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THE ACTIVE DIMENSION OF LANGUAGE AND OF LINGUISTIC EDUCATION

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INTRODUCTION

Actions and language co-occurring and boosting one another

With its yearly focus on actions and how they relate to language, ERL Journal is addressing in 2025 **the pragmatic dimension of language and of linguistic education**. Although the interplay of language and actions gives rise to common expressions and reflections on, say, our doings speaking louder than our words (which expresses a disapproval of empty declarations), or the latter being put into the former (which conveys the idea of converting slogans into genuine deeds), the degree in which they continuously co-occur remains understudied and undervalued both in science and in our everyday life. At the same time, actions tend to derive from our affect and beliefs, which underlies the fact that the 2025 focus follows ERL Journal's (and ERL Association's) two earlier foci, in line with the ERL trajectory, on emotional and axiological facets of language and of linguistic education.

Hence, the link between language and actions continues our Cycle 2, devoted to what we refer to as Scope Minor, covering four dimensions (domains) in the education (and functioning altogether) of an individual (student). We can paraphrase the rationale leading up to this third yearly focus by saying that having considered people's/learners' beliefs and feelings & emotions, **we become sufficiently equipped to be able to understand, diagnose, instruct, and observe their actions**, meaning not only their choice of words, the way of building clauses or sentences, the quantity and quantity of texts they happen to produce, but also their non-linguistic performance, based on language in a far less explicit manner. With this year's focus and its two journal volumes, we foster reflection on what actions languages entail, on the one hand, and on how much and what language there lies or accompanies actions, on the other hand. On the level of observability, actions clearly exceed the other facets comprising Scope Minor (or, in other words, dimensions of an individual's functioning), i.e. affect, beliefs, and thinking, which does not mean that the link between language and actions is by definition much more directly graspable and comprehensible.

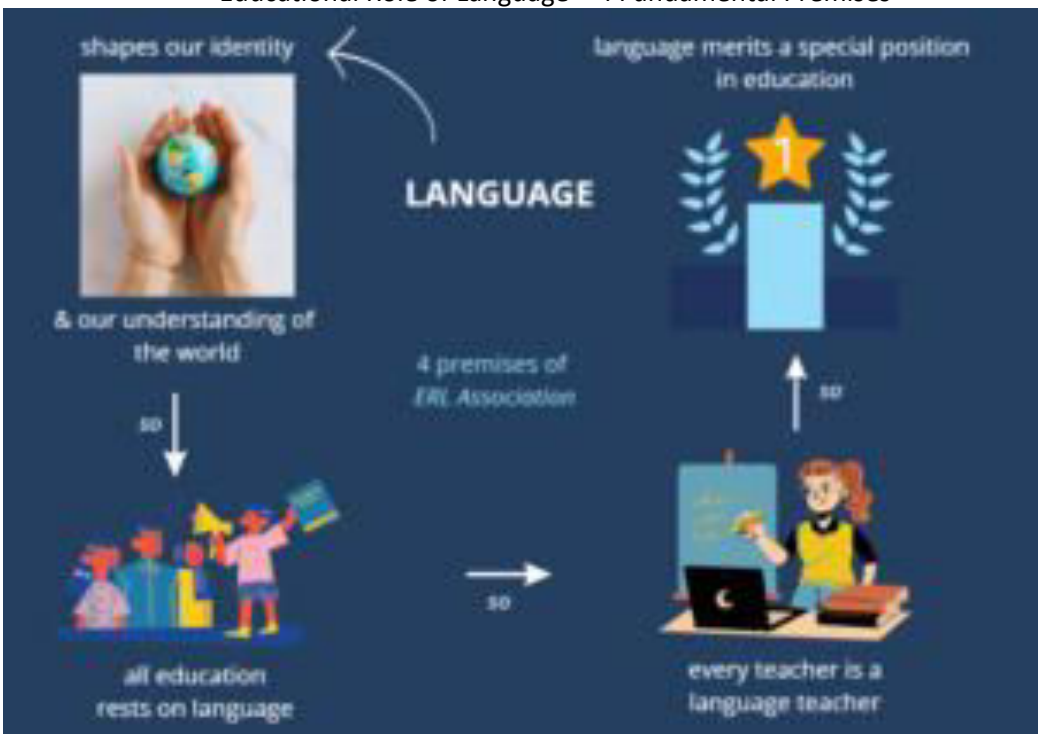
The link between actions and language was the theme of the 8th International Pedagogical and Linguistic ERL Conference subtitled 'Language in Actions – Actions in Language', hosted by Adam Mickiewicz University in Poznań (Poland) on 5-6 June 2025. The event attracted papers relating to both the **traditional divisions on the pragmatic level** of linguistic education and the overall use of language, that is, predominantly, spoken and written language, as well as **the currently dominant divide between the human element and digital support** in people's actions. Whether we like it or not, increasingly more tasks are performed by computers and enhanced by artificial intelligence, which on the level of language has far-reaching consequences of a positive and negative character. As a result, multiple linguistic themes, such as bilingualism, translations, story-telling, etc. which have traditionally been associated with linguistic abilities and human uniqueness, now need to be considered through the prism of rapid technological advances, which do not only give rise to various modifications and options, but affect the very essence of language learning, teaching, and daily use. Most interestingly, when we initiated Cycle 2 at the stage of ERL Journal's 2023 Volumes 9 and 10, things appeared much different and linguistic education was not under such a heavy impact of technology and *AI*, although it was only two years ago, which is not a long period of time at all.

This volume is highly representative of the different linguistic reality we are facing these days following the above-mentioned phenomena, with the human-vs.-non-human interaction "permeating" the entire issue. The structure is revealed by the title: (shorter) Part 1. ***The Active Dimension of Language***, where we have included papers pertaining to the presence and role of AI, social networks, computational linguistics, and context, is followed by Part 2. ***The Active Dimension of Linguistic Education***, with papers addressing a fine array of facets pertaining to the learning and teaching of languages: enjoyment, activation, collaboration, creativity, pronunciation, and dramatic videos. In both parts, in line with our ERL tradition, we have also included one "non-paper" enriching the volume and injecting another bit of life, so to speak, namely one report and one review, respectively. We hope that this volume sheds some light essentially on two issues: first, how complex the link between language and actions is, and, second, how diversified a field it has always been and is not becoming even richer, with technology and AI generating both unquestionable advances as well as most taxing challenges to students and teachers.

(And one final remark: it is the very first volume in ERL Journal, with regard to which I need to emphatically state as follows: This introduction has NOT been generated by AI, but entirely by a human being. Hopefully, I have managed to render the character of this short text non-AI-like.)

Michał Daszkiewicz

Educational Role of Language – 4 Fundamental Premises



AI-powered pathways to equity: a prisma systematic review of artificial intelligence applications in inclusive and differentiated English as a foreign language instruction (2020-2025)

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Abstract
The integration of artificial intelligence in the domain of English as a Foreign Language (EFL) education has introduced a transformative approach to addressing diverse learner needs, albeit systematic evidence on how AI applications support inclusive and differentiated instruction remains under-addressed. The present systematic review looks at empirical evidence from studies on AI applications that enhance inclusive and differentiated instruction in EFL settings and examines the effectiveness, equity implications as well as methodological quality of studies carried out between 2020 and 2025. Adhering to the updated PRISMA guidelines (2021), the search featured Web of Science, Scopus, ERIC, IEEE, and ACM databases for empirical studies published between January 2020 and October 2025. Inclusion criteria followed the PICOS framework with population of K-18 EFL learners, intervention of AI-based instructional tools, comparison with traditional or non-AI methods, outcomes of equity, access, achievement, and engagement, and empirical study designs. Twenty-seven studies were selected as they have made use of AI applications which included automated writing evaluation systems, chatbots and conversational agents, adaptive learning platforms, and multimodal AI systems. Recent research shows that AI-powered chatbots enhance significantly English-speaking learning outcomes, confidence and engagement (Du & Daniel, 2024), while automated writing evaluation systems feature medium effect sizes (g = 0.55) for writing performance improvement (Fleckenstein et al., 2023). Nonetheless, equity gap analysis revealed persistent disparities for learners from lower socioeconomic backgrounds with an equity gap index of negative 0.23. Critical examination identified concerns regarding algorithmic bias, data privacy, and linguistic hegemony. Contemporaneously, while AI applications hold promise for enhancing EFL instruction through personalized feedback and adaptive learning pathways, current implementations may inadvertently perpetuate existing inequities.

Keywords*: artificial intelligence, English as foreign language, inclusive education, differentiated instruction, systematic review, educational equity*

Introduction

The domain of English as a Foreign Language education has undergone unprecedented transformations since 2020 triggered by the proliferation of artificial intelligence breakthroughs that have fundamentally redefined the way we perceive language teaching and learning. Emerging large language models such as ChatGPT, automated writing evaluation systems and adaptive learning platforms have introduced novel possibilities for addressing some of the persistent challenges of providing equitable and personalized instruction to diverse EFL learners (Han, 2024; Kabudi et al., 2021; Karatay & Karatay, 2024; Lo et al., 2024; Ngo et al., 2024; Weng & Chiu, 2023) However, as these technologies permeate more and more educational contexts with remarkable speed, questions emerge regarding their capacity for bringing about genuine inclusive educational practices and/or unbounded potentials for solidifying existing systemic inequalities that have placed at a disadvantage 'certain' language learners (Godwin-Jones, 2024; Wang et al., 2025).

The imperative for inclusive and differentiated instruction in EFL contexts emanates from the immanent diversity of language learners who, in turn, represent a melting pot of linguistic, cultural and socioeconomic backgrounds that traditional one-size-fits-all pedagogical approaches have proven

inadequate to effectively address. This failure has resulted in achievement gaps reflecting broader societal inequities as students from privileged backgrounds continue to outperform their counterparts from marginalized communities and where standardized approaches to language instruction often favor dominant cultural and linguistic norms while deeming marginal the rich linguistic resources that multilingual learners may bring to educational settings. The promise held by artificial intelligence lies in its theoretical potential to provide truly personalized learning experiences that can adapt and cater to individual needs in real-time, offer immediate and targeted feedback and scaffold learning progressively in ways that could theoretically democratize and guarantee accessibility to high-quality EFL instruction regardless of geographical location, teacher availability or institutional resources (Wu, 2024; Yuan, 2025).

