma and Sari found motivation deficits in light of overall cultural distances, our paper shows that such deficits are exacerbated when combined with digital divides, thus pointing to the inadequacy of curricular reform alone without concurrent investments in infrastructure.

This is important within a constructivist framework: students will have an easier time meaning-making when the content they are studying is relevant to their daily lives (Aminah et al., 2021). When instruction focuses on a particular culture, students may emotionally disengage from the language. Hermawan et al. (2020) reported similar findings in West Java. Students gained a better understanding and retention of culturally relevant English materials compared to the socially Western-integrated standardized curriculum.

Along with being a system of symbols, language also incorporates cultural identities and values (Kusumaningputri & Widodo, 2018). If local culture is ignored, students do not have the opportunity to connect the process of learning English to their cultural identity as members of the Palembang community. Research conducted by Nurfaidah et al. (2021) supports this, which states that the impact of culturally responsive English teaching materials on students' self-efficacy and their willingness to communicate in the English language is significant because students view the language as a tool of their culture and identity in addition to being a means of assimilating into other cultures.

Inadequacy of locally relevant materials is not unique to Palembang. This is a systemic issue in EFL teaching in Indonesia. Cahyani et al. (2020) note that a majority of Indonesia's English textbooks contain more descriptions of foreign cultures than of local ones, and that this is a form

of 'cultural imperialism' in the practice of teaching the language. Many scholars have critiqued the influx of Western culture into teaching materials (Widodo et al., 2021; Zacharias, 2019) and called for the preparation of teaching resources that are respectful of learners' ethnicities while teaching them English.

G1's interest in the Ampera Bridge as a focus for learning is a good example of 'cultural validation' in language learning as proposed by Marlina and Giri (2014). Students are more motivated and willing to participate in lessons grounded in their realities. This is also noted in research by Fauziati (2021), where culturally rich materials in EFL training helped students affirm their cultural identity and pride, thereby enabling them to master English as a resource.

Zacharias (2020) expands on this idea by defining "grassroots contextualization" as individual teachers' actions in modifying standardized materials to fit their contexts. This is manifested by the teacher-initiated adaptations described by the participants. Despite the adaptations signaling teacher autonomy and innovation, Zacharias notes the disservice this practice causes. Relying on individual initiatives, for instance, is inequitable because it adds to the strain on overworked teachers and creates unequal learning opportunities within and between classrooms.

The lack of institutional backing for developing locally sourced instructional materials epitomizes the absence of opportunities for what Lengkanawati (2020) calls "culturally sustaining pedagogy" within Indonesian EFL contexts. In addition to teaching language proficiency, this pedagogy also actively sustains students' multilingual identities and heritage voices. The Western-culturally focused perspective in use, as described in the study, contradicts the principles of culturally sustaining pedagogy and may explain the "cultural alienation" that EFL students in Indonesia experience, as indicated by Suherman (2021).

Theme 3: Teacher Challenges & Strategies

Although the application of the third theme is currently limited, it demonstrates instructors' awareness of the importance of integrating digital technology with local cultural practices. Most educators feel that their training does not inform the intersection of education digitization and cultural preservation. For G2, Training was mostly digital apps training, not local culture integration.

This suggests an issue with Indonesian teacher professional development, which centers on technical skills that neglect context and integration (Wahyuni & Sukyadi, 2021). Hadijah et al. (2023) also found EFL teacher preparation programs focusing on digital tools lacking cultural pedagogical frameworks. Given the limited time in curriculum design, a madrasah teacher (G5) also expressed this concern: "At a certain point, I would like to do a project on Palembang culture, but time is always insufficient." Therefore, all I ask students to do is write a short text about traditional foods.

The time restrictions that G5 mentioned align with Musthafa's (2020) findings, which showed that teachers' adoption of project-based learning and culturally responsive teaching practices were severely hampered by the pressures of standardiz ed testing and rigid curriculum structures.

The importance of allowing time for the preparation, implementation, and reflection on any project that integrates authentic cross-cultural and digital technologies is critical. It remains a real limitation on the scope within which educators operate. (Rustandi & Mubarok, 2022). In any case, private junior high school teachers have managed to exercise a fair degree of ingenuity within these confines (G3).

"*I once asked students to make a short video in English about tourist attractions in Palembang. They were very excited, especially when they presented it in class*." (G3)

G3's teacher described a student-made video project on Palembang tourism that

generated strong excitement. Nevertheless, classroom observation highlighted an important gap between student engagement and actual language learning. When reviewing the videos, students mostly read memorized scripts with simple vocabulary ("This is Ampera Bridge. It is big and beautiful") or inserted Google Translate phrases. Very few demonstrated the linguistic complexity expected at their level.

Although the project created a meaningful communicative purpose, students researched tourism sites online and exchanged peer feedback, it lacked essential language scaffolding, such as sentence frames, targeted vocabulary, or feedback on accuracy. As a result, students were motivated but not necessarily developing their proficiency.

This reveals a key pedagogical tension: cultural relevance boosts motivation, but it does not automatically build language skills. The teacher evaluated the project based on enthusiasm ("they were very excited") rather than linguistic performance, and no rubric guided accuracy or complexity. Compared with effective digital storytelling practices (Reinders, 2011), the project missed core elements: pre-task grammar focus, during-task scaffolding, and post-task reflection. Without training in task-based teaching, the teacher could only guide the activity, not the underlying language development.

The project's strength lies in its potential. It activated cultural knowledge and gave students a real purpose for using English. But without structured language support, it risks becoming "activity for activity's sake" (Swain, 2005) rather than a pathway to systematic language growth

The project description also resonates with Vygotsky's sociocultural theory of learning, which holds that social interaction and scaffolding in teaching are key to learning. As Pramesti & Sari (2021) state, learners who produce culture texts and videos locally are authentically and legitimately engaged in a culturally significant social practice of meaning creation. As Widiati and Cahyono (2020) demonstrated, digitally culture-centered projects provide students with factual communicative purposes and audiences that extend beyond the teacher and the classroom, thus enabling students to achieve communicative competence.

G3's video project illustrates "multimodal cultural literacy" as described by Atmowardoyo et al. (2021), in which students use different semiotic modalities (visual, textual, and auditory) to articulate and convey cultural meanings. According to Masduqi & Izzati (2020), students tend to engage with materials more readily, and diverse materials are more likely to meet diverse learning needs and preferences. This reinforces the importance of integrating multiple learning modalities.

