

Localising the CEFR Material: Teachers' Perceptions of the C.R.A.F.T. Guide for AI-Assisted Adaptation

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Abstract

The adoption of the Common European Framework of Reference (CEFR) in Malaysia has undoubtedly exacerbated the cultural divide for rural ESL learners, who frequently encounter difficulties in reading comprehension due to unfamiliar foreign schemata. Although Generative AI offers a means for material adaptation, the absence of validated rapid engineering methods impedes its practical implementation in educational settings. This study presents the C.R.A.F.T. (Culturally Responsive AI Framework for Teachers) Guide, a systematic procedure designed to democratise the development of Schema-aligned resources. This research employs an exploratory multiple case study methodology to evaluate the usability and effectiveness of the framework with three secondary school teachers from Johor, Sarawak, and Pulau Pinang. Data were triangulated through non-participant observations and semi-structured interviews. The results demonstrate that the C.R.A.F.T. Guide diminished material adaptation processes to less than 15 minutes per text and significantly transformed the teacher's role from 'content developer' to 'cultural gatekeeper.' The results indicate that structured AI frameworks can effectively connect standardised competency goals with local cultural authenticity.

Keywords: CEFR Localisation, Ai-Assisted Material Adaptation, Teachers' Perceptions, ESL Materials Development, C.R.A.F.T. Guide

Introduction

The incorporation of the Common European Framework of Reference (CEFR) into the Malaysian English language curriculum signifies a substantial advancement in aligning language proficiency with international standards. Nonetheless, this quest for standardisation has unintentionally intensified the cultural barrier for rural English as a Second Language (ESL) learners. Although CEFR-aligned textbooks guarantee linguistic uniformity, they sometimes depend on Western-centric frameworks, including allusions to 'winter temperatures,' 'London transit systems,' or foreign social customs. That are detached from the actual experiences of rural Malaysian pupils. Thus, a resource meant for language acquisition

frequently transforms into an obstacle to understanding, resulting in a "cultural dissonance" that hinders learning engagement (Sadhasivam et al., 2023; Tahir et al., 2025).

This problem is best comprehended through Schema Theory, which asserts that reading comprehension involves not just linguistic decoding but also an interactive process necessitating the activation of past knowledge (Zeng, 2022). Rural learners face a "schema short-circuit" when confronted with texts rich in unfamiliar cultural codes. Their working memory is encumbered by the unnecessary cognitive load of interpreting unfamiliar cultural circumstances, rather than concentrating on linguistic acquisition (Todorova, 2024). Culturally Responsive Pedagogy (CRP) promotes the adaptation of materials to align with learners' funds of knowledge; yet, practical implementation is sometimes hindered by teachers' time restrictions. The manual modification of textbooks is laborious, making it an unsustainable practice for overtaxed instructors (Uri & Aziz, 2024).

The advent of Generative Artificial Intelligence (GenAI) presents a possible remedy for this logistical constraint. AI capabilities theoretically enable educators to swiftly rewrite texts, modify difficulty levels, and shift cultural contexts within seconds (Pesovski et al., 2024). Nonetheless, a considerable disparity persists between the accessibility of AI tools and their educational implementation. Contemporary literature indicates that in the absence of systematic direction, educators frequently employ AI for cursory vocabulary simplification instead of profound cultural localisation (Zhou & Peng, 2025). The lack of established "prompt engineering" frameworks compels educators to traverse intricate AI interfaces via trial and error, frequently yielding outputs that are linguistically precise yet culturally generic or prone to "hallucinations."

Significance and Novelty of the Study

This study tackles this significant deficiency by presenting the C.R.A.F.T. (Culturally Responsive AI Framework for Teachers) Guide. This study advances the fields of social sciences and education by presenting a verified methodology that democratises the creation of culturally responsive materials. This research diverges from prior studies that concentrate exclusively on the technical capabilities of AI, situating its use within a pedagogical framework and examining how organised prompting can elevate the teacher's position from a passive curriculum consumer to an active "cultural gatekeeper."