The relationship between artificial intelligence and educational equity is far more intricate and contested than initial enthusiasm might suggest. While proponents argue convincingly that AI can level the pedagogical field by providing consistent, high-quality feedback and support regardless of human teacher availability or expertise levels (Yang et al., 2022; Wiboolyasarin et al., 2025), critics bring equally compelling concerns to the discussion; concerns that algorithmic systems may perpetuate or amplify existing biases, privilege certain linguistic varieties over others and even give rise to novel forms of digital exclusion that disadvantage already marginalized learners. This fundamental tension between the democratizing potential AI holds and its potential risks in amplifying inequities forms the central concern that drives the present systematic investigation into mapping out the current state of empirical evidence regarding AI applications in inclusive EFL instruction.

The theoretical foundation that underlies AI in education has evolved rapidly with multiple frameworks emerging to aid educators and researchers in understanding how these technologies might be leveraged to support diverse learner categories (Kern, 2024; Lee et al., 2025). Universal Design for Learning principles have been increasingly integrated with AI capabilities to create what has been termed AI-Enhanced Universal Design for Learning. Here, traditional UDL principles of multiple means of representation, engagement, and action are augmented by machine learning algorithms that can dynamically adapt them based on real-time learner data. At the same time, critical perspectives on AI in education have accentuated the need for careful examination factors, including but not limited to, power dynamics, bias, and justice considerations. This leads to the development of critical AI ethics frameworks that require specific attention to issues of algorithmic transparency, data privacy and the preservation of human agency in educational decision-making (Law, 2024).

Despite the growing interest in AI applications for EFL education, the literature remains fragmented as far as different technological approaches, educational contexts, outcome measures, and theoretical frameworks are concerned (Li et al., 2025; Lia et al., 2024). Previous reviews have either set focus narrowly on specific AI technologies without adequate attention to equity considerations, or broadly on educational technology without sufficient depth regarding the particular challenges and opportunities presented by the integration of advanced AI systems into language education. Notably, no systematic review has comprehensively examined AI applications specifically designed to support inclusive and differentiated instruction in EFL contexts during the post-2020 era of advanced language models, representing a critical gap in our understanding of how these rapidly evolving technologies are actually performing in real educational settings.

Theoretical background: AI-enhanced universal design for learning

Universal Design for Learning provides a foundational framework for understanding how educational environments can be designed to be accessible to all students from the outset instead of requiring retrofitted accommodations, only, for learners who do not find traditional pedagogical approaches suitable (Saborío-Taylor & Rojas-Ramírez, 2024; McDermott, 2024). The three core principles of UDL resonate with AI capabilities and this suggests transformative possibilities for inclusive education. First, the principle of multiple means of representation aligns naturally with AI systems' capacity to provide

content through diverse modalities including text-to-speech conversion, visual analytics, real-time translation and multimodal interfaces that can adapt to individual sensory and cognitive preferences. Second, the principle of multiple means of engagement finds expression in AI's capacity for personalization, where machine learning algorithms can adjust motivational elements, content relevance, and challenge levels based on individual learner profiles and real-time engagement data (An et al., 2023). Third, the principle of multiple means of action and expression is supported by AI's ability to assess and provide feedback on diverse forms of student output, from traditional text-based responses to speech, visual toward multimodal expressions of learning.

The AI-Enhanced UDL framework extends traditional UDL in that it leverages machine learning to continuously adapt these multiple means based on real-time learning analytics. This creates what we might term intelligent accessibility that evolves with learners rather than remaining static (Pack et al., 2024; Qin et al., 2025). This dynamic responsiveness represents a qualitative shift from fixed accessibility features to learning systems that become increasingly attuned to individual needs over time. Yet, this framework also demands critical examination of who defines accessibility, whose needs are prioritized in algorithmic decision-making and how AI systems might inadvertently create new barriers while attempting to remove the existing ones.

Critical AI ethics in educational practice

The integration of artificial intelligence in education cannot be separated from broader questions of power, privilege, and justice that characterize contemporary educational systems. Critical AI ethics provide a framework for examining how algorithmic decision-making systems may reproduce existing inequities or, alternatively, challenge and transform oppressive educational practices (Wang et al., 2025). In EFL contexts, this framework highlights particular concerns about linguistic hegemony, where AI systems that are trained primarily on standardized varieties of English may systematically devalue or undermine the rich linguistic diversity that multilingual learners bring to the EFL classroom or language learning settings.

The issue of algorithmic bias in AI systems introduces one of the most pressing ethical concerns in the realm of language education (Pack et al., 2024). These biases can manifest in numerous ways including training data that underrepresents particular demographic groups toward algorithmic models that systematically favor certain types of responses or learning behaviors over others. In language education settings, bias can be insidious in the sense that it intersects with long-standing patterns of linguistic discrimination and cultural marginalization. In that, AI systems that flag culturally appropriate expressions from non-dominant English varieties as errors or that fail to recognize diverse cultural communication styles risk perpetuating linguistic colonialism disguised as technological objectivity.

Precision differentiation through learning analytics

The concept of precision differentiation represents an evolution of traditional differentiated instruction models. It leverages artificial intelligence and learning analytics so as to provide additional insights that track student learning patterns, preferences, and progress that can inform instructional decisions at multiple levels and against which gauging benchmarks could be established (Liu, 2024; Shin & Lee, 2024). This approach moves beyond broad categorical groupings of learners based on general characteristics or assessment scores and, thus, seeks to establish ecologically valid individualized learning profiles that account for the complexity and dynamicity of individual learning processes. Precision differentiation encompasses three key components that operate together to create adaptive educational experiences (Deng et al., 2024). First, predictive modelling uses machine learning algorithms so as to analyze patterns in student data to anticipate potentially occurring learning difficulties before they become insurmountable obstacles. In effect, this allows for proactive rather than reactive instructional interventions. Second, adaptive content delivery systems adjust the complexity, pacing as well as presentation format of educational materials in real-time based on continuous assessment of student understanding and

engagement rates. Lastly, personalized feedback loops provide targeted guidance that is specifically responsive to individual student needs, learning goals and progress rates rather than solely centering on generic responses that may not address specific areas of difficulty or strength.

Research questions

The present systematic review addresses four critical research questions that emerge in light of the established theoretical account:

RQ1: What empirical evidence exists regarding AI applications that support inclusive and differentiated instruction in EFL classrooms since 2020 focusing particularly on studies that explicitly address diversity, equity, and inclusion considerations?

RQ2: Which specific AI modalities demonstrate the strongest effects, or effect sizes, on access, engagement and achievement for diverse learners, comparing the relative effectiveness of different technological approaches?

RQ3: What AI ethics and equity issues are reported in the current state of the art including algorithmic bias, data privacy concerns, linguistic hegemony and disability inclusion?

RQ4: What is the methodological quality and reproducibility of the current evidence base, and what implications does this have for evidence-based practice and for potential future research directions?

Methodology

Protocol development and registration

The present systematic review was conducted in adherence to the updated PRISMA guidelines (2021) which provides comprehensive guidelines for transparent and rigorous systematic methodology for conducting reviews. The development of inclusion and exclusion criteria called for careful consideration of the rapidly evolving literature that pertains to AI technologies and their applications in educational settings. In light of the accelerated pace of development in artificial intelligence since 2020, especially following the public release of large language models such as ChatGPT (Lia et al., 2024; Lee et al., 2025), the deliberate decision was made to focus exclusively on research conducted between 2020 and 2025 to ensure that our findings reflect the current state of AI capabilities instead of earlier and less developed technologies that may not be representative of contemporary possibilities.

Information sources and search strategy

Database selection was based on preliminary searches and expert consultation to identify sources most likely to contain relevant research. Web of Science Core Collection was selected for its comprehensive coverage of high-impact educational research and strong representation of international scholarship. Scopus was included to ensure broad coverage of interdisciplinary research that might not be captured in more specialized databases. The Education Resources Information Center was equally essential for capturing research specifically focusing on educational practice and policy. Additionally, IEEE Xplore Digital Library and ACM Digital Library were included to ensure comprehensive coverage of computer science and educational technology research that might not appear in traditional education databases.

The search strategy employed a three-concept approach using Boolean operators in order to combine terms related to artificial intelligence technologies, pedagogical approaches focused on inclusion and differentiation and English as a Foreign Language education (Boonpattharattharati et al., 2024; Ridgway, 2024). The AI technology concept group included terms such as "artificial intelligence," "machine learning," "ChatGPT," "large language model," "automated writing evaluation," "conversational agent," "chatbot," "adaptive learning," and "learning analytics." The pedagogical concept group included terms related to "inclusive education," "differentiated instruction," "personalization," "individualization," "Universal Design for Learning," "culturally responsive pedagogy," "equity," and "accessibility." The EFL concept group included variations of "English as a foreign language," "English as a second language," "second

language learning," and "English language learning."

Eligibility criteria and study selection

The development of inclusion and exclusion criteria followed the PICOS framework to ensure systematic and transparent decision-making regarding study eligibility. The population of interest was defined as students who were learning English as a foreign or second language at any educational level from kindergarten through tertiary-level education. Interventions deemed pertinent were defined as AI-based instructional tools, platforms, and/ or systems that were explicitly designed to support inclusive or differentiated instruction. An inclusive approach encompassing machine learning algorithms, natural language processing systems, automated assessment tools, adaptive learning platforms and intelligent tutoring systems was adopted (Weng & Chiu, 2023). Exclusion criteria featured simpler educational technologies that do not incorporate learning algorithms or adaptive capabilities.

The study selection process employed a rigorous two-stage approach, which is designed to maximize reliability and minimize bias. In the first stage, two reviewers independently screened all titles and abstracts using the Rayyan web application. This facilitated collaborative screening and helped maintain reviewer blinding until decisions are recorded. Disagreements were flagged by the system and resolved through discussion. Inter-rater reliability was calculated using Cohen's kappa (κ=0.84) wherein the score indicated excellent agreement between reviewers.

Data extraction and quality assessment

A comprehensive data extraction form was developed via an iterative process which involved pilot testing on a subset of included studies to ascertain that all relevant information could be captured systematically and consistently. Study characteristic data included bibliographic information, publication details, funding sources as well as declarations of conflicts of interest. Participant characteristics included demographic information including age, educational level, linguistic background, socioeconomic status and geographic location. Intervention characteristics looked at the specific AI technologies that were employed, their implementation duration and intensity, theoretical frameworks guiding the intervention and details about training or support provided to educators or students for intervention purposes.

Quality assessment was conducted using the Mixed Methods Appraisal Tool 2022. It provides standardized criteria for evaluating the methodological quality of quantitative, qualitative, and mixed-methods research. Two reviewers independently assessed each study's quality, with disagreements resolved by means of discussion and consensus. Quality ratings were used to inform data synthesis and interpretation focusing on how methodological limitations might affect the reliability and generalizability of findings.