Time, funding, and training limitations point to the educational system's failure to allow teachers the freedom to create. To address the issue of teacher effort, it must first be acknowledged to be structural, rather than what Fauzan & Ngabut (2021) state. This resonates with Setiyadi (2020), who comments that educational innovation in Indonesia needs courage at the systemic rather than just individual level. This integrated culturally responsive digital pedagogy will also require, at the systemic level, the establishment of professional learning communities, equitable resource provisions, and flexible curricula to address teacher workload and burnout.

The documentation of this theme illustrates the lack of institutional support that the teachers need to put into practice what they know. This perfectly embodies what Sundari et al. (2022) identify as "implementation fidelity deficit." The teachers certainly grasp the pedagogical ideas, but they lack the system, time, and resources for sustained implementation. This is even more pronounced in resource-scarce educational settings, where teachers are forced to be creative

and derive solutions within very pragmatic constraints (Nurlaila & Rahmawati, 2021).

Rizki & Fitrawati (2020) highlight that the 'technological solutionism' critique of educational reform is relevant for G2's focus on the role of digital application skills in professional development. Briefly ignoring the deeper pedagogical, cultural, and equity issues, this plan suggests that the use of digital technologies will, by itself, improve outcomes. Sari and Wahyudin (2022) assert that the pedagogical imagination, the ability to envision how learning and cultural shifts can be achieved through technology, is as critical for successful technology integration as technological skills.

This study focuses on the intricate linkages of limited regional culture-based learning materials and the unequal diffusion of technology, as well as the challenges teachers face in digitally transforming their English language teaching located in Palembang. Based on theme analysis and interview data, several teachers have tried to adapt teaching for the local context. However, the extent of this effort is pedagogically superficial, uncritical, and yet to be widely embraced.

Document Analysis: Material Evidence of Digital and Cultural Gaps

To triangulate interview findings, systematic analysis of curriculum documents, textbooks, and teaching materials provided material evidence of the challenges teachers described.

Textbook Cultural Content Analysis

The government-mandated textbook *When English Rings a Bell* (Wachidah et al., 2017), used uniformly across all five schools, underwent systematic cultural content analysis. Two independent coders examined eight chapters (196 pages) using categories adapted from Cahyani et al. (2020), achieving strong inter-coder reliability (Cohen's ê = 0.87).

Table 5. Cultural representation in mandated textbook

Cultural Category	Frequency	Percentage	Representative Examples
Western contexts	38	80.9%	London Eye, Statue of Liberty, Thanksgiving, Christmas markets
Southeast Asian (non-Indonesian)	6	12.8%	Singaporean tourism, Thai temples
Indonesian (national, non-regional)	2	4.3%	Jakarta's Monas, Borobudur Temple
Palembang-specific	0	0%	None identified
Culturally neutral	1	2.1%	Generic family scenarios
Total cultural references	47	100%	

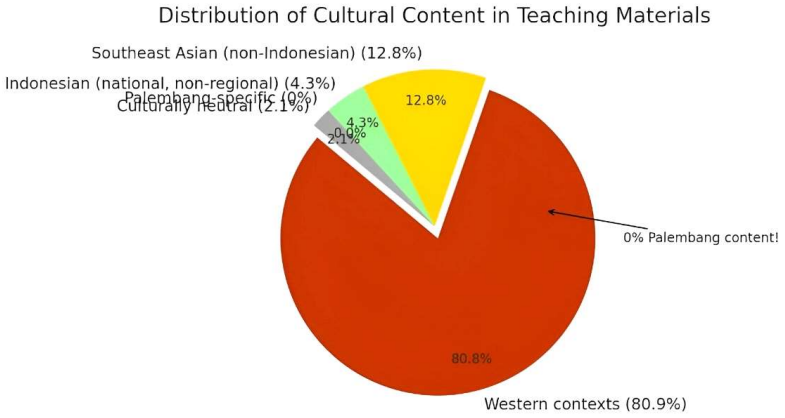

Figure 2. Distribution of cultural content in government-mandated english textbook

This quantitative analysis validates teachers' qualitative reports: over 80% of cultural content features Western contexts, with no representation of Palembang, despite the Ministry of Education mandate No. 37, year 2018, requiring the integration of local wisdom. Even Indonesian national culture receives minimal attention (4.3%), suggesting not merely Western bias but systematic exclusion of regional identities.

Linguistic Implications: Western-centric content creates comprehension barriers. Chapter 4's reading passage on "Ice Skating in Central Park" assumes familiarity with winter sports and urban American contexts, which are alien to Palembang students who experience a tropical climate and river-based culture. Conversely, no passages leverage students' existing schemas about the Musi River, *pempek*, or bidar boats, and they miss opportunities to activate schemas that facilitate language acquisition (Anderson & Pearson, 1984).

Lesson Plan Analysis

Examination of 15 lesson plans (3 per school) revealed stark disparities in local cultural integration:

Table 6. Cultural integration in teacher lesson plans

School	Lesson Plans Collected	Plans with Local Cultural Elements	Percentage	Nature of Integration
G1	3	2	66.7%	*PowerPoint* slides on Ampera Bridge (descriptive text), worksheet on Palembang food vocabulary.
G2	3	0	0%	Textbook sequence followed verbatim
G3	3	2	66.7%	Student video project on local tourism (detailed rubric provided)
G4	3	0	0%	Textbook-based with no adaptations
G5	3	0	0%	Textbook-based, one plan mentioned *"if time permits, discuss local food"* (conditional, not implemented)
Total	15	4	26.7%	

Only 26.7% of lesson plans incorporated local culture, all from better-resourced schools (G1, G3). This pattern corroborates interview findings: adequate infrastructure and professional capacity enable cultural adaptation, while resource-constrained teachers default to standardized textbook sequences.

Quality Analysis: Even culturally integrated plans showed limitations. G1's Ampera Bridge lesson provided vocabulary and images but no critical cultural discussion, treating local culture as "content" rather than "lens" for learning. G3's video project rubric assessed technical quality (video length, editing) and presentation skills, but lacked linguistic accuracy criteria, confirming interview analysis that excitement does not guarantee language development.