Objectives and Scope

The primary objective of this study is to evaluate the usability and effectiveness of the C.R.A.F.T. Guide in facilitating the AI-assisted localisation of reading materials. Specifically, the study aims to answer the following research questions:

1. How does the C.R.A.F.T. Guide influence the prompting strategies and adaptation workflow of ESL teachers?
2. How do teachers perceive the impact of the C.R.A.F.T. Guide in terms of the efficiency and the cultural authenticity of the materials produced?

This study offers an experimental investigation of how structured AI workflows might reconcile standardised competency requirements with local cultural authenticity, focussing on secondary school teachers from several geographical regions, which are Johor, Sarawak, and Pulau Pinang.

Literature Review

This research is based on a threefold theoretical framework that incorporates Schema Theory, Culturally Responsive Pedagogy (CRP), and Cognitive Load Theory (CLT). Collectively, these ideas elucidate the mechanism underlying the "comprehension deficit" in rural Malaysian ESL learners. Schema Theory clarifies the construction of meaning, CRP emphasises the need for identity affirmation in educational materials, and CLT describes how cultural unfamiliarity serves as an "extraneous load," burdening the learner's working memory. This synthesis offers a clear framework for analysing the constraints of Western-centric CEFR materials and the possibilities of AI-assisted localisation (Zeng, 2022).

The "Schema Short-Circuit": Cultural Relevance and Reading Comprehension

Reading is not only a linguistic decoding process; it is an active cognitive interaction between the text and the reader's existing knowledge. Schema Theory posits that comprehension is contingent upon three separate schemata: linguistic schema (vocabulary/grammar), formal schema (text structure), and content schema (cultural background) (Zeng, 2022).

Although CEFR curricula meticulously structure language frameworks, they frequently overlook content frameworks. Research demonstrates that when a learner is devoid of the particular cultural references inherent in a book, such as comprehension of the social norms associated with a "London commute" or the topography of "The Scottish Highlands," a "schema short-circuit" transpires. Despite the learner's grasp of words (linguistic schema), the absence of cultural reference points hinders profound understanding (Bantei, 2023).

Cognitive Load Theory elucidates this tension. Unfamiliar cultural situations create a significant "extraneous cognitive load." The rural learner's working memory is occupied with deciphering unfamiliar cultural notions rather than processing linguistic norms (Todorova, 2024). Culturally Responsive Pedagogy (CRP) contends that teaching materials should reflect the learners' "funds of knowledge." When texts mirror local contexts, such as substituting "winter clothes" with "monsoon preparation," learners can circumvent the cultural decoding phase and concentrate solely on language acquisition, thus enhancing retention and motivation (Kuek & Eng, 2025; Sandhakumarin & Tan, 2023).

The "Global vs. Local" Tension in CEFR-Aligned Materials

Although local relevance is theoretically essential, the use of CEFR in Malaysia has generated a conflict between standardisation and authenticity. Commercially generated global textbooks emphasise "marketability" rather than "relatability," leading to content that is predominantly urban-centric or Eurocentric (Oktarina et al., 2022).

The disparity is significant for rural learners in regions such as Sarawak or remote Johor. A description of a tube system or a wintry environment establishes an accessibility barrier that suburban learners might not encounter. This engenders an equality concern: rural learners are assessed on their English proficiency, although their performance is frequently undermined by their deficiency in Western cultural capital (Shak et al., 2023). Although teachers are theoretically urged to modify these resources, the practical constraints of excessive workloads and the inflexible structural demands of the CEFR curriculum render manual adaptation virtually unfeasible (Uri & Aziz, 2024).

The AI "Black Box": Opportunities and the Prompt Engineering Gap

The emergence of Generative AI provides a transformative remedy for the "time-poverty" associated with material adaptation. In theory, tools such as ChatGPT can serve as immediate "co-pilots," proficient at rewriting documents, modifying linguistic complexity (CEFR levelling), and producing localised scenarios within seconds (Pesovski et al., 2024).

