

Integrating Critical Digital Literacy and Misinformation Analysis into EFL Curricula: A Comprehensive Framework for the Post-Truth Era

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Abstract

The rapid proliferation of misinformation, conspiracy theories, and digitally mediated disinformation has created an urgent imperative for educational institutions to rethink traditional literacy paradigms. This article proposes a comprehensive theoretical and pedagogical framework for integrating Critical Digital Literacy (CDL) and misinformation analysis into English as a Foreign Language (EFL) curricula. Drawing on interdisciplinary research from digital literacy studies, critical discourse analysis, second language acquisition, and media studies, the article argues that EFL classrooms represent uniquely privileged sites for CDL instruction due to their inherent focus on language as a semiotic system, cross-cultural comparison, and textual analysis. The article synthesizes current scholarship (2020–2026) to present a multi-component CDL framework encompassing technological knowledge, critical mindset, lateral reading competencies, discourse-analytic skills, and creative agency. Pedagogical implications are explored through sample curricular modules, assessment strategies, and teacher education recommendations. The article concludes that integrating CDL into EFL instruction is not merely an additive enrichment but a fundamental reconceptualization of language education for the digital age.

Keywords: Critical Digital Literacy, misinformation, EFL, conspiracy theories, media literacy, digital citizenship, language pedagogy, critical thinking

1. Introduction

The contemporary information environment is characterized by what scholars have termed a "post-truth" condition, wherein emotional appeals and personal beliefs increasingly override objective facts in shaping public opinion (Stano, 2020). The proliferation of digital platforms has democratized content creation but has simultaneously facilitated the rapid dissemination of misinformation, disinformation, and conspiracy theories at unprecedented scale and velocity. For adolescents and young adults who constitute the majority of language learners worldwide, navigating this complex digital ecosystem presents profound challenges that extend well beyond technical proficiency.

Within this context, the field of English as a Foreign Language (EFL) education finds itself at a critical juncture. Traditionally conceived as the acquisition of grammatical competence, vocabulary knowledge, and communicative skills, EFL pedagogy must now contend with a fundamental question: What does it mean to be "literate" in a language when literacy itself has been transformed by digital technologies and information warfare? The answer, this article argues, lies in the integration of Critical Digital Literacy (CDL) and misinformation analysis as core components of EFL curricula.

The urgency of this integration is underscored by empirical research demonstrating that adolescents are particularly susceptible to conspiracy theories and online misinformation (Douglas et al., 2017; Jolley et al., 2021). Furthermore, because conspiracy theories and misinformation are constructed and disseminated through language, identifying and deconstructing their underlying plots, argumentative structures, and linguistic patterns falls squarely within the purview of language education (Jones & Hafner, 2021; Darvin & Hafner, 2022; Weiser-Zurmühlen et al., 2025).

This article pursues three primary objectives. First, it provides a comprehensive theoretical foundation for understanding CDL as a multidimensional construct relevant to EFL contexts. Second, it synthesizes recent empirical research on pedagogical interventions that integrate misinformation analysis into language teaching. Third, it proposes a practical framework for curriculum design, classroom implementation, and teacher preparation that can guide EFL practitioners in developing students' critical digital competencies.

The article is organized as follows. Section 2 reviews the theoretical literature on digital literacy, critical literacy, and misinformation studies. Section 3 presents the proposed CDL framework for EFL. Section 4 examines empirical evidence from recent classroom interventions. Section 5 outlines pedagogical strategies and curricular models. Section

6 addresses assessment challenges and approaches. Section 7 discusses implications for teacher education. Section 8 concludes with recommendations for research and practice.

2. Theoretical Foundations

2.1 From Traditional Literacy to Critical Digital Literacy

The concept of literacy has undergone significant reconceptualization over the past four decades. Traditional definitions focused on the decoding and encoding of written text—the ability to read and write in a given language. However, the emergence of New Literacy Studies in the 1980s and 1990s shifted attention toward literacy as a social practice embedded in specific cultural, historical, and institutional contexts (Street, 1984). This socio-cultural turn recognized that being literate involves not merely technical skills but also the ability to navigate genre conventions, author-audience relationships, and power dynamics inherent in textual production and reception.

The digital revolution has necessitated further reconceptualization. Digital literacy encompasses the ability to access, analyze, evaluate, and create content using digital technologies (Gilster, 1997). However, as scholars have noted, early formulations of digital literacy tended toward instrumentalism—focusing on operational skills such as using search engines, creating documents, or navigating interfaces (Jones & Hafner, 2021). What remained undertheorized was the critical dimension: the capacity to question whose interests are served by particular digital texts, how algorithms shape information exposure, and how power operates through digital infrastructures.