Curriculum Document Analysis

Provincial curriculum guidelines (Dinas Pendidikan Provinsi Sumatera Selatan, 2023) and school-level syllabi were analyzed for cultural integration directives: (1) National Curriculum (K-13) contains three references to *muatan lokal* (local content) requiring "integration of local wisdom" but provides no operational definition, assessment criteria, or resource allocation. (2) Provincial Guidelines mention "South Sumatra cultural values" twice across 47 pages, listing examples (Palembang *songket*, traditional

houses) without pedagogical strategies for integrating them into English teaching. (3) School Syllabus: All five schools used identical national syllabus templates with no localized adaptations, despite policy allowing 20% local content flexibility.

This policy-practice gap explains teacher frustration. G4's teacher stated, *"The curriculum says integrate local culture, but how? There are no materials, no training, no time allocation."* Document analysis confirms this: policy rhetoric exists without implementation infrastructure, no budget lines for material development, no professional development modules, no assessment frameworks for cultural competence.

Digital Resource Inventory

School-provided technology inventory lists revealed quantified disparities matching teacher reports:

Table 7. Digital resource availability across schools

School	Listed Digital Tools/Platforms	Categories	Examples
G1	18 tools	LMS, assessment, multimedia, collaboration	*Google Classroom, Quizizz, Kahoot, YouTube, Canva, Padlet, Flipgrid*
G2	7 tools	Basic productivity, limited multimedia	*PowerPoint, WhatsApp, YouTube* (inconsistent access), *Google Forms*
G3	22 tools	Comprehensive LMS, premium apps	*Moodle, Zoom, Quizizz Pro, Canva Pro, Grammarly, BBC Learning English*
G4	3 tools	Minimal, mostly offline	*PowerPoint, WhatsApp*, and occasional *YouTube*
G5	5 tools	Basic communication, limited learning apps	*WhatsApp, PowerPoint, Google Forms, YouTube* (limited), offline dictionary apps

This inventory quantifies the digital divide: G3 (private school) lists 22 tools, while G4 lists 3, a sevenfold disparity. Notably, culturally relevant digital content creation tools (such as *Canva* and video editors) are available only in well-resourced schools, materially constraining teachers' ability to develop local cultural materials.

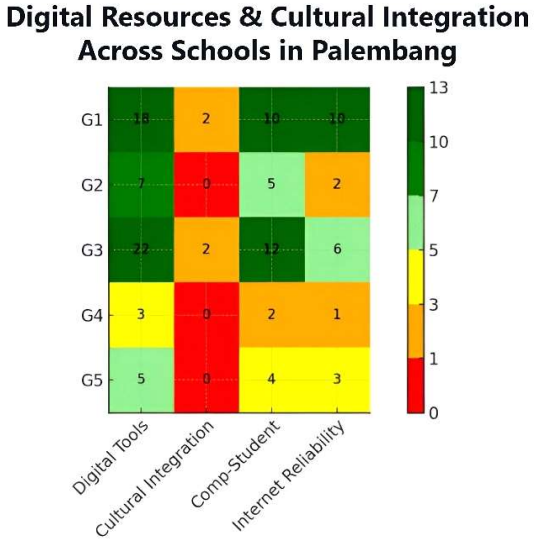

Figure 3. Digital resources & cultural integration across schools in palembang

The sharp contrast in the heatmap, where G1, G2, and G3 glow in green while G4 and G5 are marked in red, highlights a simple but powerful truth: the resources a school has directly shape what teachers can realistically do in the classroom. It is not that teachers in under-resourced schools choose not to integrate local culture. They simply do not have the tools, time, or training to make it happen. Furthermore, ironically, it is their students who could benefit the most from culturally grounded learning who end up feeling the greatest sense of disconnect.

Convergence Across Data Sources

Document analysis corroborates and extends interview findings: (1) Cultural Marginalization (Theme 2): Textbook analysis (0% Palembang content) provides quantitative evidence for teachers' qualitative complaints about Western-centric materials. (2) Digital Inequality (Theme 1): Resource inventories materialize the abstract "access gap" teachers described; differences are not merely perceptual but documented in institutional records. (3) Constrained Agency (Theme 3): Lesson plan analysis reveals that cultural integration occurs only where capacity exists (G1, G3), validating teachers' claims about unsupported individual efforts. Curriculum document gaps confirm systemic failure beyond individual schools. (4) Compounding Effects: Schools with fewer digital tools (G4, G5) also show zero cultural integration in lesson plans, demonstrating how digital and cultural deprivations compound; teachers lack both tools for creation and capacity for adaptation.

This multi-source convergence strengthens confidence that findings reflect systemic patterns rather than individual perceptions, addressing potential bias from relying solely on teacher interviews.

Focus Group Discussions (FGDs)

To capture students' perspectives more accurately through triangulation, this study added Focus Group Discussions (FGDs) with two contrasting student groups: six students from G1 (an urban public school) and six students from G4 (a semi-rural public school). Each FGD lasted 40–50 minutes. The discussions followed a protocol that explored their experiences with digital technology in English learning, their sense of connection to the teaching materials, and their preferences for cultural content.

Students in G1 described their digital learning experiences as frequent and well-integrated. They talked about using Google Classroom almost every day, accessing Quizizz for vocabulary practice, and watching YouTube videos as a normal part of lessons. One student explained that when asked to describe a tourist destination, she could immediately look up images of the Ampera Bridge and create a digital presentation. However, when asked about the content in their textbooks, they admitted feeling disconnected from contexts like Central Park or Thanksgiving festivals. One student said he understood descriptive texts more easily when the teacher replaced an example about Big Ben with the Great Mosque of Palembang because he had been there and knew exactly what it looked like. When the discussion shifted to cultural identity, they said they felt proud of Palembang culture but rarely saw it reflected in English lessons. They perceived English more as a tool for "talking about foreign countries" than a medium for expressing their own local identity.

The contrast with the G4 FGD was striking. These students described their digital experiences as sporadic and full of obstacles. The school's internet often did not work, and many students did not have their own smartphones. When given online assignments, they had to share a single device in a group or wait until they got home to borrow a parent's phone. One student expressed frustration when the teacher assigned an internet research task, only for the connection to fail midway, forcing the class to simply listen as the teacher read from the textbook instead. They also felt the learning materials were far removed from

their daily lives. When discussing a text titled "My Holiday in London," a student asked why they needed to learn about a place they had never seen and likely would never visit. However, when the teacher assigned a project on the Bidar Boat Race, their enthusiasm changed completely. They said they could interview their grandfather or uncle who had taken part in the race, write an English story about a family tradition, and feel proud presenting something they deeply understood. One student shared that English only felt "useful" when she could use it to tell stories about her own culture, not just read about someone else's.