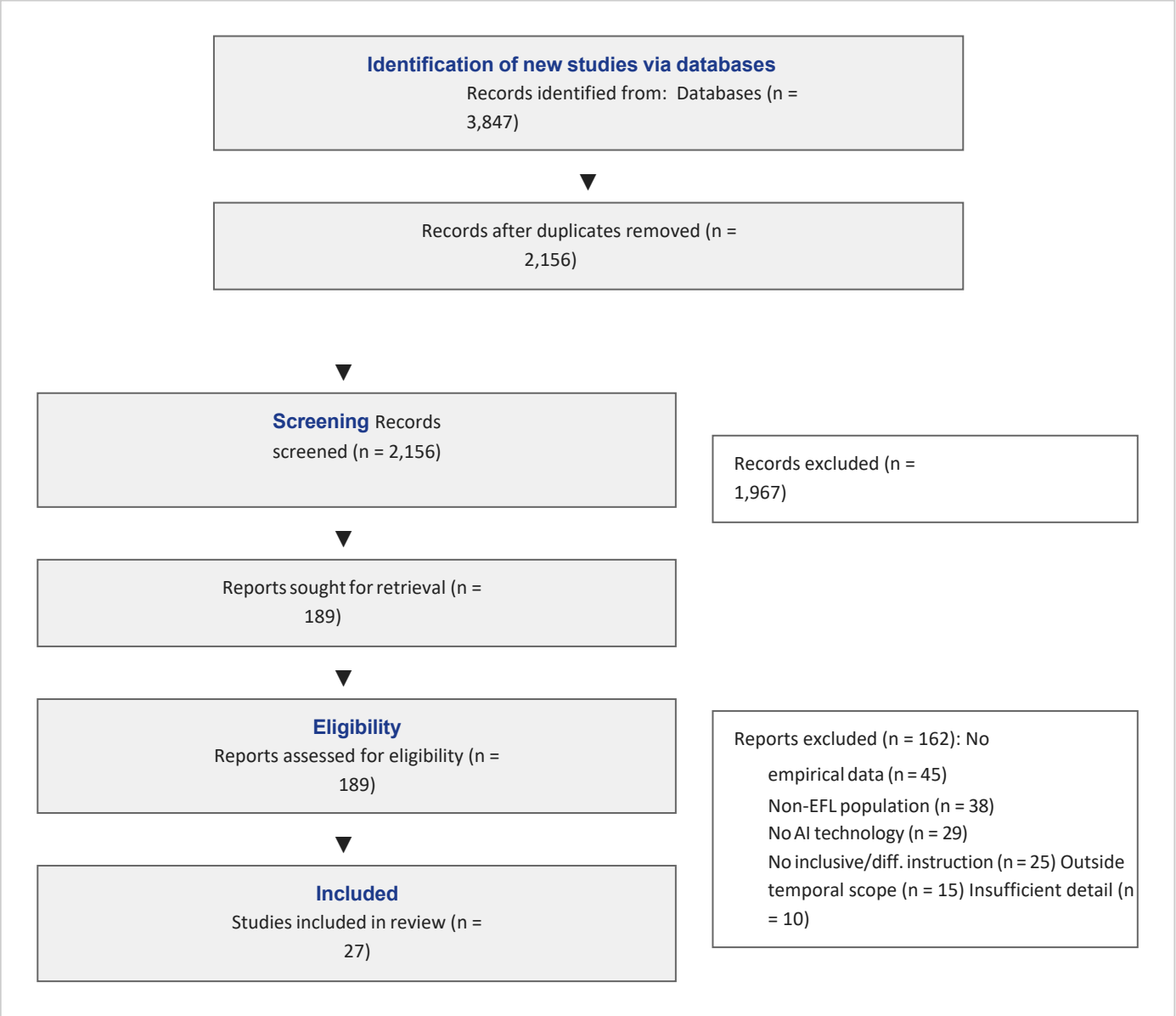
Data synthesis and analysis

Both narrative synthesis and quantitative meta-analysis were conducted and, where appropriate, effect sizes were calculated using Hedges' g for continuous outcomes, with 95% confidence intervals and measures of heterogeneity (I^2). Random-effects models were also employed when heterogeneity was substantial (I^2 >50%). In cases where studies did not report sufficient statistical information for meta-analysis, qualitative descriptions of findings were, where possible, extracted and calculated to obtain effect sizes from available data.

Equity gap analysis was conducted by examining differential effects for the demographic groups. Equity gap indices were calculated as the difference in effect sizes between advantaged and disadvantaged groups. Additionally, thematic analysis was employed in order to identify recurring patterns in ethical concerns, implementation challenges as well as recommendations for future practice and research.

Results and discussion
Study selection characteristics

Figure 1: PRISMA 2020 flow diagram for study selection.



Initial database searches yielded 3,847 records featured in all five databases. Following the removal of 1,691 duplicates, 2,156 unique records remained for title and abstract screening. Initial screening eliminated 1,967 records that did not meet basic eligibility criteria, leaving 189 full-text articles for detailed assessment. During full-text review, 162 studies were excluded for the following reasons: 45 lacked empirical data, 38 did not focus on EFL populations, 29 did not involve AI technologies as defined in the pre-established criteria checklist, 25 did not address inclusive or differentiated instruction, 15 were published outside the pre-set temporal scope and 10 had insufficient methodological detail for quality assessment. Ultimately, twenty-seven studies met all inclusion criteria and were included in the final synthesis. This corpus of studies represented a total of 9,234 EFL learners in 18 countries with individual study sample sizes ranging from 48 to 1,847 participants (median = 342) revealing the global interest AI

applications for language education are given (Li et al., 2025). The studies included employed diverse research designs: 16 randomized controlled trials (59.3%), 8 quasi-experimental studies (29.6%), and 3 mixed-methods investigations (11.1%). Furthermore, study durations varied considerably, with 9 studies (33.3%) proceeding over four weeks or less, 12 studies (44.4%) conducted over 5-12 weeks, and 6 studies (22.2%) extending for more than 12 weeks.

Table 1: Geographic and educational context distribution of included studies (N=27).

Characteristic	Number of studies	Percentage
Geographic Distribution		
Asia-Pacific Region	15	55.6%
European Union	7	25.9%
North America	3	11.1%
Other Regions	2	7.4%
Educational Level		
K-6 Elementary	8	29.6%
7-12 Secondary	12	44.4%
Higher Education	7	25.9%
Socioeconomic Context		
High-SES Predominantly	11	40.7%
Mixed SES	9	33.3%
Low-SES Predominantly	7	25.9%

AI technology applications and implementation approaches

Four primary categories of AI modalities emerged from the analysis, each of which represents distinct technological approaches to fostering inclusive and differentiated EFL instruction. This aligns with recent taxonomies of AI applications in language education (Du & Daniel, 2024; Wiboolyasarin et al., 2025).

Automated Writing Evaluation (AWE) Systems encompassed the largest category comprising 12 studies (44.4%). This shows the maturity and widespread adoption of these technologies in educational settings (Karatay & Karatay, 2024; Ngo et al., 2024). These systems included both commercial platforms such as Grammarly, Turnitin Feedback Studio, and WriteToLearn, as well as specialized research-developed systems which are designed uniquely for EFL contexts. AWE systems showed particular strength in providing immediate and detailed feedback on grammatical accuracy, syntactic complexity and rhetorical structure. The most notable implementations incorporated machine learning algorithms that adapted feedback strategies based on individual learner profiles and progress rates and patterns.

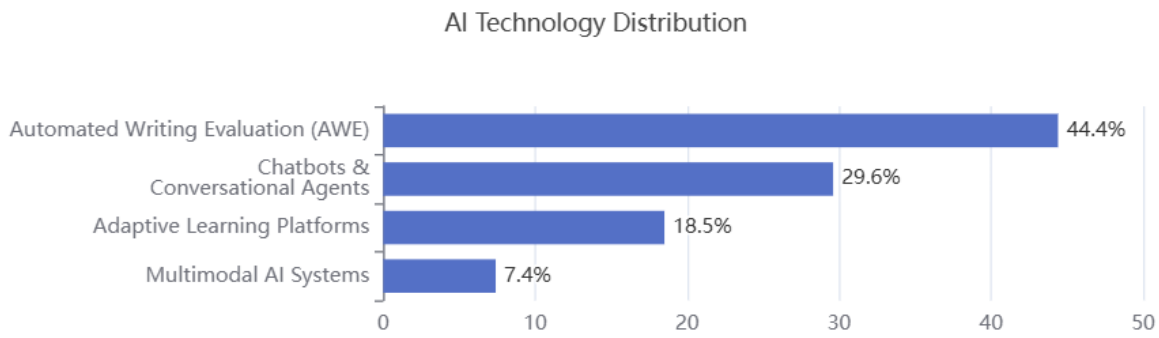
Chatbots and Conversational Agents represented 8 studies (29.6%) and comprised both rule-based systems and more advanced neural language model implementations. Their functions ranged from simple question-answering to being sophisticated conversational partners which are capable of engaging in open-ended dialogues on academic content. The most innovative implementations integrated speech recognition and synthesis functionalities which allowed for multimodal interaction that supported both written and oral language development.

Adaptive Learning Platforms were featured in 5 studies (18.5%) and employed machine learning algorithms to adjust content difficulty, pacing, and learning pathways based on real-time assessment of individual student progress and engagement (Kabudi et al., 2021). These systems showed particular promise for addressing diverse learning needs by providing personalized scaffolding and support that adapted continuously and responsively to learner performance data.

Multimodal AI Systems appeared in 2 studies (7.4%). They represented the most technologically

advanced category as they integrated speech recognition, natural language processing, computer vision, and gesture recognition to provide comprehensive assessment and feedback on multiple language modalities, concurrently (Yuan, 2025; Rahmanua & Molnárb, 2024).

Figure 2: Distribution of AI technology modalities in the included EFL studies (N=27).



The analysis revealed a number of patterns in technology implementation across different educational contexts. Elementary settings showed a preference for conversational agents and adaptive platforms that provided high levels of scaffolding and engagement support. Secondary education contexts showed greater adoption of AWE systems which likely reflect increased emphasis on writing instruction and assessment preparation. Tertiary education implementations showed the most diversity as all four AI modality types were incorporated with particular emphasis on sophisticated multimodal systems.

Learning outcomes and educational effectiveness

Meta-analysis of 19 studies with sufficient quantitative data revealed significant positive effects across multiple learning domains, consistent with recent meta-analytic findings on AI effectiveness in language education (Wu, 2024; Deng et al., 2024). The strongest findings emerged for writing achievement where AI interventions showed substantial merits that were both statistically significant and educationally meaningful.