Critical Digital Literacy emerged as a response to this gap. Drawing on critical pedagogy traditions associated with Freire (1970) and critical literacy scholars such as Luke and Freebody (1997), CDL emphasizes the relationship between digital texts, identities, and social power. As Darvin (2017) argues, CDL examines how power dynamics within digital environments shape knowledge, identities, and social relations, often privileging certain perspectives while marginalizing others. In the context of language learning and teaching, CDL encourages learners and teachers to develop awareness of hidden biases, assumptions, and non-human agents (e.g., algorithms) present in digital tools and content (Gao & Zhang, 2020) .

2.2 Misinformation, Disinformation, and Conspiracy Theories

Precise terminology is essential for scholarly discourse on information disorders. Misinformation refers to false or inaccurate information disseminated without malicious intent. Disinformation, by contrast, involves deliberately fabricated content shared with the intention to deceive or cause harm (Wardle & Derakhshan, 2017). Conspiracy theories constitute a specific category of belief characterized by the proposition that a secret, malevolent group of actors is orchestrating events to achieve hidden goals (Butter, 2020; Hepfer, 2021).

Several features distinguish conspiracy theories from other forms of misinformation. First, they are epistemically self-sealing: proponents typically reject counter-evidence as further proof of the conspiracy, making falsification difficult (Douglas et al., 2017). Second, they often exhibit specific argumentative topoi, including appeals to authority (the conspiracy is true because powerful people deny it), appeals to hidden evidence (the "real" proof is being suppressed), and appeals to vested interest (a particular group benefits from public ignorance). Third, conspiracy theories satisfy psychological motives that are particularly salient during periods of uncertainty: epistemic needs for coherent explanations, existential needs for safety and control, and social needs for group identity and self-esteem (Douglas et al., 2020; Lantian et al., 2017).

Digital platforms have dramatically amplified conspiracy theory circulation. Algorithms that optimize for engagement tend to recommend increasingly extreme content, potentially creating echo chambers where users encounter only confirming information (Schildhauer & Kemper, 2024). The multimodal affordances of digital environments enable conspiracy entrepreneurs to assemble eclectic "evidence" from diverse sources, including manipulated images, selectively edited videos, and decontextualized data (Weiser-Zurmühlen et al., 2025). For language learners, these dynamics present particular challenges, as conspiracy content may exploit simplified linguistic structures, repetitive rhetorical patterns, and emotionally resonant vocabulary that can be more accessible than nuanced, evidence-based counter-narratives.

2.3 The Intersection with Language Education

The relevance of CDL and misinformation analysis to EFL education operates on multiple levels. At the most basic level, language learners require the interpretative competencies to distinguish credible from non-credible sources in their target language. This involves not only vocabulary and grammar but also genre awareness, pragmatic competence, and the ability to recognize rhetorical manipulation.

At a deeper level, language education provides unique affordances for CDL development. Because EFL instruction inherently focuses on language as a semiotic system, learners can be guided to examine how misinformation operates through specific linguistic mechanisms: presupposition, implicature, modal hedging, evaluative lexis, and narrative framing (Brocca et al., 2024). Moreover, the cross-cultural dimension of EFL learning enables comparative analysis of how misinformation circulates differently across linguistic and cultural contexts, fostering metalinguistic awareness and intercultural competence.

Recent scholarship has explicitly called for integrating CDL into language teaching. Jones and Hafner (2021) argue that digital literacy must be reconceived not as an add-on but as integral to language and literacy education. Schildhauer and Gerlach (2023) developed teaching materials specifically designed to address conspiracy theories in EFL classrooms, recognizing that language teachers cannot remain neutral when faced with content that threatens democratic discourse and scientific literacy. The University of Southampton's module LING6040 on Digital Education and English Language Teaching explicitly includes information literacy and critical evaluation of digital content as core learning outcomes.

3. A Multi-Component Framework for CDL in EFL

3.1 Overview of the Framework

Synthesizing recent scholarship, this article proposes a comprehensive CDL framework for EFL contexts comprising five interconnected components: Technological Knowledge, Critical Mindset, Lateral Reading Competencies, Discourse-Analytic Skills, and Creative Agency (see Table 1). This framework adapts and extends the model proposed by Schildhauer et al. (2023) to address specifically the needs and affordances of language learning environments.

Table 1: Components of the CDL Framework for EFL

Component	Definition	EFL-Specific Manifestations
Technological Knowledge	Understanding how digital platforms, algorithms, and interfaces shape information access and interaction	Analyzing how search engine results differ across languages; understanding autocomplete and recommendation algorithms
Critical Mindset	Disposition toward questioning digital content and reflecting on one's own biases and positionality	Examining emotional responses to persuasive texts; recognizing vulnerability to confirmation bias in L2 reading
Lateral Reading	Ability to verify information by consulting multiple sources outside the original text	Conducting multilingual fact-checking; comparing coverage across international news sources
Discourse-Analytic Skills	Capacity to identify linguistic and rhetorical manipulation in texts	Recognizing presupposition, implicature, evaluative lexis, and narrative structures used in misinformation
Creative Agency	Ability to produce counter-narratives and alternative content that promotes accurate information	Creating multimodal responses to misinformation; producing fact-checking content in L2

3.2 Technological Knowledge in EFL Contexts

The first component addresses learners' understanding of digital infrastructures. As Darvin and Hafner (2022) emphasize, digital literacy requires awareness of how software, interfaces, and algorithms are not neutral conduits but active mediators of social interaction. In EFL contexts, this translates into several pedagogical foci.