The mere presence of AI does not ensure educational excellence. A significant obstacle to successful adoption is the deficiency of Prompt Engineering Literacy among teachers. Recent studies indicate that in the absence of systematic direction, teachers frequently employ AI for superficial "linguistic simplification" (word simplification) instead of profound "cultural localisation" (contextual transformation) (Zhou & Peng, 2025). Moreover, inadequately prompted AI is susceptible to "hallucinations" or generic responses that do not accurately reflect the intricacies of local Malaysian culture (e.g., conflating Malaysian traditions with broad Asian stereotypes).

This underscores a significant deficiency in the literature: whereas studies validate that AI can produce text, there is a lack of research on organised procedures that assist teachers in directing AI towards Culturally Responsive Pedagogy. This study aims to address that gap by presenting a verified guide (C.R.A.F.T.) that organises the "human-in-the-loop" process, guaranteeing that AI outputs are not only linguistically accurate but also culturally genuine.

Methodology*Research Design*

This study used an exploratory multiple case study approach, chosen for its ability to examine complex phenomena, specifically, the cognitive processes of teachers in their actual environments. Considering the embryonic state of "AI prompt engineering" in Malaysian education, an exploratory method facilitates the detection of emerging behaviours and usability challenges that a quantitative survey would neglect.

Participants and Sampling Strategy

The research utilised purposive sampling to choose three English language teachers from secondary schools located in different geographical areas: Johor (Southern Peninsula), Pulau Pinang (Northern Peninsula), and Sarawak (East Malaysia). This spatial stratification was intentional, aimed at including a variety of rural cultural contexts (e.g., coastal villages versus inland longhouse communities).

This study utilises the notion of 'Information Power' (Malterud et al., 2016) instead of relying on saturation, which is commonly employed in qualitative research. Considering the study's explicit objective is to assess the procedural usability of the C.R.A.F.T. protocol rather than to generalise teacher beliefs throughout the population, a more limited sample of specialised experts possesses enough explanatory capacity. The chosen participants (n=3) exemplified 'extreme' scenarios (different geography, differing learner proficiencies) necessary to evaluate the framework's adaptability. Moreover, in usability research, three to five users are generally adequate to uncover most usability obstacles in a novel methodology (Nielsen, 2012).

Instrumentation

Two primary instruments were utilised to triangulate data:

1. **Non-Participant Observation Checklist:** Designed to document real-time interaction with the AI tool. This instrument recorded quantitative metrics (e.g., "Time-to-First-Draft," "Frequency of Re-prompting") and qualitative behaviours (e.g., hesitation markers, manual editing).
2. **Semi-Structured Interview Protocol:** Administered post-task to elicit a "cognitive walkthrough" of the adaptation process. Questions focused on the rationale behind prompt selection and the perceived cultural authenticity of the output.

Development of the C.R.A.F.T Guide

The C.R.A.F.T. Guide serves as a framework for teachers to effectively engage with Generative AI. It comprises five "Golden Prompts," which are pre-designed templates intended to limit AI outputs to CEFR Level A2/B1 requirements.

✦ Act as a Malaysian curriculum developer. Create a parallel informational text based on the one below.
Constraints:

- Replace [Original Topic] with [Malaysian Topic].
- Match the structure, paragraph length, and sentence length exactly.
- Use similar types of descriptive vocabulary.
- Ensure all Malaysian facts are accurate.
- Original text: [Paste Here]

Figure 1: Prompt 3 - The Fact-Swapper

Figure 1 depicts the "Fact-Swapper" (Template 3), the principal template employed by participants in this study. This template, unlike generic prompts, enforces stringent structural constraints (such as uniform paragraph length) and cultural constraints (such as altering geographical facts), hence minimising cognitive load for learners while preserving linguistic rigour.

Research Procedure

The data collection was implemented via a methodical, three-phase process (refer to Figure 2). This approach was devised to reduce researcher influence while accurately recording the participants' genuine cognitive processes.