Both groups expressed a strong desire to see more Palembang-related content in their English lessons. G1 students wanted this integration to be systematic rather than occasional and dependent on the teacher's free time. G4 students said that local content made learning feel more relevant and meaningful, even without advanced technology. Surprisingly, the findings showed that G4 students displayed deeper emotional engagement when local cultural content was used, compared to G1 students who had better technological access but still worked with predominantly foreign cultural materials. This suggests that cultural relevance can partly compensate for technological constraints in terms of motivation and emotional connection, even though it does not eliminate the widening digital skills gap.

These FGD findings reinforce the teachers' narratives, but with an even sharper dimension. Students are not passive recipients of digital and cultural disparities; they actively experience them as a form of double exclusion. They want learning that reflects their realities and identities, and they recognize that when this happens, their learning experience becomes far more meaningful. This pattern aligns with contextual learning theories, which argue that connecting new knowledge to existing cultural schemas facilitates deeper understanding and long-term retention.

Reinterpretation and Integration of Theory

The findings from Palembang suggest that some widely used learning theories need rethinking when applied in contexts shaped by digital inequality and cultural marginalization. Vygotsky's view of learning as socially mediated through cultural tools assumes that students have relatively equal access to those tools (Ünlüsoy, Leander, & de Haan, 2022). In this study, however, access to mediational tools, especially digital technology, was anything but equal. In theory, technology should connect learners to wider communities of practice, but when internet access is unstable or devices must be shared among many students, the promise of that theory remains largely unrealized.

Warschauer and Matuchniak (2010) also remind us that technology only works within the sociocultural contexts in which it is embedded. The stark contrast between G1's well-resourced classroom and G4's resource-poor school suggests more than a difference in implementation. It points to a deeper challenge to the universality of digital learning theories. If only some students consistently experience technology-mediated scaffolding, their Zones of Proximal Development (ZPD) may expand unevenly, complicating what we usually assume about equitable cognitive growth.

The ZPD itself, as Walqui (2006) explains, relies on learners receiving appropriate scaffolding at key moments. Nevertheless, when technology is supposed to provide that scaffolding and is unreliable or unavailable, some students are effectively denied access to digitally mediated learning opportunities. This does not imply that learning cannot happen without technology. However, it does highlight that, in systems increasingly shaped by digital expectations, students without access face layered, compounding disadvantages.

Cultural relevance introduces another layer of tension. Constructivist theory emphasizes that

learners build knowledge through experiences and reflection (Ayaz & Sekerci, 2015; Bada & Olusegun, 2015). However, many teachers described materials centered on distant cultural contexts London landmarks, instead of the Musi River, leaving students with little to connect to. The strong engagement teachers observed when using Palembang-based examples reflects what situative perspectives describe as learning embedded in lived reality (Manzano-Sánchez, 2016). Still, the limited availability of such materials raises difficult questions about whose cultural experiences are prioritized in the curriculum.

These patterns do not suggest that current theories are wrong. Instead, they reveal blind spots that emerge when theories developed in well-resourced, culturally dominant settings are applied in classrooms marked by scarcity and cultural distance. The creative workarounds teachers employed demonstrate both educators' adaptability and the limits of relying on individual innovation to fill systemic gaps.

Approaching the Theory of Local-Cultural Digital Learning

What this study begins to suggest is a different way of thinking about digital learning. Instead of treating digital integration as universal and easily adopted anywhere, our findings point to the need for approaches rooted in local cultural ways of knowing. This is not yet a full theory, but an early attempt to rethink how technology should function in language education, especially in places where digital access and cultural representation are uneven.

If we take Vygotsky's idea of social mediation and constructivism's emphasis on learning through experience seriously, then importing ready-made models from elsewhere will never be enough. Technology is not just a neutral tool; it can either support or silence the knowledge students already bring from their communities. When the G1 teacher replaced lessons about London with materials featuring the Ampera Bridge, she did more than localize a textbook. She shifted students from being outsiders looking at someone else's culture to insiders interpreting their own heritage through English.

This aligns with ideas in culturally sustaining pedagogy (Paris, 2012; Paris & Alim, 2017), which argue that local culture should not be an optional add-on. From this perspective, cultural identity becomes central to how teachers choose technology, design digital content, and shape classroom interactions. Knowledge is not culturally neutral; what a community values as "worth learning" is rooted in its own ways of understanding the world.

Symbolic competence offers another useful lens. Through digital tools, students can make their cultural identities visible to the world, creating English-language videos about bidar boats or pempek traditions. Instead of consuming Western-made digital content, they become creators of meaning grounded in their own culture. As Caingcoy (2023) notes, language learning is always a form of cultural mediation, helping students build layered identities rather than adopt a single target culture.

Yet we must be careful not to idealize this vision. Technology often magnifies inequalities when access issues are ignored (Lãcrãmioara & Pavel, 2018). The digital divide observed in this study indicates that cultural digital production will remain out of reach for many students unless infrastructure and training gaps are first addressed.

What we might tentatively call a *Local-Cultural Digital Learning* perspective, therefore, requires two commitments: digital equity (ensuring access to devices, internet, and training) and cultural equity (treating local knowledge as legitimate and central). This is not just about inserting Palembang examples into

English lessons. It asks us to rethink what counts as valuable knowledge and to ensure every student has the technological means to participate in creating it.

This has deeply human implications. Students become more than future workers learning skills; they emerge as cultural beings whose histories, identities, and emotions matter in learning spaces. Research on culturally responsive pedagogy shows that when students' identities are centered, their engagement and comprehension increase (Boon & Lewthwaite, 2015; Ober et al., 2023). In Palembang's context, this might mean valuing a student's explanation of the cultural meaning of the Musi River as highly as their description of generic tourist attractions.

Finally, this perspective invites us to rethink technology's role in globalization. Instead of viewing digital tools mainly as channels for Western content, they can become platforms that amplify local voices and connect them to wider networks on a more equal footing. This resonates with work showing that technology can support social inclusion when communities use it to express, not just consume, knowledge (Bates, 2019; Fonseca & Conboy, 2006).