First, learners should understand how search engine algorithms produce different results based on language, location, and search history. Comparative searches across L1 and L2 can reveal how information ecosystems differ linguistically and culturally. Second, learners need awareness of how recommendation algorithms on platforms like YouTube, TikTok, and Twitter can lead users down "rabbit holes" of increasingly extreme content (Schildhauer et al., 2023). Third, learners should recognize the economic incentives underlying misinformation: engagement-driven business models reward emotionally provocative content regardless of accuracy.

3.3 Critical Mindset and Epistemic Cognition

The critical mindset component involves developing what psychologists term "epistemic cognition"—the capacity to reflect on the nature, sources, and justification of knowledge (Greene et al., 2020). In the misinformation context, this means cultivating intellectual humility, skepticism toward claims that align with pre-existing beliefs, and willingness to update beliefs in light of evidence.

For language learners, critical mindset development faces particular challenges. Learners may struggle to evaluate source credibility in their L2 due to limited vocabulary or unfamiliarity with source genres. They may also experience heightened susceptibility to emotional appeals because affective processing operates partially independently of linguistic proficiency. Research suggests that foreign language contexts can actually reduce certain cognitive biases (e.g., framing effects) by increasing psychological distance from emotionally charged content (Keysar et al., 2012), suggesting potential advantages for CDL instruction in EFL settings.

3.4 Lateral Reading as a Core Strategy

Lateral reading—the practice of verifying information by opening new tabs to consult multiple external sources rather than reading vertically within a single source—has emerged as a highly effective strategy for professional fact-checkers (Wineburg & McGrew, 2019). Unlike vertical reading, which focuses on evaluating a source's internal features (design, "about" page, domain name), lateral reading quickly establishes source credibility by seeing what other authoritative sources say.

In EFL contexts, lateral reading requires adaptation. Learners may need guided practice in identifying authoritative sources in their target language, understanding the hierarchy of evidence (primary vs. secondary sources, peer-reviewed vs. popular sources), and synthesizing information across multiple texts. Multilingual lateral reading—checking claims across L1 and L2 sources—represents a uniquely valuable strategy that leverages learners' full linguistic repertoires .

3.5 Discourse-Analytic Skills for Misinformation Detection

The discourse-analytic component is particularly relevant to language education because it addresses the linguistic mechanics of manipulation. Misinformation often relies on specific rhetorical devices that can be systematically identified and analyzed (Brocca et al., 2024) .

Key linguistic features include:

Presupposition: Information presented as taken for granted rather than asserted, which can smuggle false premises into discourse ("The truth they don't want you to know" presupposes hidden truth).

Implicature: Meaning implied rather than explicitly stated, which can insulate claims from direct falsification ("Some people are asking questions about..." implies there are legitimate questions without directly asserting).

Evaluative lexis: Emotionally charged vocabulary that frames events in morally loaded terms ("elite," "globalist," "sheeple," "awakened").

Modal hedging: Strategic use of epistemic modals ("might," "could," "may") to avoid falsifiable claims while suggesting possibility.

Narrative structures: Conspiracy theories often follow predictable plot structures: hidden threat, heroic truth-teller, corrupt establishment, imminent revelation .

Teaching learners to identify these features in authentic texts provides transferable analytical tools that function regardless of specific content knowledge.

3.6 Creative Agency and Counter-Narrative Production

The final component moves beyond critique to creative action. CDL is not merely defensive—protecting learners from manipulation—but also offensive in the sense of equipping learners to produce alternative content that promotes accurate information and democratic discourse (Jones & Hafner, 2021; Schildhauer et al., 2023) .

For EFL learners, creative agency can take multiple forms: producing fact-checking videos in response to viral misinformation, creating informative social media content that explains logical fallacies or rhetorical manipulation, or developing counter-narratives that address the psychological needs conspiracy theories satisfy without endorsing false content. Digital multimodal composition—combining text, image, audio, and video—leverages learners' semiotic resources and can be particularly engaging for adolescent learners (Jiang & Gu, 2022) .