Phase 1: Pre-Intervention Training and Text Selection

A 30-minute briefing session was held individually with each participant before data collection. This session fulfilled two objectives:

- 1) **Tool Familiarisation:** Participants were acquainted with the C.R.A.F.T. Guide and informed about the "Golden Prompts." To ascertain that the study evaluated the guide rather than the teachers' pre-existing AI literacy, a standardised demonstration was administered on how to submit a prompt into the Generative AI platform (ChatGPT/GeminiAI).
- 2) **Text Selection:** Participants were instructed to choose a reading passage from the Form 1 or Form 2 Pulse 2 textbook. The selection criteria were intentional: teachers were directed to select a literature they had previously deemed "challenging to teach" because of cultural disparity. This guaranteed that the adaptation assignment tackled a legitimate pedagogical challenge.

Phase 2: The Adaptation Task (Naturalistic Observation)

Subsequent to the briefing, participants commenced the adaptation task. This step was intended to replicate a genuine lesson planning situation:

- 1) The assignment was conducted in the teachers' authentic working environment (e.g., staff room or vacant classroom) to guarantee ecological validity.
- 2) Teachers were directed to utilise the C.R.A.F.T. Guide to "localise" their chosen literature. No explicit time constraint was established, permitting the researcher to assess the duration of the natural workflow.
- 3) The researcher functioned as a non-participant observer, employing the Observation Checklist to document particular behaviours. Essential observational metrics comprised:
 - Latency: The duration between consulting the instructions and inputting the prompt.
 - Fidelity: The degree to which teachers complied with the "Golden Prompt" as opposed to engaging in improvisation.
 - Intervention: Instances in which the teacher was required to manually modify the AI output or re-issue prompts to the system.

Phase 3: Post-Task Stimulated Recall Interview

Upon task completion, a semi-structured interview was conducted. This timing was essential for employing the Stimulated Recall Methodology. Teachers were instructed to position the Original Text alongside their newly adapted text.

The interviewer utilised the texts as artefacts to investigate certain decisions (e.g., "I observed you selected the Fact-Swapper template for this text." What led you to believe that was more suitable than a narrative alteration?) This technique facilitated profound introspection over the role of "Cultural Gatekeeping," advancing from general impressions to precise educational rationale.

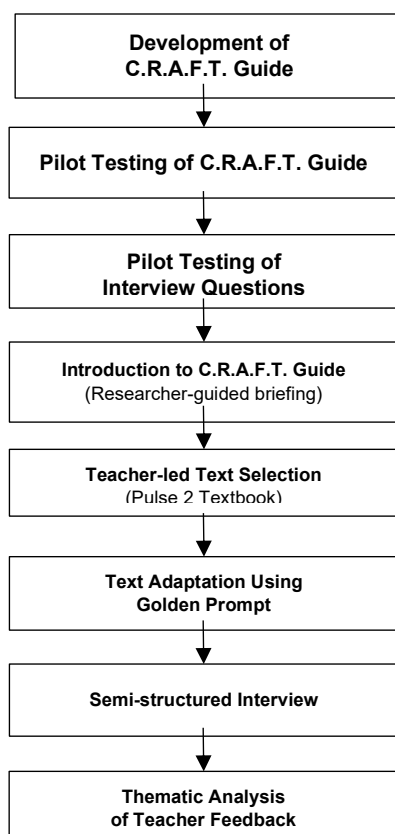


Figure 2: Research Procedure

Data Analysis

The interview data were transcribed verbatim and analysed by Thematic Analysis (Braun & Clarke, 2006). The investigation employed a deductive methodology, aligning findings with the objectives of the C.R.A.F.T. framework: (1) Efficiency (Time), (2) Usability (Prompt Efficacy), and (3) Product Quality (Cultural Authenticity). Descriptive analysis of observation checklists was conducted to validate interview findings pertaining to process velocity and points of hesitation.