These ideas are preliminary and require much more research before becoming a full theoretical framework. They are grounded in the real challenges and creative practices observed in Palembang's classrooms. For now, they serve as an invitation: to reconsider whose knowledge counts in digital learning and how both technological and cultural resources can be more fairly shared.

■ CONCLUSION

This study explored how digital access and local culture intersect in English language teaching across five schools in Palembang. Three main insights emerged. First, digital inequality was striking: while urban schools had stronger infrastructure, such as 1:3 computer-to-student ratios and stable 100 Mbps connections, semi-rural schools operated with only 1:15 ratios and highly unstable 2 Mbps internet. Second, the curricular materials available to teachers were overwhelmingly Western, with 80.9% of content centered on foreign contexts and none representing Palembang. However, teachers consistently observed that students were more engaged when lessons included local culture. Third, teachers were navigating layers of practical challenges, such as generic professional development, limited curriculum time, the absence of ready-made local materials, and minimal institutional support. As a result, they often relied on personal initiatives that, though creative, were not sustainable and unintentionally widened existing inequalities.

These findings point to the need for concrete steps rather than broad policy statements. National textbook developers should integrate at least 30% regional content and create digital repositories accessible offline. Schools can strengthen implementation by forming Cultural–Digital Integration Teams, giving teachers protected collaboration time each week, improving connectivity to at least 10 Mbps, ensuring a minimum 1:5 device ratio, and recognizing teachers who develop culturally contextualized materials. Professional development should blend technology and culture, teaching not just how to use applications, but how to design Palembang-based digital resources. At a broader level, policymakers should commit 20% of local education budgets to closing infrastructure gaps within three years, formally allow 30% local adaptation of the curriculum, and establish provincial centers dedicated to developing region-specific teaching materials. Together, these shifts would help transform individual, isolated efforts into systemic practices that make digital and cultural inclusion achievable for all students.

Several limitations temper the scope of these conclusions. The small sample (five teachers from one city) limits the extent to which the

findings can be applied to other Indonesian regions with different cultural, technological, or policy environments. Because the study drew mainly on teacher perspectives, it does not fully capture students' experiences or how digital access and cultural content actually influence their language learning; without systematic student data, engagement cannot be directly linked to proficiency gains. The two-lesson observation per teacher offers only a brief look into classroom practices rather than a full picture across a school year. Document analysis may also have overlooked informal or digital resources that teachers created but did not formally record. Finally, data were collected during a particular policy moment (October 2024), meaning some conditions may shift over time. For these reasons, the findings should be viewed as exploratory rather than definitive.

Future research would benefit from larger, multi-site samples, longitudinal studies tracking both engagement and language development, direct inclusion of student voices, and cross-regional comparisons to understand how differing cultural contexts and infrastructure levels shape digital and cultural integration. Such work is essential for testing, refining, and expanding the insights offered here.

■ REFERENCES

Alkhudiry, R. (2022). The contribution of Vygotsky's sociocultural theory in mediating L2 knowledge co-construction. *Theory and Practice in Language Studies, 12*(10), 2117–2123. https://doi.org/10.17507/tpls.1210.19

Aminah, S., Arifin, Z., & Mutohhari, F. (2021). The effect of learning models and learning motivation on students' learning outcomes in social studies subjects. *International Journal of Elementary Education, 5*(1), 36–44. https://doi.org/10.23887/ijee.v5i1.31983

Anderson, R. C., & Pearson, P. D. (1984). A schema-theoretic view of basic processes in reading comprehension. In P. D. Pearson (Ed.), *Handbook of reading research* (pp. 255–291). Longman.

Argawati, N. O., & Suryani, L. (2020). Digital-based instruction: Chances and challenges in English language teaching context. *International Journal of Evaluation and Research in Education (IJERE), 9*(4), 1138–1146. https://doi.org/10.11591/ijere.v9i4.20579

Arista, H. D. (2020). *Pemanfaatan potensi budaya dan lingkungan lokal sebagai sumber belajar bahasa Indonesia dalam konteks global*. [Utilization of local cultural and environmental potential as a source of learning Indonesian in a global context]. *ISCE: Journal of Innovative Studies on Character and Education, 4*(1), 10-24. http://iscjournal.com/index.php/isce

Atmowardoyo, H., Weda, S., & Sakkir, G. (2021). Students' voice on multimodal learning environment in language teaching. *Celt: A Journal of Culture, English Language Teaching & Literature, 21*(1), 112–136. https://doi.org/10.24167/celt.v21i1.2943

Ayaz, M. F., & Sekerci, H. (2015). The effects of the constructivist learning approach on student's academic achievement: A meta-analysis study. *Turkish Online Journal of Educational Technology, 14*(4), 143–156.

Bada, S. O., & Olusegun, S. (2015). Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research & Method in Education, 5*(6), 66–70. https://doi.org/10.9790/7388-05616670

Bates, A. W. (2019). *Teaching in a digital age: Guidelines for designing teaching and learning* (2nd ed.). Tony Bates Associates Ltd. https://doi.org/10.59668/900.2

Bhakti, C. P., & Meiningsih, L. P. (2022). Digital literacy, psychological wellbeing, and teaching readiness among pre-service teachers during pandemic. *Cakrawala Pendidikan, 41*(1), 122-133. https://doi.org/10.21831/cp.v41i1.45634

Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research, 26*(13), 1802-1811. https://doi.org/10.1177/1049732316654870

Blake, R. J. (2013). *Brave new digital classroom: Technology and foreign language learning* (2nd ed.). Georgetown University Press. https://doi.org/10.2307/j.ctt2tt3jx

Boon, H. J., & Lewthwaite, B. (2015). Development of an instrument to measure a facet of quality teaching: Culturally responsive pedagogy. *International Journal of Educational Research, 72*, 38–58. https://doi.org/10.1016/j.ijer.2015.04.009

Borg, S. (2006). *Teacher cognition and language education: Research and practice*. Continuum International Publishing Group.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brinkmann, S., & Kvale, S. (2015). *Interviews: Learning the craft of qualitative research interviewing* (3rd ed.). Sage Publications.