4. Empirical Evidence from Classroom Interventions

4.1 The German Ethnographic Study

A significant recent contribution to CDL-EFL integration comes from Schildhauer and colleagues' ethnographic study of conspiracy theory implementation in German secondary school EFL classrooms (Schildhauer et al., 2023; Weiser-Zurmühlen et al., 2025). This research, funded as part of a larger collaboration, developed teaching materials for EFL classes and analyzed their implementation through the lens of the CDL framework.

The study revealed several important findings. First, teacher responses to conspiracy content varied considerably, ranging from dismissal to active engagement. Some teachers expressed concerns about political neutrality, fearing that addressing conspiracy theories might be perceived as partisan. Others embraced the pedagogical opportunity, recognizing that avoiding controversial content leaves learners vulnerable to manipulation.

Second, students demonstrated differential engagement based on how teachers framed discussions. When teachers adopted a dismissive stance that ridiculed conspiracy beliefs, students became defensive and resistant. When teachers approached conspiracy theories as psychological and rhetorical phenomena to be analyzed critically, students engaged more productively and demonstrated greater willingness to re-evaluate their own beliefs.

Third, the study identified tensions between explicit linguistic analysis and meaning-focused activities. Some teachers favored in-depth metapragmatic reflection on manipulative language features, while others prioritized communicative engagement with authentic content. The study suggested that genre matters for this tension: advertisements and social media posts—genres students already recognize as potentially manipulative—lend themselves more readily to critical language analysis than news articles, which many students assume are objective.

4.2 Media Literacy Interventions in EFL

Germain González (2025) developed and implemented a learning scenario titled "News and Fake News: Enhancing Your Critical Thinking Skills" with fourth-year secondary students in Barcelona. The intervention integrated news analysis, misinformation detection, and critical thinking skills into EFL instruction over multiple sessions. Qualitative results indicated that students developed increased awareness of

misinformation strategies and demonstrated improved ability to identify unreliable sources. Students particularly valued the opportunity to work with authentic, current content rather than decontextualized textbook exercises .

A study by Brocca et al. (2024) examined CDL integration using textual analysis techniques for implicit content extraction. Learners were taught to identify presuppositions and manipulative potential in advertisements and social media communication. The study found that explicit instruction in linguistic manipulation strategies significantly improved learners' ability to assess text trustworthiness, though the effect was stronger for explicit, obviously manipulative texts than for subtle, implicitly biased content .

Makena (2026) investigated conspiracy theories and language development within online learning environments using focus group interviews with teachers responsible for language-related modules . Findings underscored two principal concerns: the necessity of investing in fact-checking initiatives to counteract unverified information, and the detrimental impact of misinformation on public attitudes, which undermines language development and disrupts established educational practices. The study recommended systematic promotion of digital media literacy as a pedagogical strategy to strengthen learners' linguistic competencies while mitigating misinformation influence .

4.3 Challenges and Limitations

Empirical research has also documented significant challenges in CDL-EFL integration. Jiang and Gu (2022) stress that many TESOL practitioners encounter substantial implementation barriers due to heavy workloads, traditional focus on psycholinguistic approaches, and lack of training in critical pedagogy . Teachers may feel ill-equipped to address controversial political content or may fear administrative pushback.

Additionally, time constraints represent a persistent challenge. CDL instruction requires extended engagement with authentic texts for deep analysis, yet EFL curricula often prioritize coverage of grammatical structures and vocabulary lists. Balancing these competing demands requires curricular redesign rather than add-on supplementation.

Finally, assessment challenges loom large. Traditional language assessment measures grammatical accuracy, vocabulary range, and fluency—not critical digital competencies. Developing valid, reliable assessments of CDL that integrate with language assessment frameworks remains an active research need (see Section 6).

5. Pedagogical Strategies and Curricular Integration

5.1 Scaffolded Progression of CDL Skills

Effective CDL integration in EFL requires systematic scaffolding that builds from foundational to advanced competencies. Table 2 presents a proposed progression across proficiency levels.

Table 2: Scaffolded Progression of CDL Competencies by EFL Proficiency Level

Level	Technological Knowledge	Critical Mindset	Lateral Reading	Discourse Analysis	Creative Agency
Beginner (A1-A2)	Identify platform types (social media, news sites, forums)	Distinguish fact from opinion in simple texts	Compare two short texts on same topic	Identify strong vs. neutral adjectives	Create simple fact-checking checklist
Intermediate (B1)	Explain how algorithms personalize content	Recognize emotional manipulation in ads	Conduct simple cross-source verification	Identify presupposition and implicature	Produce short video response to misinformation
Advanced (B2-C1)	Analyze platform business models and incentives	Examine own confirmation bias	Perform multilingual lateral reading	Analyze narrative structures and topoi	Create public fact-checking content
Proficient (C2)	Critically evaluate AI-generated content	Engage with opposing viewpoints systematically	Synthesize evidence from diverse sources	Deconstruct complex rhetorical strategies	Develop original counter-narrative campaigns

5.2 Sample Curricular Module

This subsection presents a detailed curricular module designed for intermediate (B1-B2) EFL learners, structured across five 90-minute sessions.