Results and Discussion

This section outlines the findings obtained from the semi-structured interviews and non-participant observation checklists. The data analysis is structured around the two research questions, integrating the teachers' procedural behaviours with their reflective perceptions.

Demographic and Procedural Summary

Three secondary school English teachers participated in the study. All participants independently chose "Prompt 3: The Fact-Swapper" for adjusting their selected texts, indicating a collective inclination towards modifying factual or non-fiction genres rather than tales. Table 2 encapsulates the adaptation tasks executed.

Table 2

Summary of Adaptation Tasks and Observation Metrics

Participant	Region	Text Selected	Prompt Strategy Used	Time Taken	Key Manual Intervention
Teacher A	Johor	Route 66 (Narrative)	Prompt 3: Fact Swapper	15 mins	Simplified "scenery" vocab, adjusted sentence length.
Teacher B	Pulau Pinang	Irish Beliefs (Informational)	Prompt 3: Fact Swapper	12 mins	Corrected specific cultural nouns ("Inscription Stone" to "Batu Bersurat").
Teacher C	Sarawak	UK Tourism (Brochure)	Prompt 3: Fact Swapper	12 mins	Complete transposition of setting (United Kingdom to Kuala Lumpur/Perak).

Research Question 1:

How does the C.R.A.F.T. Guide influence the prompting strategies and adaptation workflow of ESL teachers?

The findings demonstrate that the guide served as an essential cognitive scaffold, transforming the teachers' approach from unstructured "trial-and-error" to systematic "prompt engineering."

Eliminating "Prompt Anxiety" through Scaffolding

Before the intervention, participants indicated that their engagement with AI was frequently ineffective, marked by ambiguous directives that produced generic outcomes. The observational data validated that the "Golden Prompt" templates markedly enhanced the Initiation Phase.

Teacher A characterised the guide as an essential "filter" that obviated the necessity for redundant corrective prompting. During the interview, he compared the C.R.A.F.T. workflow with his prior zero-shot endeavours:

"Because if I use my own prompt, sometimes I have to re-prompt again and again. But using this prompt, it is already specific. So when we put it into the AI, the AI answers it directly. This one is very precise." (Teacher A)

This indicates that the C.R.A.F.T. guide functions as a procedural intervention. By offering a "precise" input framework, it alleviates the unnecessary cognitive burden on the instructor, enabling them to avoid the annoyance of "hallucinations" frequently linked to unstructured urges.

From Passive Users to Active "Prompt Editors"

A key finding from the observation of Teacher B revealed that the guide did not rigidify the workflow but rather enabled adaptive agency. Observation notes recorded that Teacher B modified the "Golden Prompt" before execution, adding a specific instruction for the output to be generated at two distinct proficiency levels.

When probed about this deviation, Teacher B explained that the robust structure of the guide gave the teacher the confidence to experiment in his mixed-ability classroom:

"I can actually combine... for example, I want the A2 level and B1 level. So I can see the differentiation there. It helps me to create differentiation tasks for my learners."

This illustrates that the guide offers a reliable "base code" that teachers can modify. Instead of becoming passive consumers of AI information, the framework enables them to function as "Prompt Editors," customising the AI's skills to meet specific pedagogical requirements such as differentiation.

The "Human-in-the-Loop" Verification Strategy

The "Adapt" phase was identified as the locus of the most significant human action. Teacher C remarked that this phase was crucial for "quality assurance":

"I think it helps me to organise my thoughts... I know where to go, step by step. From step one to step two... it guides me."

This shows that the guide effectively establishes a verification phase. The workflow compels the teacher to pause and validate the AI output, so guaranteeing the teacher retains their role as the pedagogical authority.

Research Question 2

How do teachers perceive the impact of the C.R.A.F.T. Guide in terms of time efficiency and the cultural authenticity of the materials produced?

The findings indicate a consensus that the guide effectively tackles the "time-poverty" experienced by rural teachers while successfully bridging the schema gap for learners.