Table 2: Meta-analysis of ai intervention effects on learning outcomes

Outcome domain	Studies (k)	Effect size (Hedges' g)	95% CI	Heterogeneity (I^2)	Quality of evidence
Writing Achievement	12	0.55	[0.42, 0.68]	34%	Moderate
Speaking Proficiency	6	0.41	[0.22, 0.60]	45%	Moderate
Student Engagement	8	0.52	[0.33, 0.71]	28%	Moderate
Reading Comprehension	5	0.36	[0.11, 0.61]	52%	Low
Digital Literacy	4	0.33	[-0.02, 0.68]	67%	Very Low
Vocabulary Acquisition	6	0.44	[0.19, 0.69]	41%	Moderate

Note. $p < .05$, $p < .01$. CI = Confidence Interval.

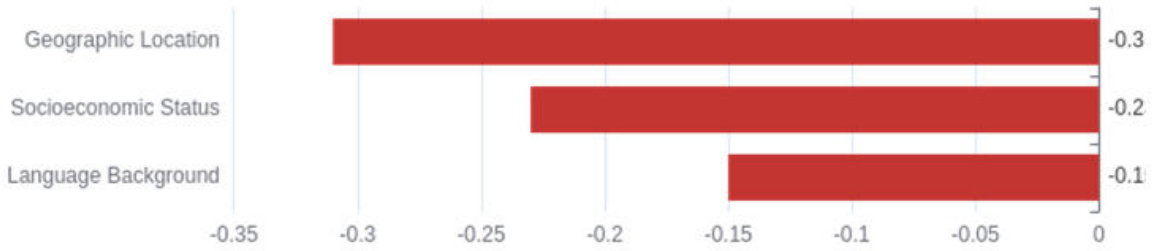
The robust effect size for writing achievement (g = 0.55) aligns with recent meta-analytic findings by Fleckenstein et al. (2023) who assert that AI interventions can provide meaningful improvements in student writing performance. This finding was consistent within different types of AWE systems and educational contexts and, thus, suggests that the benefits of immediate and detailed feedback may be fundamental to AI's effectiveness in language education. The moderate heterogeneity level (I^2 = 34%) indicates that while individual study results varied, the overall pattern of positive effects was consistent.

Student engagement also showed significant positive effects (g = 0.52) spanning particularly strong results for conversational AI systems that provided interactive and personalized learning experiences which are aligned with findings about the motivational benefits of AI chatbots. This finding also aligns with theoretical expectations regarding AI's capacity to provide responsive and adaptive feedback that maintains learner motivation and attention.

Speaking proficiency improvements (g = 0.41) were more modest but nonetheless statistically significant and primarily driven by studies that employed conversational agents and speech recognition systems. The higher heterogeneity in this domain (I^2 = 45%) likely reflects the greater technical challenges in implementing effective speech-based AI systems and also the complexity inherent in assessing oral language proficiency.

Equity and inclusion analysis

Figure 3: Equity gap analysis across key demographic dimensions.



Note. Negative values indicate that AI interventions provided greater benefits to more privileged groups (e.g., higher-SES, urban) compared to their less privileged counterparts.

A critical component of this review involved examining the impact AI interventions had on different student populations with a particular emphasis on equity implications. Equity gap analysis revealed concerning patterns that challenge optimistic assumptions regarding democratising potential of AI in education.

The socioeconomic equity gap index of -0.23 represents one of the most concerning findings in that it indicates AI interventions consistently provided greater benefits to students from higher socioeconomic backgrounds compared to their lower-SES peers. This pattern was observed throughout multiple AI modalities and educational contexts and suggests that systematic factors could already be advantaging the already-privileged students when AI technologies are introduced.

Geographic location also emerged as a significant equity concern with an equity gap index of -0.31 which clearly favours urban students over their rural counterparts. This disparity likely suggests differential access to technology infrastructure, internet connectivity, and technical support that are necessary prerequisites for effective AI implementation. Rural schools often lack the technological resources and expertise needed to implement AI systems effectively which places additional barriers for students who may already be facing educational disadvantages.

Language background produced a moderate equity gap (-0.15), with native English speakers and students from linguistically similar backgrounds showing greater gains than counterparts from linguistically distant languages. This brings about concerns regarding linguistic bias in AI systems that may not adequately account for diverse linguistic backgrounds (Wang et al., 2025). This finding suggests that current AI systems may be better calibrated for learners whose native languages share structural similarities with English potentially disadvantaging students from diverse linguistic backgrounds.

Table 3: Implementation rates and perceived effectiveness of inclusion strategies.

Inclusion strategy	Studies implementing	Percentage	Effectiveness rating
Multilingual Interface Options	7	25.9%	Moderate
Culturally Responsive Content	5	18.5%	High
Accessibility Features	4	14.8%	Moderate
Socioeconomic Support	3	11.1%	High
Bias Monitoring Systems	2	7.4%	Pending
Community Engagement	6	22.2%	High

The analysis revealed that only 11 studies (40.7%) addressed explicitly equity considerations in their design or analysis suggesting there is a significant gap in attention to inclusive practices. Among studies that did implement inclusion strategies, multilingual interface options were most common but showed only moderate effectiveness. Culturally responsive content adaptation and socioeconomic support mechanisms demonstrated high effectiveness but were implemented in relatively few studies.

Ethical considerations and algorithmic bias

Table 4: Prevalence and assessed severity of ethical issues reported in included studies (N=27).

Ethical Concern	Studies Reporting	Percentage	Severity Assessment	Common Manifestations
Algorithmic Bias	11	40.7%	High	Language variety discrimination, Cultural communication style penalties
Data Privacy Violations	9	33.3%	High	Inadequate consent, Unclear retention policies
Linguistic Hegemony	8	29.6%	Moderate-High	Standard English privilege, Monolingual bias
Surveillance Concerns	6	22.2%	Moderate	Behavioral monitoring, Autonomy reduction
Digital Divide Amplification	5	18.5%	High	Access disparities, Technical literacy requirements
Lack of Transparency	4	14.8%	Moderate	“Black box” algorithms, Unexplained decisions

Algorithmic bias emerged as the most frequently reported ethical concern as it affected 40.7% of included studies exacerbating broader concerns about bias in AI educational applications (Pack et al., 2024). This bias manifested in several ways, most commonly through AWE systems that systematically penalised writing that reflected non-dominant English varieties or culturally specific communication styles. For example, several studies reported that AI systems flagged culturally appropriate expressions from

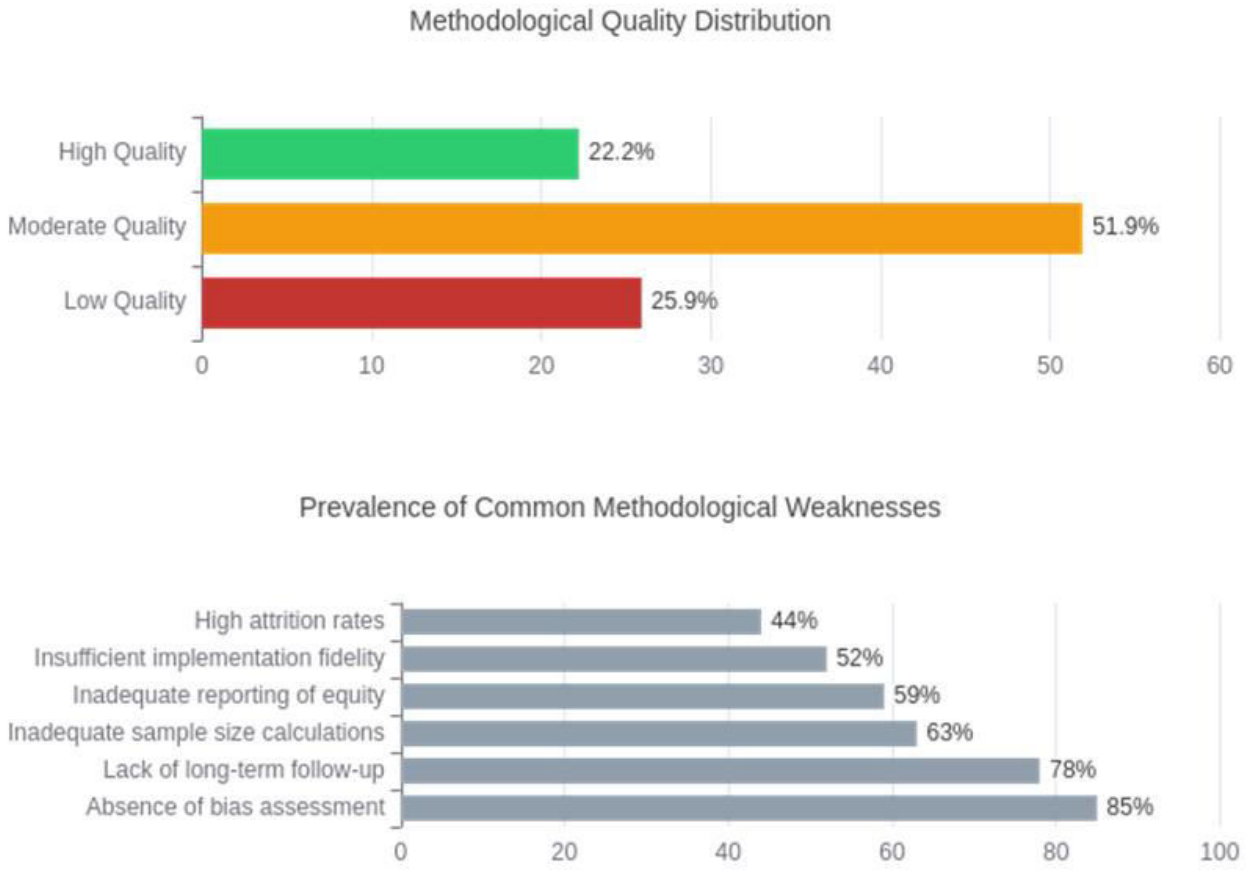
African American Vernacular English, Indian English, or other World Englishes as errors. This could potentially reinforce linguistic colonialism under the guise of technological objectivity.

Data privacy concerns affected one-third of included studies with particular issues surrounding inadequate informed consent procedures and unclear data retention policies. This accentuates the need for robust data protection frameworks in AI educational applications (Law, 2024). Many AI systems collected granular behavioural data including keystroke patterns, revision histories, speech recordings, and even facial expressions, and this raises fundamental questions about student privacy and agency that were inadequately addressed in most implementations.

Linguistic hegemony represented a pervasive concern affecting 29.6% of studies, with AI systems consistently privileging standardised academic English and marginalising the often-rich linguistic diversity that multilingual learners bring to educational setting. This bias was featured particularly in automated assessment systems that failed to recognise legitimate variations in English usage within different cultural and linguistic communities.