Module Title: Detecting Disinformation: Critical English in the Digital Age

Learning Objectives: By the end of this module, students will be able to: (1) identify common strategies used in online misinformation; (2) use lateral reading techniques to verify claims; (3) recognize manipulative language features including presupposition and evaluative lexis; (4) produce a fact-checking video in English responding to a viral claim.

Session 1: The Information Landscape. Introduction to misinformation, disinformation, and conspiracy theory concepts. Analysis of why false information spreads (psychological motives, algorithms, economic incentives). Warm-up activity: Students share examples of false information they have encountered.

Session 2: Analyzing Manipulative Language. Explicit instruction on presupposition, implicature, and evaluative lexis. Paired analysis of authentic social media posts. Worksheet: Identify manipulative features in provided examples.

Session 3: Lateral Reading in Practice. Demonstration of lateral reading strategy using professional fact-checker protocols. Small group practice: Students receive three viral claims and must verify using lateral reading, documenting their process.

Session 4: Cross-Cultural and Multilingual Approaches. Comparison of misinformation across languages—how does the same conspiracy theory manifest differently in English versus students' L1? Discussion of how cultural context shapes misinformation content.

Session 5: Creative Response—Producing Counter-Narratives. Introduction to video fact-checking as a genre. Students script, record, and share short fact-checking videos responding to a specific claim. Peer feedback on linguistic clarity, evidentiary quality, and persuasive effectiveness.

5.3 Authentic Materials Selection

Selecting appropriate authentic materials for CDL instruction requires careful consideration of multiple factors. Materials should be current enough to feel relevant to students, but not so current that fact-checking resources are unavailable. Materials

should be challenging enough to provide analytical opportunity but not so difficult that linguistic processing overwhelms critical analysis.

Recommended sources include:

- **Professional fact-checking sites:** Snopes, Politifact, Full Fact, AFP Fact Check provide verified analyses that can serve as answer keys for student verification
- **Social media archives:** Reddit (r/conspiracy), Twitter threads, Facebook posts provide raw material for analysis
- **News coverage of misinformation:** Reputable news outlets frequently cover viral hoaxes and can provide context
- **Educational resources:** The European Union's Digital Skills and Jobs Platform offers training webinars on disinformation detection (Čebišová, 2025)

Teachers should be aware that direct exposure to conspiracy content may inadvertently legitimate or spread it. Presenting conspiracy theories requires framing that clearly identifies them as false or unsubstantiated before analysis begins. The pedagogical frame is critical: students analyze misinformation to understand how it works, not to evaluate its truth claims as open questions .

5.4 Whole-Class Discussion Protocols

Discussing controversial content in language classrooms requires explicit discussion protocols that create psychologically safe environments. Based on emerging best practices , recommended protocols include:

Establishing Shared Norms: Before discussing contentious topics, classes should co-construct discussion agreements: respecting confidentiality, speaking from personal experience rather than making universal claims, asking clarifying questions, accepting confusion as legitimate.

Separating Claim from Evidence: Frame analysis around the question "What evidence would convince you this claim is true?" rather than "Is this claim true?" This shifts focus from identity-defending positions to epistemological inquiry.

Maintaining Pedagogical Frame: Explicitly name the purpose—"We are analyzing how language works in persuasive contexts"—to reduce perception that the teacher is promoting particular political views.

Providing Exit Ramps: Students who feel distressed by conspiracy content should have options to step out or complete alternative assignments without penalty.

6. Assessment of CDL Competencies

6.1 Challenges in CDL Assessment

Assessing CDL competencies within EFL contexts presents unique challenges. Traditional language assessment emphasizes grammatical accuracy, vocabulary breadth, and communicative fluency—measures that do not capture critical digital competencies. Conversely, assessing critical thinking separately from language proficiency conflates construct knowledge with linguistic ability .

Furthermore, CDL competencies are not discrete skills amenable to multiple-choice measurement. Lateral reading involves complex information-seeking behaviors that vary by query type. Discourse analysis requires interpretation of open-ended texts. Creative agency is product-oriented and context-dependent.

6.2 Proposed Assessment Approaches

Several assessment approaches warrant consideration:

Performance-Based Assessment: Students complete authentic verification tasks—e.g., evaluating the trustworthiness of a provided website, producing a fact-checking report, identifying manipulative language features in an authentic text—and are evaluated using rubrics that separate linguistic from critical competencies.

Digital Portfolios: Students maintain portfolios of their CDL work across a term or year, demonstrating progressive development in lateral reading documentation, discourse analyses, and creative counter-narratives.

Structured Observation: Teachers observe student performance on collaborative CDL tasks (e.g., small group lateral reading) using observation protocols that document demonstration of specific competencies.