Byram, M., Golubeva, I., Hui, H., & Wagner, M. (2017). *From principles to practice in education for intercultural citizenship*. Multilingual Matters. https://doi.org/10.21832/9781783097654

Cahyani, H., Cahyono, B. Y., & Astuti, U. P. (2020). Cultural content in EFL textbooks used by Indonesian senior high schools. *Arab World English Journal, 11*(4), 445-459. https://doi.org/10.24093/awej/vol11no4.28

Cahyono, B. Y., & Widiati, U. (2021). *The teaching of English as a foreign language in Indonesia*. Routledge. https://doi.org/10.4324/9781003022381

Caingcoy, M. E. (2023). Intercultural communicative competence and English language teaching: Teachers' perceptions and practices in the Omani EFL context. *Cogent Education, 10*(1), 2171486. https://doi.org/10.1080/2331186X.2023.2171486

Candela, A. G. (2019). Exploring the function of member checking. *The Qualitative Report, 24*(3), 619–628. https://doi.org/10.46743/2160-3715/2019.3726

Chapelle, C. A., & Sauro, S. (Eds.). (2017). *The handbook of technology and second language teaching and learning*. Wiley-Blackwell. https://doi.org/10.1002/9781118914069

Cope, B., & Kalantzis, M. (2015). The things you do to know: An introduction to the pedagogy of multiliteracies. In B. Cope & M. Kalantzis (Eds.), *A pedagogy of multiliteracies: Learning by design* (pp. 1-36). Palgrave Macmillan. https://doi.org/10.1057/9781137539724_1

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage Publications.

Daud, M., & Musigrungsi, S. (2024). English instruction challenges and opportunities in Indonesian primary schools: A systematic review. *Journal of English Language Teaching Innovations and Materials (JELTIM), 6*(1), 31–49. https://doi.org/10.26418/jeltim.v6i1.72178

Dewi, N. R., & Budiono, A. (2021). Collaborative learning using digital

technology during COVID-19 pandemic: Indonesian EFL students' perceptions. *Journal of Asia TEFL, 18*(3), 1024–1033. https://doi.org/10.18823/asiatefl.2021.18.3.20.1024

Dinas Pendidikan Provinsi Sumatera Selatan. (2023). *Laporan implementasi kurikulum merdeka tingkat provinsi* [Provincial curriculum implementation report]. Palembang: Dinas Pendidikan Provinsi Sumatera Selatan.

Fauzan, U., & Ngabut, M. N. (2021). EFL teachers' challenges and strategies during COVID-19 pandemic: Multiple case studies. *LANGKAWI: Journal of The Association for Arabic and English, 7*(1), 24-35. https://doi.org/10.31332/lkw.v7i1.2620

Fauziati, E. (2021). Culture-based English language teaching: Integrating local wisdom into EFL classroom. *Register Journal, 14*(1), 1–20. https://doi.org/10.18326/rgt.v14i1.1-20

Fonseca, J., & Conboy, J. (2006). Secondary student perceptions of factors affecting failure in science in Portugal. *Eurasia Journal of Mathematics, Science and Technology Education, 2*(2), 82–95. https://doi.org/10.12973/ejmste/75456

Galletta, A. (2013). *Mastering the semi-structured interview and beyond: From research design to analysis and publication*. NYU Press. https://doi.org/10.18574/nyu/9780814732939.001.0001

Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press.

Godwin-Jones, R. (2019). Riding the digital wilds: Learner autonomy and informal language learning. *Language Learning & Technology, 23*(1), 8–25. https://doi.org/10125/44667

Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer Assisted Language Learning, 27*(1), 70–105. https://doi.org/10.1080/09588221.2012.700315

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 59-82. https://doi.org/10.1177/1525822X05279903

Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. Sage Publications. https://doi.org/10.4135/9781483384436

Hadijah, S., Shalawati, S., & Amri, Z. (2023). EFL teachers' beliefs and practices on technology integration in teaching English. *Studies in English Language and Education, 10*(1), 363-383. https://doi.org/10.24815/siele.v10i1.23878

Hammond, Z. (2015). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin Press.

Harvey, L. (2015). Beyond member-checking: A dialogic approach to the research interview. *International Journal of Research & Method in Education, 38*(1), 23–38. https://doi.org/10.1080/1743727X.2014.914487

Hermawan, B., & Lia, F. (2020). *Konten budaya dalam buku teks bahasa Inggris yang digunakan di SMA Indonesia*. [The cultural content in English textbooks used in Indonesian senior high schools]. *Learn Journal: Language Education and Acquisition Research Network, 13*(2), 275–292.

Hermawan, D., Rai, I. G. A., & Padmadewi, N. N. (2020). Developing local culture-based digital materials for teaching English at senior high school. *Journal of Education Research and Evaluation, 4*(3), 286–294. https://doi.org/10.23887/jere.v4i3.27445

Hockly, N. (2016). Focus on learning technologies. *ELT Journal, 70*(1), 88–91. https://doi.org/10.1093/elt/ccv064

Hubbard, P. (2008). CALL and the future of language teacher education. *CALICO Journal, 25*(2), 175–188. https://doi.org/10.1558/cj.v25i2.175-188

Indah, R. N., Toyyibah, Budhiningrum, A. S., & Afifi, N. (2022). The research competence, critical thinking skills, and digital literacy of Indonesian EFL students. *Journal of Language Teaching and Research, 13*(2), 315–324. https://doi.org/10.17507/jltr.1302.11

Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing, 72*(12), 2954-2965. https://doi.org/10.1111/jan.13031

Koelsch, L. E. (2013). Reconceptualizing the member check interview. *International Journal of Qualitative Methods, 12*(1), 168-179. https://doi.org/10.1177/160940691301200105

Kristiawan, D. Y. (2012). Situating local culture in ELT material design in the Indonesian EFL context. *The English Teacher, XLI* (2), 79–90. https://journals.melta.org.my/index.php/tet/article/view/248

Kusumaningputri, R., & Widodo, H. P. (2018). Promoting Indonesian university students' critical intercultural awareness in tertiary EAL classrooms: The use of digital photograph-mediated intercultural tasks. *System, 72*, 49-61. https://doi.org/10.1016/j.system.2017.10.003

Kwarteng, M. (2025). Practical application of Piaget's cognitive theory and Vygotsky's sociocultural theory in classroom pedagogy. *Journal of Studies in Education, 15*(2), 68–85. https://doi.org/10.5296/jse.v15i2.22703