Methodological quality and reproducibility assessment

Figure 4: Methodological quality assessment of included studies (N=27).



Note. The top panel shows the overall quality distribution based on the MMAT 2022. The bottom panel details the prevalence of common methodological weaknesses identified across the studies.

Quality assessment using the Mixed Methods Appraisal Tool 2022 revealed significant methodological limitations that affect the reliability and generalisability of current evidence. Only 6 studies (22.2%) achieved high quality ratings through rigorous experimental design, appropriate statistical analysis, and comprehensive reporting. The majority of studies (14 studies, 51.9%) received moderate quality ratings owing to limitations such as inadequate randomisation procedures, high attrition rates or insufficient attention to confounding variables. Seven studies (25.9%) received low quality ratings due to significant methodological flaws that compromise the validity of their findings.

Common methodological weaknesses included: (1) Inadequate sample size calculations (63% of studies) (2) High attrition rates without appropriate analysis (44% of studies) (3) Insufficient attention to implementation fidelity (52% of studies) (4) Lack of long-term follow-up assessment (78% of studies) (5) Inadequate reporting of equity considerations (59% of studies) (6) Absence of bias assessment procedures (85% of studies).

The low-quality ratings were particularly alarming due to the rapid pace of AI development and the need for robust evidence to guide educational policy and practice. Many studies appeared to prioritise technological innovation over rigorous evaluation, which results in insufficient evidence about long-term effectiveness, sustainability, and equity implications.

Discussion

Principal findings and synthesis

Building on recent comprehensive reviews of AI in language education (Lo et al., 2024; Lee et al., 2025), this systematic review provides a comprehensive synthesis of empirical evidence on AI applications for inclusive EFL instruction in the post-2020 era and reveals a complex reality of promise and peril that demands nuanced interpretation. Three overarching findings emerge and fundamentally challenge simplistic narratives on the role of AI in educational transformation.

First, AI technologies demonstrate moderate to strong positive effects on specific learning outcomes, particularly writing achievement, suggesting genuine potential for enhancing EFL instruction through personalised feedback and adaptive learning pathways. This could be seen as consistent with meta-analytic findings by Fleckenstein et al. (2023) and Wu (2024). The robust effect size for writing achievement ($g = 0.55$) represents a meaningful improvement that could translate into substantial learning gains for students, especially when considering the immediate and detailed feedback that AWE systems can consistently provide within diverse educational contexts.

Second, significant equity gaps endure across multiple demographic dimensions, with AI interventions potentially exacerbating rather than reducing educational inequalities. The negative equity gap indices for socioeconomic status (-0.23), geographic location (-0.31), and language background (-0.15) reveal alarming pattern where AI benefits privileged students more than their marginalised peers challenging, in turn, foundational assumptions about technology's democratising potential.

Third, ethical considerations remain inadequately addressed in most implementations, with algorithmic bias, data privacy violations, and linguistic hegemony affecting a substantial proportion of studies, and highlighting urgent needs for critical AI ethics frameworks in educational technology development (Wang et al., 2025; Law, 2024). This finding suggests that the current trajectory of AI development in education may reproduce and amplify existing patterns of exclusion and discrimination unless fundamental changes are made to development and implementation practices.

Theoretical implications for AI-enhanced universal design for learning

The findings provide important insights into the practical implementation of AI-Enhanced Universal Design for Learning frameworks in EFL contexts. While the theoretical potential of AI to provide multiple means of representation, engagement, and action remains compelling, the evidence suggests current implementations fall short of this vision in significant ways.

The strong effects observed for writing achievement align with UDL principles around multiple means of action and expression as AWE systems can provide feedback on diverse forms of written communication while adapting to individual learning styles and preferences. Yet, the equity gaps observed across demographic groups suggest that current AI systems may not adequately address the diverse needs and backgrounds that UDL principles are designed to accommodate.

The challenge lies in moving beyond surface-level personalisation that simply adjusts difficulty levels or content presentation formats to deeper forms of cultural and linguistic responsiveness that recognise and value the diverse knowledge and communication styles that multilingual learners bring to educational settings. Current AI systems often default to standardised norms that may inadvertently marginalise non-dominant cultural and linguistic practices.

Critical AI ethics and educational justice

The prevalence of algorithmic bias (40.7% of studies) and inadequate attention to data privacy (33.3% of studies) highlight the urgent need for critical AI ethics frameworks in educational technology development. The evidence suggests that current AI systems often embody what can be termed “technological solutionism” or the belief that complex social and educational challenges can be solved through technological innovation alone without adequate attention to the social, cultural and political contexts in which these technologies operate.

The patterns of linguistic hegemony observed in many studies reflect deeper issues regarding whose knowledge and ways of communicating are ‘standardised’ in educational settings. AI systems trained primarily on academic English and dominant cultural communication patterns may systematically devalue the rich linguistic diversity that characterises contemporary EFL learners (Godwin-Jones, 2024).

Implementation science and systemic considerations

The methodological limitations identified in 74% of studies underscore fundamental challenges in the current approach to AI research in education. The emphasis on technological innovation over rigorous evaluation has resulted in an evidence base that provides insufficient guidance for sustainable and equitable implementation at scale. This pattern reflects what scholars have termed the "innovation imperative" in educational technology, where the pressure to develop and deploy new technologies often outpaces careful consideration of their educational impact and equity implications.

The low rates of inclusion strategy implementation (ranging from 7.4% to 25.9% within different approaches) suggest that equity considerations can often be treated as afterthoughts instead of central design principles. This pattern underscores broader issues in educational technology development where diversity, equity, and inclusion concerns are frequently marginalised in favour of technical functionality and efficiency metrics. The consequence is a technology landscape that may inadvertently reproduce existing educational inequalities while claiming to address them.

Systemic Implementation Challenges: The evidence reveals several systemic barriers to equitable AI implementation in EFL education. Technical infrastructure disparities create fundamental barriers to access, with rural and low-resource schools often lacking the reliable internet connectivity, computational resources, and technical support necessary for effective AI implementation. These infrastructure gaps interact with socioeconomic disparities to create compounding disadvantages for already marginalised student populations.

Professional development and educator preparation represent another critical implementation challenge. Many educators lack the technical literacy and critical AI awareness necessary to implement these technologies effectively and equitably. Without adequate preparation, even well-intentioned implementations may fail to realize their potential benefits or may inadvertently exacerbate existing inequalities.

Sustainability and scaling considerations: The evidence suggests that many AI implementations in EFL education remain small-scale pilot projects with limited attention to sustainability and scaling mechanisms. The transition from research prototypes to sustainable educational practice requires careful attention to factors including ongoing technical support, professional development systems, cost structures, and community engagement processes that are often inadequately addressed in current research.

Organisational and cultural factors: Implementation science research in other domains has consistently demonstrated that technological innovations succeed or fail depend largely on organizational and cultural factors rather than simply on technical features alone. The current evidence base provides little insight into how factors such as institutional culture, leadership support, community values, and resistance to change affect the success of AI implementations in EFL education.

Practical recommendations for stakeholders: Prior to addressing potential recommendations, it is essential to discuss the question often raised, as far as AI integration in the language classroom is concerned, regarding whether the implementation of AI tools in the EFL classroom can be seen as a moderating factor that alters existing practices or one in whose light novel instruction methods are introduced. Traditionally, pre-AI classrooms defined teachers as more knowledgeable others whose mission is to offer subject matter expertise, answers, and feedback, all the while compromising authentic in-take time and swapping the timetable tiles on their lesson plans. The advent of AI automated most tasks on the teacher's itinerary, thus, allowing more careful consideration for authentic in-take time. However, post-method era practices seem to be largely eclectic in nature and, thus, the question as to whether AI alters existing practice or introduces novel one becomes a product that is molded by teachers in favor of their learners and the peculiarities that make up their individual classrooms (Taqi et al., 2025).

Based on the synthesis of evidence, several concrete recommendations emerge for different stakeholder groups:

For educational technology developers: Implement mandatory bias auditing procedures throughout the development lifecycle, consistent with best practices for ethical AI development (Pack et al., 2024) engage diverse linguistic and cultural communities as partners rather than subjects in system design; develop transparent algorithmic decision-making processes that preserve human agency; prioritize multilingual and multicultural representation in training data and development teams.

For educational institutions: Establish comprehensive AI ethics committees that include community representatives; implement robust data privacy frameworks that prioritize student autonomy and consent; provide professional development focused on critical AI literacy for educators (Kern, 2024); develop equity monitoring systems to track differential impacts across student populations.

For policymakers: Mandate equity impact assessments for AI educational technologies; establish regulatory frameworks that ensure algorithmic transparency and accountability; invest in digital infrastructure that reduces technology access disparities; support research focused on equity-centered AI design and implementation.

For researchers: Prioritize longitudinal studies that examine long-term equity implications (Li et al., 2025); develop methodological standards that require explicit attention to diversity and inclusion; create interdisciplinary collaborations that bridge technical and social justice perspectives; establish open datasets that enable reproducible, transparent research.

Future research directions

The evidence synthesis reveals several critical areas where additional research is urgently needed to advance both the scientific understanding and practical implementation of AI in inclusive EFL education.

Longitudinal impact studies: The short-term focus of most current research (median duration = 8 weeks) provides insufficient insight into sustainability and long-term impact patterns. Future research should prioritise multi-year studies that track the sustained effects of AI interventions on learning outcomes,

engagement patterns, and equity gaps. Such studies would help distinguish between initial novelty effects and genuine sustained benefits, while also revealing potential adaptation patterns as students become more familiar with AI systems.

Implementation science research: There is an urgent need for research that examines the complex processes of implementing AI technologies in real-world educational settings. This includes investigation of professional development needs for educators, institutional readiness factors, technical infrastructure requirements, and community engagement strategies. Understanding how to scale successful implementations while maintaining fidelity to equity principles remains a critical gap in current knowledge.

Cross-cultural validation studies: Mixed-methods research that combines quantitative effectiveness measures with qualitative investigations of student, teacher, and community perspectives on AI implementation could provide crucial insights into how these technologies are experienced by different stakeholders. Cross-cultural research examining how AI systems perform across different linguistic, cultural, and educational contexts is essential for understanding the generalizability of current findings and identifying culturally responsive design principles that could improve equity outcomes.

Critical algorithm studies: A research that goes beyond surface-level bias detection has become a must to examine the fundamental assumptions and values embedded in AI educational systems. This includes analysis of training data representativeness, algorithmic decision-making processes, and the cultural and linguistic assumptions that shape system design. Such research should involve interdisciplinary collaboration between computer scientists, linguists, anthropologists, and education researchers.