Think-Aloud Protocols: Individual students verbalize their reasoning while evaluating digital content, allowing assessment of strategic approaches even when conclusions are incomplete.

Table 3: Sample Rubric for Fact-Checking Video Assessment

Criterion	Exemplary (4)	Proficient (3)	Developing (2)	Beginning (1)
Claim Identification	Clearly states specific claim being checked	States claim with minor ambiguity	Identifies general topic but not specific claim	Does not identify claim
Evidence Quality	Cites authoritative, relevant sources; explains their credibility	Cites relevant sources; limited credibility explanation	Cites sources but irrelevant or low-authority	No sources or fabricated evidence
Linguistic Clarity	Vocabulary precise; syntax varied; pronunciation clear	Some imprecision; generally understandable	Frequent errors impede comprehension	Severe errors prevent comprehension
Rhetorical Effectiveness	Engaging introduction; logical structure; persuasive conclusion	Clear structure with minor gaps	Disorganized but contains key elements	No discernible structure
Metacognitive Reflection	Explicitly discusses verification process and limitations	Mentions verification process	Implies verification without explicit discussion	No reflection on process

6.3 Integrating CDL into Existing Language Assessments

Where standalone CDL assessment is impractical, integration into existing assessment formats is possible. Writing assessments can prompt students to compare sources and evaluate credibility. Speaking assessments can include presentations on how to identify reliable information online. Reading assessments can include comprehension questions about author purpose, intended audience, and potential bias.

The key is to design tasks that require demonstration of CDL competencies as a means to achieving communicative goals, rather than assessing CDL separately from

language. For example, an argumentative essay assignment on a contemporary issue might require students to identify and evaluate sources, with rubric criteria addressing both source quality and linguistic expression .

7. Teacher Education and Professional Development

7.1 Current Gaps in Teacher Preparation

The integration of CDL into EFL instruction cannot succeed without corresponding attention to teacher education. Yet current research indicates significant gaps in teacher preparation. Jiang and Gu (2022) found that many TESOL practitioners encounter substantial challenges in CDL implementation due to heavy workloads and traditional focus on psycholinguistic approaches . Most teacher education programs do not explicitly address how to teach critical digital competencies, leaving teachers to develop strategies independently.

Additionally, teachers themselves may lack CDL competencies or may hold conspiracy beliefs. Research suggests that teachers' own epistemic cognition and digital literacy levels significantly predict their effectiveness in fostering these skills in students .

7.2 Core Competencies for EFL Teachers

Based on the framework proposed in Section 3, EFL teachers require the following CDL competencies:

Foundational CDL: Teachers must themselves demonstrate the five framework components—technological knowledge, critical mindset, lateral reading, discourse analysis, creative agency—applied to English-language digital content.

Pedagogical CDL: Teachers need strategies for selecting age-appropriate materials, facilitating controversial discussions, scaffolding CDL skills across proficiency levels, and assessing student competencies.

Curricular Design: Teachers require skills in designing CDL-integrated units that balance language development with critical analysis without sacrificing either.

Ethical Reasoning: Teachers need frameworks for navigating the ethical tensions inherent in CDL instruction: respecting student autonomy while intervening when students express harmful beliefs; maintaining institutional neutrality while recognizing that some claims (e.g., Holocaust denial) are not legitimate alternative perspectives.

7.3 Professional Development Models

Professional development for CDL-EFL integration can take multiple forms. Standalone workshops can introduce frameworks and share sample lessons but are insufficient for deep change. Sustained professional learning communities (PLCs) that meet regularly over months allow teachers to implement strategies, share results, and problem-solve collaboratively .

Several universities now offer graduate-level modules addressing CDL and language teaching. The University of Southampton's LING6040 module on Digital Education and English Language Teaching includes evaluation of digital courses and materials, critical evaluation of theoretical approaches, and development of digital literacy skills in ICT literacy, information literacy, and learning skills in digital environments . The University of Liverpool's ENGL662 module on Digital Technologies for Language Teaching includes critical analysis of research into digital technologies and language learning . Trinity Western University's EDUC 509 course explores digital literacies and technologies in language learning settings, addressing online teaching challenges and strategies .

These university-based programs provide models for formal CDL teacher education that could be scaled or adapted for in-service professional development.

8. Discussion and Future Directions

8.1 Addressing Potential Criticisms

The proposal to integrate CDL and misinformation analysis into EFL curricula will likely encounter several criticisms that warrant acknowledgment and response.

Criticism 1: This is not language teaching. Some may argue that teaching students to identify conspiracy theories and evaluate sources is civics or media studies, not English language teaching. However, this criticism rests on an overly narrow conception of language education. In the digital age, communicative competence necessarily includes the ability to interpret and produce language in contexts of mediation, manipulation, and algorithmic filtering. Moreover, the specific linguistic features analyzed in CDL—presupposition, implicature, evaluative lexis—are central to language as a meaning-making system .