Operational Efficiency: The "15-Minute" Threshold

The quantitative data from the observation checklist indicated a steady improvement in efficiency. The overall length for the adaptation task, encompassing text selection to final export, averaged 12 to 15 minutes for all participants ($M=13.6$ mins).

Teacher C delineated a clear distinction between this procedure and manual adaptation techniques:

"It saves time. Usually, if we want to find materials, it takes like 2 to 3 hours to find the good material. But this one... 15 minutes."

Teacher A echoed this sentiment, noting that the speed of the tool did not compromise the quality, but rather made lesson planning more sustainable:

"It simplifies our work. It's concise, easy to understand... and straight to the point."

This finding suggests that the C.R.A.F.T. guide addresses the primary barrier to materials adaptation time scarcity by automating the linguistic restructuring while leaving the cultural decision-making to the teacher. By reducing the mechanical burden of rewriting, the guide effectively lowers the extraneous cognitive load on the teacher, allowing them to allocate their mental resources toward pedagogical decision-making rather than linguistic correction.

Cultural Authenticity: "Relocation" vs. "Translation"

Participants perceived the quality of the adapted texts not merely as "translated" but as authentically "relocated." This differentiation is essential for Schema Theory. The guide's explicit directive to exchange "facts" instead of merely "words" produced texts that engaged local content schemata.

Teacher A emphasised that the adapted texts bridged the schema gap for the learners, who often struggle to visualise foreign concepts found in the *PULSE 2* textbook:

"It connects with the learners. The learners can relate more compared to the textbook. The textbook is more to the UK-based culture... but this one [the adapted text], it relates to them."

Teacher B supported this, noting that the adaptation allowed the teacher to localise specific historical terms (such as *Batu Bersurat*), which creates a "local soul" in the text that generic AI translation often misses. Teacher B noted that without the guide, he might have settled for a direct translation, but the framework pushed the teacher to ensure the *cultural* equivalence was accurate. This validation process ensures that the Content Schema is not just translated, but culturally activated, fulfilling the core requirement of Culturally Responsive Pedagogy. Table 3 illustrates the specific "Cultural Gatekeeping" performed by Teacher B using the 'Fact-Swapper' prompt.

Table 2

Comparative Analysis of Text Relocation (Teacher B)

Feature	Original Concept (Pulse 2: Irish Beliefs)	C.R.A.F.T. Adapted Text (Teacher B Output)	Pedagogical & Schema Impact
Cultural Entity	"Irish Fairies" (Little People) (Western Folklore)	"Orang Bunian" (The Hidden People) (Local Malay Folklore)	Replaces alien concepts with a familiar local supernatural entity, reducing cognitive load.
Historical Artifact	"Stone Circles" (Iron Age Europe)	"The Inscription Stone" (Batu Bersurat) (Terengganu History)	Creates a Cross-Curricular Link to the Form 1 History syllabus (Sejarah).
Cultural Symbol	"The Shamrock" (3 leaves = Luck)	"The Hibiscus" (Bunga Raya) (5 petals = Luck/Principles)	Reinforces National Identity by linking the text to the National Flower.
Linguistic Structure	Single Standard Text (CEFR A2)	Dual-Level Output (CEFR A2 & B1)	Teacher Agency: Demonstrates the teacher's ability to use the guide for instant differentiation in mixed-ability classes.

Teacher Confidence and Professional Satisfaction

Finally, the data suggest that the guide impacts the teachers' emotional relationship with materials design. The participants expressed relief that the AI, guided by the guide, could handle the "heavy lifting" of grammar and structure.

As Teacher C concluded during the interview:

"The materials [produced] are good. It helps me... to organise my thoughts."

This indicates that the C.R.A.F.T. framework does more than just produce text; it provides professional assurance to teachers that their adapted materials are methodologically sound and CEFR-compliant.