Lãcrãmioara, R. G., & Pavel, A. P. (2018). Using new technologies in teaching and learning. *Procedia - Social and Behavioral Sciences, 180*, 1246-1250. https://doi.org/10.1016/j.sbspro.2015.02.253

Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a. the remix. *Harvard Educational Review, 84*(1), 74–84. https://doi.org/10.17763/haer.84.1.p2rj131485484751

Lai, C., & Widmar, N. O. (2021). Revisiting the digital divide in the COVID-19 era. *Applied Economic Perspectives and Policy, 43*(1), 458–464. https://doi.org/10.1002/aepp.13104

Lantolf, J. P., & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford University Press. https://doi.org/10.1093/oso/9780199288564.001.0001

Lengkanawati, N. S. (2020). EFL teachers' competence in integrating culture in language teaching. *Celt: A Journal of Culture, English Language Teaching & Literature, 20*(2), 304-323. https://doi.org/10.24167/celt.v20i2.2964

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications. https://doi.org/10.1016/0147-1767(85)90062-8

MacPhail, C., Khoza, N., Abler, L., & Ranganathan, M. (2016). Process guidelines for establishing intercoder reliability in qualitative studies. *Qualitative Research, 16*(2), 198–212. https://doi.org/10.1177/1468794115577012

Malterud, K., Siersma, V. D., & Guassora, A.

D. (2016). Sample size in qualitative interview studies: Guided by information power. *Qualitative Health Research, 26*(13), 1753-1760. https://doi.org/10.1177/1049732315617444

Manzano-Sánchez, H. (2016). Situated learning and Vygotsky's sociocultural theory: Understanding teacher professional development. *Revista Latinoamericana de Estudios Educativos, 46*(1), 119–146.

Marlina, R., & Giri, R. A. (2014). *The pedagogy of English as an international language: Perspectives from scholars, teachers, and students*. Springer. https://doi.org/10.1007/978-3-319-06127-6

Marsh, J. (2016). 'Unboxing' videos: Co-construction of the child as cyberflâneur. *Discourse: Studies in the Cultural Politics of Education, 37*(3), 369–380. https://doi.org/10.1080/01596306.2015.1041457

Masduqi, H., & Izzati, L. N. (2020). Multimodal literacy: Emancipating students' critical thinking through digital storytelling. *International Journal of Language Education, 4*(3), 435–447. https://doi.org/10.26858/ijole.v4i3.14871

Matsuda, A. (2017). *Preparing teachers to teach English as an international language*. Multilingual Matters. https://doi.org/10.21832/9781783097036

McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica, 22*(3), 276–282. https://doi.org/10.11613/BM.2012.031

McKay, S. L. (2018). English as an international language: What it is and what it means for pedagogy. *RELC Journal, 49*(1), 9–23. https://doi.org/10.1177/0033688217738817

Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research, 25*(9), 1212–1222. https://doi.org/10.1177/1049732315588501

Musthafa, B. (2020). English language teaching in Indonesia: A continuous struggle for relevance. *Indonesian Journal of Applied Linguistics, 10*(2), 473–486. https://doi.org/10.17509/ijal.v10i2.28599

Nugroho, A., & Mutiaraningrum, I. (2020). EFL teachers' beliefs and practices about digital learning of English. *EduLite: Journal of English Education, Literature and Culture, 5*(2), 304-321. https://doi.org/10.30659/e.5.2.304-321

Nurfaidah, S., Lengkanawati, N. S., & Sukyadi, D. (2021). Levels of reflection in EFL pre-service teachers' teaching journal. *Indonesian Journal of Applied Linguistics, 10*(3), 633–641. https://doi.org/10.17509/ijal.v10i3.31753

Nurlaila, A. P., & Rahmawati, E. (2021). The use of digital technology in EFL classroom: Teachers' creativity during pandemic. *Journal of English Language Teaching and Linguistics, 6*(2), 301–319. https://doi.org/10.21462/jeltl.v6i2.555

Ober, R., Parter, R. J., & Bat, M. (2023). Weaving Aboriginal and Torres Strait Islander perspectives and pedagogies into the fabric of early childhood education. *Contemporary Issues in Early Childhod, 24*(1), 124–138. https://doi.org/10.1177/14639491231161119

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health, 42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher, 41*(3), 93–97. https://doi.org/10.3102/0013189X12441244

Paris, D., & Alim, H. S. (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. Teachers College Press.

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage Publications.

Poland, B. D. (1995). Transcription quality as an aspect of rigor in qualitative research. *Qualitative Inquiry, 1*(3), 290–310. https://doi.org/10.1177/107780049500100302

Pramesti, U. D., & Sari, F. M. (2021). Investigating EFL students' perception toward multimodal learning. *Journal of English Language Teaching and Linguistics, 6*(1), 39-55. https://doi.org/10.21462/jeltl.v6i1.517

Putri, N. P. D., Artini, L. P., & Nitiasih, P. K. (2022). Project-based learning strategy on students' writing skill viewed from creativity. *Journal of Education Research and Evaluation, 6*(1), 95-106. https://doi.org/10.23887/jere.v6i1.43642

Rahayu, R. P., Wirza, Y., & Ihsan, D. (2022). Digital literacy and 21st century skills: A bridge to education 4.0 in Indonesia. *International Journal of Instruction, 15*(2), 509–522. https://doi.org/10.29333/iji.2022.15228a

Rahmawati, A., & Ertin. (2020). EFL teachers' challenges in using technology integrated into the classroom. *VELES: Voices of English Language Education Society, 4*(2), 211–219. https://doi.org/10.29408/veles.v4i2.2472

Reinders, H. (2011). Digital storytelling in the foreign language classroom. *ELT World Online, 3*, 1–9.

Rizki, F., & Fitrawati, F. (2020). ICT literacy of senior high school English teachers in integrating technology in language teaching in Padang. *Journal of English Language Teaching, 9*(4), 744-754. https://doi.org/10.24036/jelt.v9i4.109848

Rustandi, A., & Mubarok, H. (2022). Technology literacy as a form of Indonesian education transformation in the digital era. *Advances in Social Science, Education and Humanities Research, 655*, 210–217. https://doi.org/10.2991/assehr.k.220406.033

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Sage Publications.