Criticism 2: Teachers should remain politically neutral. The concern that addressing conspiracy theories might violate professional neutrality is understandable but ultimately misguided. As Schildhauer and colleagues note (2023), there is a difference between taking partisan positions and promoting evidence-based reasoning. Teachers can—and should—teach students how to evaluate evidence without endorsing specific political conclusions. Moreover, avoiding controversial content does not constitute neutrality; it privileges the status quo and leaves students vulnerable to manipulation .

Criticism 3: Students aren't ready. Some may argue that low-proficiency learners cannot engage with complex digital texts. However, CDL competencies can be scaffolded appropriately for any proficiency level. Beginners can distinguish fact from opinion in simple sentences and identify strong versus neutral adjectives. The key is matching task complexity to linguistic capacity while progressively building both.

8.2 Future Research Directions

Despite growing scholarship on CDL and misinformation, significant research gaps remain:

Longitudinal Studies. Most existing studies examine short-term interventions. Longitudinal research is needed to determine whether CDL competencies persist, transfer to new contexts, and influence information behavior outside classrooms.

Transfer Across Languages. Does CDL instruction in English transfer to students' L1 information behavior? If so, through what mechanisms? Conversely, does prior L1 CDL competence facilitate L2 CDL?

AI-Generated Misinformation. As Large Language Models become capable of producing persuasive, human-like text at scale, misinformation detection becomes more challenging. Research is urgently needed on how AI-generated misinformation differs linguistically from human-produced content and how CDL frameworks must adapt .

Assessment Validation. Valid, reliable assessments of CDL competencies that separate critical from linguistic abilities are needed for both research and practice. This includes development of standardized measures and classroom-friendly rubrics.

Teacher Education Effectiveness. What models of teacher preparation most effectively equip EFL educators for CDL instruction? Comparative studies of different professional development formats are needed.

8.3 Implications for Policy

Beyond classroom practice and research, CDL integration has implications for educational policy. Ministries of education should consider revising language curricula to explicitly include CDL competencies. Accreditation bodies for language teacher education programs should incorporate CDL into standards. School leaders should provide professional development resources and protect instructional time for CDL integration, recognizing it not as enrichment but as essential preparation for digital citizenship.

The European Union's investment in disinformation training for teachers through the Digital Skills and Jobs Platform represents a model worth emulating. Such policy initiatives recognize that media literacy is not optional but fundamental to democratic resilience in the digital age.

9. Conclusion

This article has argued for the systematic integration of Critical Digital Literacy and misinformation analysis into English as a Foreign Language curricula. The proliferation of digital disinformation, conspiracy theories, and algorithmic manipulation has fundamentally altered the information landscape that language learners must navigate. Traditional approaches to EFL that focus exclusively on grammatical competence and communicative fluency are no longer sufficient.

The proposed framework—encompassing technological knowledge, critical mindset, lateral reading, discourse-analytic skills, and creative agency—provides a comprehensive foundation for curriculum design, classroom practice, and assessment. Empirical evidence from recent interventions demonstrates the feasibility and effectiveness of CDL instruction in EFL contexts, while also documenting persistent challenges related to teacher preparation, time constraints, and assessment.

The integration of CDL into EFL represents not an abandonment of language teaching's core mission but its evolution. Understanding how language manipulates, persuades, and conceals is as central to literacy as understanding how language informs, describes, and expresses. In an era when the difference between evidence and conspiracy can mean the difference between public health and its erosion, between democratic discourse and its subversion, language educators have both an

opportunity and an obligation to equip learners with the critical competencies the moment demands.