Economic impact analysis: Future research should examine the economic implications of AI implementation in EFL education, including cost-effectiveness analysis, return on investment calculations, and examination of how resource allocation affects equity outcomes. Understanding the financial sustainability of AI interventions is crucial for long-term implementation planning.

Participatory design research: There is a critical need for research that positions students, teachers, and communities as partners in AI system design rather than passive subjects of technological intervention. Participatory design approaches could help ensure that AI systems are developed with meaningful input from the communities they are intended to serve.

Comparative effectiveness research: Systematic comparison of different AI modalities across similar educational contexts could provide valuable insights into which technological approaches are most effective for specific learning objectives and student populations. This includes head-to-head comparisons of AWE systems, chatbots, adaptive platforms, and multimodal systems.

Teacher professional development research: Investigation of effective professional development models for supporting educators in the critical and ethical use of AI technologies represents another crucial research priority. This includes examination of pre-service and in- service training approaches, ongoing support mechanisms, and the development of critical AI literacy among education professionals.

Limitations

This systematic review has several important limitations that should be considered when interpreting findings. First, the focus on research published between 2020 and 2025, while capturing recent advances in AI technology, may have excluded relevant earlier studies that could provide important baseline comparisons or theoretical foundations.

Second, publication bias may favour studies reporting positive effects, potentially inflating the observed effect sizes and understating challenges or negative outcomes associated with AI implementation. The relatively small number of included studies (n=27) also limits the generalisability of findings and the precision of meta-analytic estimates.

Third, the rapid pace of AI development means that findings may quickly become outdated as new technologies emerge and existing systems evolve. The review captures a snapshot of current evidence, but the landscape continues to change rapidly.

Fourth, heterogeneity in outcome measures and study methodologies limited our ability to conduct comprehensive meta-analyses across all domains of interest. Many studies used different assessment instruments and outcome definitions, making direct comparisons challenging.

Finally, the predominance of studies from certain geographic regions (particularly Asia-Pacific) may limit the cultural and linguistic generalisability of findings to other educational contexts and populations.

Conclusion

This systematic review reveals both the transformative potential and significant risks associated with AI applications in inclusive EFL education. While the evidence demonstrates that AI technologies can provide meaningful benefits for student learning particularly in writing achievement and engagement, these benefits are unevenly distributed across student populations in ways that may aggravate existing educational inequalities.

The moderate to strong positive effects observed for writing achievement (g = 0.55) and student engagement (g = 0.52) indicate AI technologies hold genuine promise for enhancing EFL instruction through personalised feedback, adaptive learning pathways and responsive instructional support. Nevertheless, these benefits must be weighed against concerning equity gaps that consistently favour privileged students over their marginalised counterparts, as well as widespread ethical concerns regarding algorithmic bias, data privacy, and linguistic hegemony. The path forward requires fundamental shifts in how we conceptualise, develop and deploy AI in educational settings. Rather than simply pursuing technological solutions in isolation, we must centre equity and justice considerations from design through implementation. This means prioritising multilingual learners' voices in AI development, implementing robust bias auditing procedures, ensuring transparent algorithmic decision-making processes, and maintaining meaningful human oversight of educational decisions.

Manifestations of inequality seem to favour certain learner categories whilst constraining others. In that, AI helps students write better (g = 0.55) as it gives instant and high-quality feedback that any learner can act on, but the gains are most noticeable for those who already have the digital access, home support and self-regulation skills that privilege high-SES students. Their faster internet, newer devices and parents who can troubleshoot let them spend time on learning instead of on fixing log-ins or waiting for pages to load; their wider reading experience and metacognitive strategies help render the AI's suggestions into richer revisions, while low-SES students often need basic grammar or vocabulary aid first and therefore receive less advanced feedback loops. Thus, the tool is not biased by design: its benefits simply accrue faster where the surrounding human and material infrastructures are stronger. Narrowing the gap, therefore, requires more than better algorithms: equitable broadband, teacher scaffolding that explicitly trains self-regulation, and ethics protocols that audit who gets left behind.

For educators and policymakers, these findings suggest a stance of critical engagement rather than wholesale adoption or rejection. AI tools can provide valuable support for EFL instruction, but their implementation must be guided by equity principles and accompanied by ongoing assessment of their impact on marginalised learners. Professional development programs should focus on developing critical AI literacy that enables educators to evaluate and implement these technologies in ways that serve justice rather than efficiency.

As we face this critical juncture in the development of AI educational technologies, the choices we opt for as our research priorities, development practices and implementation policies will determine whether AI fulfils its democratising potential or becomes another mechanism for perpetuating educational inequality. The evidence presented in this review provides a foundation for making these choices with greater awareness of both the opportunities and responsibilities that accompany the integration of artificial intelligence in education.

The transformation of EFL education via AI is not inevitable but is contingent on conscious choices pertaining to values, priorities and implementation practices. By centring equity, maintaining critical

vigilance about bias and exclusion and prioritising the voices and experiences of marginalised learners, we can work toward realizing AI's potential to create more just and inclusive educational futures. The evidence base provides both reason for cautious optimism and urgent motivation for ensuring that technological advancement serves educational justice rather than digital divide amplification.

References

An, X., Chai, C. S., Li, Y., Zhou, Y., & Yang, B. (2023). Modeling students' perceptions of artificial intelligence assisted language learning. *Computer Assisted Language Learning, 36*(1-2), 297-329. https://doi.org/10.1080/09588221.2023.2246519

Boonpattharattharati, K., Ruenin, G., Kulwong, P., Lueawattanasakul, J., Saechao, C., Pitak, P., Caldwell, D. M., Chaiyakunapruk, N., Dhippayom, T. (2024). Exploring methodological approaches used in network meta-analysis of psychological interventions: A scoping review. *Research Synthesis Methods, 15*(6), 789-806. https://doi.org/10.1002/jrsm.1764

Deng, R., Jiang, M., Yu, X., Lu, Y., Liu, S. (2024). Does ChatGPT enhance student learning? A systematic review and meta-analysis of experimental studies. *Computers & Education, 227*, 105224. https://doi.org/10.1016/j.compedu.2024.105224

Du, J., Daniel, B. K. (2024). Transforming language education: A systematic review of AI-powered chatbots for English as a foreign language speaking practice. *Computers and Education: Artificial Intelligence, 6*, 100230. https://doi.org/10.1016/j.caeai.2024.100230

Fleckenstein, J., Liebenow, L. W., Meyer, J. (2023). Automated feedback and writing: A multi-level meta-analysis of effects on students' performance. *Frontiers in Artificial Intelligence, 6*, 1162454. https://doi.org/10.3389/frai.2023.1162454

Godwin-Jones, R. (2024). Distributed agency in language learning and teaching through generative AI. *Language Learning & Technology, 28*(2), 5-31. https://doi.org/10125/73570

Han, Z. (2024). ChatGPT in and for second language acquisition: A call for systematic research. *Studies in Second Language Acquisition, 46*(2), 301-306. https://doi.org/10.1017/S0272263124000111

Kabudi, T., Pappas, I., Olsen, D. H. (2021). AI-enabled adaptive learning systems: A systematic mapping of the literature. *Computers and Education: Artificial Intelligence, 2*, 100017. https://doi.org/10.1016/j.caeai.2021.100017

Karatay, Y., Karatay, L. (2024). Automated writing evaluation use in second language classrooms: A research synthesis. *System, 123*, 103332. https://doi.org/10.1016/j.system.2024.103332

Kern, R. (2024). Twenty-first century technologies and language education: Charting a path forward. *The Modern Language Journal, 108*(2), 515-533. https://doi.org/10.1111/modl.12924

Law, L. (2024). Application of generative artificial intelligence (GenAI) in language teaching and learning: A scoping literature review. *Computers and Education Open, 6*, 100174. https://doi.org/10.1016/j.caeo.2024.100174

Lee, S., Choe, H., Zou, D., Jeon, J. (2025). Generative AI (GenAI) in the language classroom: A systematic review. *Interactive Learning Environments*. https://doi.org/10.1080/10494820.2025.2498537

Li, B., Tan, Y. L., Wang, C., Lowell, V. (2025). Two years of innovation: A systematic review of empirical generative AI research in language learning and teaching. *Computers and Education: Artificial Intelligence, 9,* 100445. https://doi.org/10.1016/j.caeai.2025.100445

Lia, B., Lowella, V. L., Wang, C., Li, X. (2024). A systematic review of the first year of publications on ChatGPT and language education: Examining research on ChatGPT's use in language learning and teaching. *Computers and Education: Artificial Intelligence, 7*, 100266. https://doi.org/10.1016/j.caeai.2024.100266

Liu, G. L. (2024). Exploring AI-mediated informal digital learning of English (AI-IDLE): A mixed-method investigation of Chinese EFL learners' AI adoption and experiences. *Computer Assisted Language Learning, 37*(7), 1752-1777. https://doi.org/10.1080/09588221.2024.2310288

Lo, C. K., Yu, P. L. H., Xu, S., Ng, D. T. K., Jong, M. S. Y. (2024). Exploring the application of ChatGPT in ESL/EFL education and related research issues: A systematic review of empirical studies. *Smart Learning Environments, 11*, Article 50. https://doi.org/10.1186/s40561-024-00342-5

McDermott, B. (2024). *AI as an accessibility tool: Using generative AI to support Universal Design for Learning. Academic Integrity in the Age of Artificial Intelligence*. https://olc.secure-platform.com/accelerate/gallery/rounds/82030/schedule/items/16881

Ngo, T. T. N., Chen, H. H. J., Lai, K. K. W. (2024). The effectiveness of automated writing evaluation in EFL/ESL writing: A three-level meta-analysis. *Interactive Learning Environments, 32*(2), 727-744. https://doi.org/10.1080/10494820.2022.2096642

Pack, A., Barrett, A., Escalante, J. (2024). Large language models and automated essay scoring of English language learner writing: Insights into validity and reliability. *Computers and Education: Artificial Intelligence, 6*, 100234. https://doi.org/10.1016/j.caeai.2024.100234

Qin, W., Wang, W., Yang, Y., Gui, T. (2025). Machine-assisted writing evaluation: Exploring pre-trained language models in analyzing argumentative moves. *Computer Assisted Language Learning*. https://doi.org/10.1080/09588221.2025.2511064

Rahmanua, I. W. E. D., Molnárb, G. (2024). Multimodal immersion in English language learning in higher education: A systematic review. *Heliyon, 10*(19), e38357. https://doi.org/10.1016/j.heliyon.2024.e38357