Conclusion

This study examined the significant gap between standardised CEFR-aligned reading materials and the sociocultural contexts of rural Malaysian ESL learners. The accepted potential of Generative AI to bridge this gap is impeded by insufficient pedagogical scaffolding in its practical implementation. This research demonstrates that the C.R.A.F.T. (Culturally Responsive AI Framework for Teachers) Guide effectively closes the "implementation gap," converting AI from a complicated technical obstacle into an accessible educational resource. The empirical results confirm two important conclusions. Initially, concerning logistical efficiency, the guide streamlined the adaptation process to less than 15 minutes per text, successfully eliminating the obstacle of "time scarcity" that frequently hinders rural teachers from customising materials. The second, and arguably more consequential, aspect is the transformation in professional agency. The framework empowered teachers to evolve from passive recipients of global curriculum to proactive "Cultural Gatekeepers." By methodically replacing foreign schemata (e.g., 'Winter') with local knowledge (e.g., 'Monsoon'), teachers maintained the grammatical integrity of the CEFR while ensuring the "cultural essence" of the work resonated with their learners.

This study ultimately illustrates that technology alone is inadequate. The methodical application of technology, guided by robust theoretical frameworks such as Schema Theory and Cognitive Load Theory, promotes fair learning possibilities.

Implications and Recommendations

The findings of this study carry significant implications for educational policy and classroom practice in Malaysia.

Pedagogical Implications: AI Literacy as a Core Competency

The research indicates that "Prompt Engineering" should be regarded as a crucial pedagogical competency for 21st-century ESL teachers. Professional development should prioritise "Schema-Based Prompting" over generic technical coding, instructing teachers on how to use AI to tailor information to local cultural contexts. The efficacy of the C.R.A.F.T. Guide illustrates that when teachers are equipped with "Golden Prompts" (validated templates), they can circumvent the "hallucination" phase and promptly generate superior, differentiated resources.

Policy Implications: Towards a "Centralised Prompt Repository"

This study offers a cost-efficient methodology for the Ministry of Education (KPM) to decentralise curriculum relevance at the policy level. Instead than depending solely on static, centrally generated textbooks that fail to address Malaysia's varied geography, officials ought to contemplate the establishment of a National Prompt Repository. In line with the Digital Education Policy (Dasar Pendidikan Digital), this repository would have verified AI templates (like the C.R.A.F.T. Golden Prompts) that teachers in different parts of the country, from the coastal villages of Sabah to the urban centres of Kuala Lumpur, could use to "localise" the same core curriculum goals to fit their own cultures. This endorses a "Glocal" educational strategy: Global standards (CEFR) implemented inside Local contexts.

Limitations & Future Research

Notwithstanding the empirical insights provided by this study, certain limitations require a contextualised interpretation of the results. The research primarily employed an exploratory multiple case study design utilising a small purposive sample ($n=3$). This approach adequately established the 'Information Power' necessary for usability assessment; nevertheless, the sample size limits statistical generalisation to the wider community of Malaysian ESL teachers. Thus, the results of time efficiency and workflow reduction should be seen as suggestive of possible effectiveness in particular expert contexts rather than as general standards.

Moreover, the extent of the intervention was limited by participant preference. The unique choice of "Prompt 3: The Fact-Swapper" by all participants indicates that the framework's applicability for modifying narrative fiction or dialogue-based works is notably under-explored. This inquiry was limited to the production phase of material development, concentrating exclusively on the teacher's perspective and process. The study did not empirically evaluate the reception phase, particularly whether the C.R.A.F.T.-adapted texts yield quantifiable enhancements in learner reading comprehension or motivation in an actual classroom environment.

Future research should redirect its emphasis from the teacher's workflow to learner results to alleviate these limits. A quasi-experimental study comparing reading comprehension scores between control groups utilising conventional Pulse 2 texts and experimental groups employing C.R.A.F.T.-adapted materials would yield essential quantitative information regarding the framework's educational efficacy. Furthermore, subsequent iterations of the research should explicitly focus on narrative genres and encompass elementary school instructors (CEFR A1 level) to confirm the framework's adaptability across various skill levels and text types.

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