Sari, D. P., & Wahyudin, A. Y. (2022). Indonesian EFL teachers' technological pedagogical and content knowledge (TPACK) and their beliefs about integrating technology into teaching. *Journal of Asia TEFL, 19*(1), 258-275. https://doi.org/10.18823/asiatefl.2022.19.1.16.258

Selwyn, N. (2016). Digital downsides: Exploring university students' negative engagements with digital technology. *Teaching in Higher Education, 21*(8), 1006–1021. https://doi.org/10.1080/13562517.2016.1213229

Setiyadi, A. B. (2020). *Teaching English as a foreign language* [*Pengajaran bahasa Inggris sebagai bahasa asing*] (2nd ed.). Graha Ilmu.

Spradley, J. P. (2016). *The ethnographic interview*. Waveland Press.

Sudartini, S. (2024). Preserving cultural identity: The imperative of prioritizing Indonesian character values in English textbooks to safeguard against cultural hegemony in language learning. *Jurnal Pendidikan Karakter, 14*(1), 21–37. https://doi.org/10.21831/jpk.v14i1.67890

Suh, Y., An, S., & Forest, D. (2017). Immigration, imagined communities, and collective memories of Asian American experiences: A content analysis of Asian American experiences in Virginia US history textbooks. *The Journal of Social Studies Research, 41*(1), 39–51. https://

doi.org/10.1016/j.jssr.2016.03.001

Suherman, A. (2021). The implementation of character education values in integrated physical education subject in elementary school. *Cakrawala Pendidikan, 40*(2), 426-438. https://doi.org/10.21831/cp.v40i2.30647

Sukma, Y., & Sari, D. A. (2022). The use of local culture-based materials in teaching English: Teachers' perspectives [*Penggunaan materi berbasis budaya lokal dalam pengajaran bahasa Inggris: Perspektif guru*]. *Journal of English Education and Teaching, 6*(1), 14–28. https://doi.org/10.33369/jeet.6.1.14-28

Sulistyo, G. H., Mukminin, A., Abdurrahman, K., & Haryanto, E. (2020). Learning to teach: A case study of student teachers' practicum and policy recommendations. *The Qualitative Report, 25*(10), 3667–3682. https://doi.org/10.46743/2160-3715/2020.4189

Sundari, H., Rafli, Z., & Nuraeni, C. (2022). Indonesian EFL teachers' technological pedagogical content knowledge (TPACK) in remote teaching. *International Journal of Instruction, 15*(3), 515–534. https://doi.org/10.29333/iji.2022.15328a

Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal, 11*(2), 63–75. https://doi.org/10.3316/QRJ1102063

Swain, M. (2005). The output hypothesis: Theory and research. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 471–483). Routledge. https://doi.org/10.4324/9781410612700

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry, 16*(10), 837–851. https://doi.org/10.1177/1077800410383121

Ünlüsoy, A., Leander, K., & de Haan, M. (2022). Reconsidering learning in the digital age: A proposal for "Digital Resonance". *Learning, Culture and Social Interaction, 35*, 100632. https://doi.org/10.1016/j.lcsi.2022.100632

Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterising and justifying sample size sufficiency in interview-based studies: Systematic analysis of qualitative health research over a 15-year period. *BMC Medical Research Methodology, 18*(1), 148. https://doi.org/10.1186/s12874-018-0594-7

Voogt, J., & Roblin, N. P. (2012). A comparative analysis of international frameworks for 21st century competences: Implications for national curriculum policies. *Journal of Curriculum Studies, 44*(3), 299–321. https://doi.org/10.1080/00220272.2012.668938

Wachidah, S., Gunawan, A., Diyantari, & Khatimah, Y. R. (2017). *When English rings a bell: SMP/MTs kelas VII. Kementerian Pendidikan dan Kebudayaan.*

Wahyuni, S., & Sukyadi, D. (2021). Indonesian EFL teachers' professional development: The bright and dark sides of situated learning. *TEFLIN Journal, 32*(1), 50–71. https://doi.org/10.15639/teflinjournal.v32i1/50-71

Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework. *International Journal of Bilingual Education and Bilingualism, 9*(2), 159–180. https://doi.org/10.1080/13670050608668639

Warschauer, M. (2004). *Technology and social inclusion: Rethinking the digital divide*. MIT Press. https://doi.org/10.7551/mitpress/6699.001.0001

Warschauer, M., & Healey, D. (1998).

Computers and language learning: An overview. *Language Teaching, 31*(2), 57–71. https://doi.org/10.1017/S0261444800012970

Warschauer, M., & Matuchniak, T. (2010). New technology and digital worlds: Analyzing evidence of equity in access, use, and outcomes. *Review of Research in Education, 34*(1), 179–225. https://doi.org/10.3102/0091732X09349791

Widiati, U., & Cahyono, B. Y. (2020). The teaching of EFL speaking in the Indonesian context: The state of the art. *Bahasa Dan Seni: Jurnal Bahasa, Sastra, Seni, dan Pengajarannya, 48*(1), 125-138. https://doi.org/10.17977/um015v48i12020p125

Widodo, H. P., Perfecto, M. R., & Canh, L. V. (2020). Constructing cultural representations in English language textbooks: A critical discourse analysis. *Pedagogy, Culture & Society, 29*(4), 617–640. https://doi.org/10.1080/14681366.2020.1749769

Widodo, H. P., Perfecto, M. R., Van Canh, L., & Buripakdi, A. (2021). Culturally inclusive TESOL materials: Teachers' conceptualisations and use. *System, 103*, 102648. https://doi.org/10.1016/j.system.2021.102648

Wijaya, T. T., Cao, Y., Weinhandl, R., & Yusron, E. (2023). Applying the UTAUT model to understand factors affecting micro-lecture usage by mathematics teachers in China. *Mathematics, 10*(7), 1008. https://doi.org/10.3390/math10071008

Zacharias, N. T. (2012). EFL students' understanding of their culture and the target culture. *TEFLIN Journal, 23*(1), 69–86. https://doi.org/10.15639/teflinjournal.v23i1/69-86

Zacharias, N. T. (2019). Toward a culturally and pedagogically sensitive EFL teacher education. *TEFLIN Journal, 30*(1), 1–21. https://doi.org/10.15639/teflinjournal.v30i1/1-21

Zacharias, N. T. (2020). Contextualising, tailoring and connecting: Ways to adapt textbooks. *ELT Journal, 74*(4), 445–453. https://doi.org/10.1093/elt/ccaa031