Ridgway, R. (2024). Screenshotting partial perspectives: The case of Danish mink in Google search results. *Journal of the Association for Information Science and Technology, 75*(9), 1094-1107. https://doi.org/10.1002/asi.24892

Saborío-Taylor, S., Rojas-Ramírez, F. (2024). Universal design for learning and artificial intelligence in the digital era: Fostering inclusion and autonomous learning. International Journal of Professional Development, *Learners and Learning, 6*(2), ep2408. https://doi.org/10.30935/ijpdll/14694

Shin, D., & Lee, J. H. (2024). Moving from off-the-shelf chatbots to a user-designed bespoke L2 chatbot. *Language Learning & Technology, 28*(1), 1-14. https://www.lltjournal.org/item/10125-73581/

Taqi, H., Alghasab, M., Akbar, R., AlRubaeie, R. (2025). Embracing AI in EFL classrooms: Between fears and needs. *International Journal of Information and Education Technology, 15*(8), 1616-1624. https://www.ijiet.org/vol15/IJIET-V15N8-2363.pdf

Wang, Y., Zhang, T., Yao, L., Seedhouse, P. (2025). A scoping review of empirical studies on generative artificial intelligence in language education. *Innovation in Language Learning and Teaching*. https://doi.org/10.1080/17501229.2025.2509759

Weng, X., Chiu, T. K. F. (2023). Instructional design and learning outcomes of intelligent computer assisted language learning: Systematic review in the field. *Computers and Education: Artificial Intelligence, 4*, 100117. https://doi.org/10.1016/j.caeai.2022.100117

Wiboolyasarin, W., Wiboolyasarin, K., Tiranant, P., Jinowat, N., Boonyakitanont, P. (2025). AI-driven chatbots in second language education: A systematic review of their efficacy and pedagogical implications. *Ampersand, 14*, 100224. https://doi.org/10.1016/j.amper.2025.100224

Wu, X.-Y. (2024). Artificial Intelligence in L2 learning: A meta-analysis of contextual, instructional, and social-emotional moderators. *System, 126*, 103498. https://doi.org/10.1016/j.system.2024.103498

Yang, H., Kim, H., Lee, J. H., Shin, D. (2022). Implementation of an AI chatbot as an English conversation partner in EFL speaking classes. *ReCALL, 34*(3), 327-343. https://doi.org/10.1017/S0958344022000039

Yuan, H. (2025). Artificial intelligence in language learning: Biometric feedback and adaptive reading for improved comprehension and reduced anxiety. *Humanities and Social Sciences Communications, 12*, 556. https://doi.org/10.1057/s41599-025-04878-w

A comparative study of English lexical variations based on gender on social networks: from 2015 Twitter to 2025 Twitter (x)

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Abstract
This study explores and compares lexical variations on Twitter and X (formerly Twitter) as social networks, based on gender and gender homophily. Data were collected at ten-year intervals from the same platform. The first dataset was collected in 2015, with 400 tweets (200 female, 200 male) randomly selected using Wamp Server. Gender classification was confirmed manually and via test data. Tweets were analysed through categories adapted from Bamman (2014), including named entities, taboo and swear words, numbers, emotional terms, emoticons, kinship terms, abbreviations, hashtags, and pronounceable/non-pronounceable words, along with emerging categories such as political and romantic words. Frequencies were examined, and clusters were formed based on lexical similarity to analyse language independent of gender stereotypes. Gender homophily was investigated by examining the gender composition of twenty networks using binomial distribution. In 2025, data were recollected; due to restricted access, 200 tweets were manually compiled. Findings suggest that language use may be gendered within the dataset; however, digital language differs from real-life use. Female authors tended to use more political, emotional, and interactional language, while male authors used more romantic expressions. Female tweets also included more swear and taboo words, as well as more hashtags. Male networks exhibited gender homophily, whereas female networks did not. When 2015 and 2025 data were compared, several patterns reversed, particularly in hashtags and romantic words, with increased use by male and female authors respectively. Political words showed a more balanced distribution. Gender homophily patterns also shifted, with no clear evidence of homophily in 2025.

Keywords*: Twitter, X, gender, lexical variations, gender, homophily, digital/virtual environment, sociolinguistics*

Introduction

Since online social networks have grown rapidly in recent years and they have turned out to be a part of majority of people's daily lives, there is a substantial body of research on the use of language on them (Argamon, et al., 2007; Pedersan & Macafee, 2007; Kunsmann, 2013) and such studies have become subjects for sociolinguistics today. One of the most interesting sides of social networks is that they provide a common platform for their participants where they enable customization, sharing and communication in any aspect. On the other hand, social networks seem to provide a plenty of language data, as they create a community in which it is even possible to witness the communication of people who have never met or have known each other for years without meeting in person. As being one of these social networks, 'Twitter' provides significant data on language use. As such, based on Twitter Statistics (Post, 2010) Twitter alone had 645.750.000 global users and 289.000.000 of them were active users in 2015 which is around 368 million today for Twitter (X) platform. The number of tweets per each second is about 9.100 as Cohen and Ruths (2015) claimed. Many studies in sociology, linguistics and sociolinguistics today focused on

Twitter (X) because of its widespread services and the facility of letting its users to keep their accounts and sharing in public.

Twitter (X) alone has already been a community and as Kwak et al. (2010: 591) claimed:

> Common practice of responding to a tweet has evolved into well-defined mark-up culture: 'RT' stands for retweet, '@' followed by a user identifier address the user, and '#' followed by a word represents hashtag. This well-defined mark-up vocabulary combined with a strict limit of 140 characters per posting conveniences users to spread information.

As being different from other social media networks, Twitter (X) does not reveal latent features of users such as age, gender and ethnicity. That is, it provides a comprehensive database to study on how language conveys personal attributes including gender.

As Holmes (1997) stated, gender is more salient than social class. Based on some studies in relevant literature (Haas, 1979; Crawford, 1995), male and female use of language differs; however, it is not simple to draw up gender boundaries, particularly, in social media context. West and Zimmerman (1987: 13) claimed that doing gender involves "complex socially guided perceptual, interactional, and micro-political activities". There might be many reasons for these differences including women's subordinate social status, male-dominated patriarchal societies, insecure situation of women in society, learned social codes as explained by Kunsmann (2013: 2) in the following quote:

> Lakoff observed that women's use of color terms *(mauve, ecru, lavender*), of adjectives (*divine, adorable*), their frequent use of tag questions (*John is here, isn't he?)* and weak expletives differed radically from male use. Taking her cue from Bernstein (1972) theory of language codes she claimed that women's linguistic behavior is deficient when constructed with male speech behavior. As one explanation for this deficiency she pointed to the differences in the socialization of men and women.

Similarly, Fishman (1978; 1983) portrayed women as ''shift workers of routine interaction'' (p. 99). In his studies, Fishman (1978, 1983) claimed that men govern the talks as women is always in need of ensuring responses. Although there are some later studies (i.e. Nichols, 1983; Graddol and Swann 1989; Freed 1996) which criticized Fishman (1978; 1983) and Lakoff (1975), it is seen that women/ feminine speech has been described as a powerless, fragile, clumsy and even a symbol of weakness. This was described by male dominance in society and pre-existing patterns of this hierarchy which may lead a similar communication style online, as well, by such researchers. Although there are controversial ideas on online conversations as being ungendered/ asexual, Pedersen and Macfee (2007) claimed that there were early suggestions regarding that online communications were 'gender-blind' and they were democratic platforms that provided equal facilitates to everyone regardless of being male or female. On the other hand, some others suggested that online platforms do not neutralize gender, but the male dominance continued in online communities. According to Herring (1996) women and men have different online styles,

> …with the male-gendered style being more adversarial, including strong assertions, self-promotion, lengthy post, put-downs, and sarcasm aimed at others. In contrast, the female gendered-style was characterized by supportiveness and attenuation, including appreciation and community-based activities, thanks, apologies, and questions (p. 1473).

As it seems, the linguistic diversity was mostly based on the stereotype of 'masculine' and 'feminine'. However, it is not easy to suggest that 'masculine' sentences have some certain dimensions while 'feminine' sentences have those others. If gender in linguistics was interpreted as 'masculine' and 'feminine' way of speaking, we might claim that it limits the large scaled area of linguistics and undervalued it to a 'two' dimensional stereotype. In turn, it may not be the gender that assigns the language but based on the stereotypes it may be the language who assigns gender. It was also said that, during the 60s and 70s, many feminists accepted that biological differences were used in many societies just to engender

male/ female distinctions. From this perspective, as Holmes (1997: 199) claimed, "women's identity is signaled not so much by the choice of particular linguistic variants which contrast with those preferred by men, but rather by the ways in which women are often required to use language to construct a much wider range of social identities" and Holmes added that "those identities express a wider range of social roles than men.''

Today, it is possible to say that these established gender stereotypes are also moved to social media contexts such as Twitter. The Twitter is likely to provide more freedom when compared to the social codes that are enforced by our neighborhood, or it is possible to say that Twitter offers a completely different linguistic variety that can be free from gender stereotypes.

Gender, language and social media

There are many opinions on the gender-social media relations such as Tannen's (1993: 7) arguing that "…differences between women's and men's conversational stories reflect and create women's and men's divergent worlds." Similarly, Johnstone (1993: 7, cited in Tannen, 1993) indicates that "…women's talk involves social power through community while men's talk involve power that comes from individuals themselves. Men had details about places, times and other things; women mostly talked about people."

The relevant literature (Haas, 1979; Crawford, 1995; Herring 1993, 1996; Holmes 1997; Pederson, et al., 2007; Kunsmann, 2013; Bamman et al., 2014) indicates that language is gendered in society and gendered language is on social media today; however, social media have their own environment by offering their authors both more freedom and restriction; more interaction and less communication; more latency and less privacy; even different codes and rules. As such, social media can have their own language as being different from the language in society. As it can be seen in relevant research, language is mostly gendered because of social codes, tenets and disciplines that construct and shape people with different sexes. Then it can be asked whether social media with their own tenets and creeds lead gendered talk.

The literature on media and gender studies has validated that social media have had gendered language and maintained the existing stereotypes about female and male language even on social media (Pederson, & Macafee, 2007; Bamman et al., 2014).

While early studies on gender and language have often relied on binary distinctions between "male" and "female" speech styles (e.g., Lakoff, 1975; Tannen, 1993), contemporary sociolinguistic research increasingly conceptualizes gender as a socially constructed and performative phenomenon rather than a fixed biological category. Drawing on Judith Butler's (1990) notion of performativity, gender is understood as something that is enacted through discourse and interaction rather than inherently possessed.