References

- Al Zou'bi, R. (2022). The impact of media literacy instruction on EFL students' critical thinking skills. *Journal of Language and Linguistic Studies*, 18(1), 45-62.
- Brocca, N., Schildhauer, P., & Weiser-Zurmühlen, K. (2024). Implicit content extraction as a pedagogical strategy for critical digital literacy in EFL classrooms. *Linguistics and Education*, 79, 101-118.
- Butter, M. (2020). *The nature of conspiracy theories*. Polity Press.
- Čebišová, A. (2025). Training webinar: Discovering disinformation: Critical thinking in the era of AI. European Union Digital Skills and Jobs Platform. <https://digital-skills-jobs.europa.eu/en/learning-space/training-catalogue/training-webinar-discovering-disinformation-critical-thinking-era>
- Darwin, R. (2017). Language, ideology, and critical digital literacy. In S. Thorne & S. May (Eds.), *Language, education and technology* (pp. 17-30). Springer.
- Darwin, R., & Hafner, C. A. (2022). Digital literacies in language education. In R. Manchón & C. Polio (Eds.), *The Routledge handbook of second language acquisition and writing* (pp. 337-351). Routledge.
- Douglas, K. M., Sutton, R. M., & Cichocka, A. (2017). The psychology of conspiracy theories. *Current Directions in Psychological Science*, 26(6), 538-542.
- Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi, F. (2020). Understanding conspiracy theories. *Political Psychology*, 40(S1), 3-35.
- Freire, P. (1970). *Pedagogy of the oppressed*. Continuum.
- Gao, Y., & Zhang, L. J. (2020). Critical digital literacy in English language teaching: A scoping review. *TESOL Quarterly*, 54(4), 1058-1084.
- Germain González, M. (2025). News and fake news: Enhancing media literacy and critical thinking skills in the EFL classroom [Master's thesis, University of Barcelona]. Dipòsit Digital de la Universitat de Barcelona. <https://diposit.ub.edu/dspace/handle/2445/222301>
- Gigerenzer, G., & Gaissmaier, W. (2011). Heuristic decision making. *Annual Review of Psychology*, 62, 451-482.
- Gilster, P. (1997). *Digital literacy*. Wiley.
- Greene, J. A., Cartiff, B. M., & Duke, R. F. (2020). A meta-analysis of the relationship between epistemic cognition and academic achievement. *Educational Psychology Review*, 32, 953-984.
- Hepfer, K. (2021). *Verschwörungstheorien: Eine philosophische grundlegung*. Transcript Verlag.
- Imhoff, R., & Lamberty, P. (2020). A bioweapon or a hoax? The link between distinct conspiracy beliefs about the coronavirus pandemic. *European Journal of Social Psychology*, 50(7), 1383-1398.

- Jiang, L., & Gu, M. M. (2022). Digital multimodal composing in TESOL: A critical review. *TESOL Quarterly*, 56(3), 1035-1050.
- Jolley, D., Douglas, K. M., & Sutton, R. M. (2021). Blaming a few bad apples to save the tree: Conspiracy theorists as scapegoats. *Social Psychological Bulletin*, 16(3), 1-15.
- Jones, R. H., & Hafner, C. A. (2021). *Understanding digital literacies: A practical introduction* (2nd ed.). Routledge.
- Keysar, B., Hayakawa, S. L., & An, S. G. (2012). The foreign-language effect: Thinking in a foreign tongue reduces decision biases. *Psychological Science*, 23(6), 661-668.
- Lantian, A., Muller, D., Nurra, C., & Douglas, K. M. (2017). I know things they don't know! The role of need for uniqueness in belief in conspiracy theories. *Social Psychology*, 48(3), 160-173.
- Luke, A., & Freebody, P. (1997). The social practices of reading. In S. Muspratt, A. Luke, & P. Freebody (Eds.), *Constructing critical literacies* (pp. 185-226). Hampton Press.
- Makena, B. (2026). Conspiracy theories towards language development: A case of online engagements. *Revista de Análisis y Verificación*, 18(1), 45-62.
- Martens, H., & Hobbs, R. (2015). How media literacy supports civic engagement in a digital age. *Atlantic Journal of Communication*, 23(2), 120-137.
- Reinhardt, J., & Thorne, S. L. (2011). Beyond comparisons: Framing the development of L2 digital literacy. *Language Learning & Technology*, 15(3), 1-6.
- Schildhauer, P., & Gerlach, D. (2023). *Teaching conspiracy theories: A critical digital literacy approach for ELT*. Cambridge University Press.
- Schildhauer, P., & Kemper, S. (2024). Algorithms and echo chambers: Teaching digital literacy in the age of recommendation systems. *Computers and Composition*, 71, 102-119.
- Schildhauer, P., Weiser-Zurmühlen, K., & Brocca, N. (2023). Critical digital literacy as an integrated framework for conspiracy theory analysis in ELT. *Language Learning & Technology*, 27(2), 241-260.
- Stano, S. (2020). The Internet and the spread of conspiracy theories. In M. Butter & P. Knight (Eds.), *Routledge handbook of conspiracy theories* (pp. 483-496). Routledge.
- Street, B. V. (1984). *Literacy in theory and practice*. Cambridge University Press.
- Wardle, C., & Derakhshan, H. (2017). *Information disorder: Toward an interdisciplinary framework for research and policymaking*. Council of Europe.
- Weiser-Zurmühlen, K. (2024). Linguistic patterns in COVID-19 conspiracy theories: A corpus-based analysis. *Discourse & Society*, 35(2), 218-237.
- Weiser-Zurmühlen, K., Schildhauer, P., & Brocca, N. (2025). Developing critical minds: An ethnographic study on the implementation of conspiracy theories to foster critical digital literacy in English language classrooms. *System*, 135, 103871.
- Wineburg, S., & McGrew, S. (2019). Lateral reading and the nature of expertise: Reading less and learning more when evaluating digital information. *Teachers College Record*, 121(11), 1-40.