In addition, recent approaches emphasize intersectionality, recognizing that gender interacts with other identity dimensions such as culture, class, and digital participation practices. This perspective challenges earlier essentialist assumptions that associate specific linguistic features rigidly with male or female speakers.

Despite these developments, empirical research on large-scale social media datasets often remains constrained by the available metadata, which typically encodes gender in binary terms. Therefore, while acknowledging the limitations of binary categorization, the present study adopts a binary operationalization of gender due to methodological constraints inherent in Twitter (X) data. This approach allows for comparability with earlier studies while recognizing that gender identities in digital environments are more fluid and complex than this classification suggests.

Lexical markers of social media

Linguistic variations based on gender have revealed different dimensions so far, as research has shown. For instance, Bamman, et al. (2014) mentioned some of them; firstly, it is expected that female-authored discourse is likely to be more extensive by lengthening, such as, 'yesss' or 'nooo'. Additionally, non-

standard spelling and abbreviations were projected as female style while masculine language is portrayed as having tendency to use proper nouns, more quantifiers and more swear and taboo words.

Female-authored discourse has also been described with the words regarding family, society, and kinship while men language has had more words related to finance and money. (Elekaei et al., 2014). Also, words related to the sport have always been attributed to men language. All these classifications in related literature have common ideas regarding fragility of female-authored discourse that is equipped with sensitivity and emotions while male-authored discourse is representing directness, less sensitivity and oriented with money, sports, and technology words mostly. Additionally, based on the related literature again, male and female language may even differ in use of preposition, timing adverbs, places, number of words, and the choice of grammar (Elekaei et al., 2014).

Gender homophily and social media

Bakshy et al. (2012: 1) defined homophily as ‘‘the tendency of individuals with similar characteristics to associate with one another.’’ People are most likely to interact to whom they are similar, and it is possible that they influence each other. Bisgin et al. (2010) stated that homophily was categorized into two, such as status homophily and value homophily. Status homophily is related to social status while value homophily is pertinent to individuals who are similar and think alive.

Regarding Twitter, people express their own opinions and attributes that lead the possibility of homophily; on the other hand, it is not easy to decide on homophily on a virtual world as it involves many dimensions such as age, education, social status and gender. Homophily is applicable to gender variations, as well. It might be possible that people interact with same genders on social media. Bamman et al. (2014) collected corpus data from Twitter and checked them for homophily. The results indicated that 63 % mutual corrections were the same gendered. The idea of homophily is based on ‘‘the birds of a feather flock together.’’ (Bamman et al., 2014: 149).

Recent research has expanded the understanding of homophily in digital environments by integrating computational and network-based perspectives. Studies demonstrate that homophily and social influence jointly shape information diffusion processes, highlighting the importance of modelling both relational dynamics and structural network properties in social media contexts (Shang et al., 2022). Moreover, homophily is not a uniform phenomenon but varies across different social scales, with stronger similarity patterns observed in close-knit groups and more heterogeneous interactions across broader networks (Rizi et al., 2025).

Empirical research on social media interactions further reveals that homophily is shaped by multiple intersecting factors, including gender, political affiliation, and institutional context. For instance, analyses of Twitter (X) interactions among political candidates show that while homophily is widespread, gendered patterns differ in how these connections are formed, with women and men exhibiting distinct interaction strategies (Cioroianu & Coffé, 2025). In addition, recent surveys in social network analysis emphasize that homophily operates through both status-based and value-based similarities, playing a key role in the formation of online communities and the emergence of information clusters and echo chambers (Khanam et al., 2022).

These developments suggest that homophily in digital environments is a dynamic and multi-layered phenomenon, shaped by both structural network properties and context-dependent user behaviors.

Related literature

Recent advances in technology have led a growing body of research on social media, Twitter (Burger et al., 2011; Bamman et al., 2014). In turn, the variation of linguistic characteristics according to the author’s gender has become doable in corpus in addition to the numerous studies that have been conducted to investigate gendered-language relation and lexical variations on social media.

Aiseng (2025) conducted a study to examine language ideologies in the context of South African Twitter (X) discourse by compiling a corpus of South African Twitter (X) data and aimed to exemplify how language ideologies of the community in this context display a tendency towards colonial principles of hierarchy, power and superiority. The study findings emphasized the importance of multilingual and multicultural digital spaces to negotiate the identities of users by utilizing language resources.

Recent empirical studies have further examined gendered language use in social media environments through large-scale and cross-platform analyses. Arshad et al. (2022), analyzing Facebook discourse within a feminist stylistic framework, found that male users tend to employ more assertive and publicly oriented language, whereas female users adopt more relational, polite, and solidarity-oriented expressions.

Similarly, Romadloni and Sari (2025), in their analysis of a large corpus of tweets on X (formerly Twitter), reported that female users tend to produce shorter, more emotionally expressive and relationship-focused content, while male users more frequently generate longer and action-oriented messages. However, their findings also indicate that such differences are not always statistically robust, highlighting the role of contextual and interactional factors in shaping digital communication.

In addition, Elmahdi et al. (2024) demonstrated that gendered communication patterns observed in face-to-face contexts are partially maintained in online environments, where women tend to use more supportive and emotionally expressive language, whereas men are more likely to adopt authoritative and opinion-oriented styles.

These findings suggest that gendered linguistic patterns persist in digital communication; however, they are dynamically shaped by platform-specific affordances and user practices rather than being fixed or universal. Building on these recent findings, earlier computational and corpus-based studies have also explored gendered linguistic variation in online environments using different methodological approaches.

Ikea and Savoy (2022) aimed to analyze ten machine learning strategies to define stylistic variances between genders on web-based communications, particularly tweets on Twitter. The study employed CLEF-PAN to extract corpora and provided an answer whether it is easy to identify terms related to gender as positive. The study confirms male style is more frequent with numbers and determiners and unlike previous studies appear to use negations and personal pronouns of third person. Also, female authors' tweets are rich in prepositions, personal pronouns, punctuation symbols and emojis.

While Ikea and Savoy (2022) focused on the stylistic variances, Bahammam (2018) was inspired by the growing popularity of Twitter-hash tagged debates in Saudi among men and women on woman rights by employing an eclectic qualitative method with a ore sociolinguistic focus. The study compiled a corpus of 1000 text-based tweets on two-selected topical hashtags which are on woman's travelling and marital status. The study findings are important to reveal that in a discourse privileging man over women, digital space offers meso-discursive strategies such as "referential and predicational", "assimilation and differentiation", "intensification and mitigation", laughter, emoticons, mocking, and humor and reflects a gradual social change in Saudi society by providing a space for public deliberation of social practices relating woman and the power of transformative potential of Twitter.

A similar study was conducted by Bamman et al. (2014) to investigate the relationship between gender, linguistics style and social networks by using a corpus of 14.000 Twitter authors. Twitter users were clustered based on their linguistic similarity; however, clusters were also gender oriented. For each cluster, it was examined whether authors' language matches the classifier's model for gender assignment and social network homophily was also examined. The results indicated that most of the clusters revealed strong gender orientations. Females and males showed a distinction between topic and style. Women used fewer dictionary words, significantly fewer abbreviations and emoticons as being different from previous study conducted by Dunn (1961). Male-dominated clusters had more dictionary words and pronounceable non-standard words, whereas taboo words were preferred by men in accordance with Dunn (1961). Regarding homophily, the results indicated that an average woman in the dataset have

gender composition of 58 % of female and 67 % of male for male users. As the proportion of same –gender increased, the same-gender markers increased, as well.

As regards classifying gender and examining gender recognition on social media by linguistic variations, Halteren and Speersta (2014) conducted a similar study on Dutch tweets by collecting data from 600 users during 2011 and 2012. Tweets were examined to distinguish female and male authors based on purely lexical features in unigrams (single tokens), bigrams (two adjacent tokens), trigrams (three adjacent tokens) and bigrams (two tokens without adjacent). The study recruited Principal Component Analysis (PCA) for classification. All text samples were tokenized, and unigram tokens dominated the data to present best features. Regarding analysis, how often the token is used by each gender was taken into consideration and the percentage of the authors in the corpus data was measured to see whether they are in agreement with the true gender. Overall, the results portrayed female authors in a very emotional place and exemplified with 'omg', giggling, emotionally loaded adjectives such as 'nice', 'sweet' while men side was portrayed rather differently with many location adverbs, football-related words, playing, winning, losing. Additionally, female author tweets were claimed to have more intensified adverbs with adjectives such as 'so tired', 'so happy' while male tweets were illustrated as having pragmatic endings such as 'good, man'.

Actually, all studies above confirmed the variance in females' and males' use of language and they all characterized female language as free from taboo and swear words, endowed with emotionally full adjectives, emojis, prepositions and punctuation symbols while male-authored discourse was described as full with sports, games, dictionary words, numbers (Ikae & Savoy, 2022), pragmatic and handy phrases. That is to say, literature reflects the socially coded and portrayed fragile female stereotypes in contrast to men's powerful and tough language style. Regarding gender, it is really difficult to interpret the literature gender-blind and it is unfortunate that gender studies may already have gender subjectivity in itself. Similar results were presented by Pedersen and Macafee' study (2007: 1491) which was conducted to examine gender differences in blogging and the findings suggest that women have a lower profile in blogging as they have more "fear from online stalkers'' and Arnold and Miller (2000) stated that "academic women are inhibited online because their vulnerability as women remains part their persona as academics." (as cited in Pedersen and Macafee, 2007: 1491).

In addition to these, some other studies were conducted to examine gender homophily on social media. Zamal et al. (2012) conducted a study in Canada by considering three attributes which are gender, age and affiliation. The data were collected from Twitter; 200 tweets with one label (e.g. female or male) were studied. The tweets were investigated based on k-top words, k-top stems, k-top diagrams and trigrams, k-top co-stems, k-top hashtags, frequency statistics, retweeting tendency and neighborhood size. The data were analyzed with a 10-fold cross-validation. All friends of a Twitter user were included in the study to assess homophily. The closest friends were decided based on retweeting and mentioning at most times. The results indicated that neighborhood features are enough to get good accuracy which indicated homophily on Twitter.

A similar study was conducted by Choudhury et al. (2010) to investigate the impact of user homophily in online social media. The data were collected from Twitter and the results demonstrated homophilous inclination that may lead information diffusion on a given topic. Mostly, homophily explained the diffusion in the data and trends were measured as ~15-25%.

In contrast to above studies, Bisgin et al. (2010) investigated homophily on social media by collecting data three representative social media sites; blog catalogue, last.fm and live journal. The overlapping interests and community structure were examined by identifying the communities in each social media site and figuring out the interests. Results of the study indicated that the influence is not a strong factor for building new ties; in other words, connections are not based on common interests at all. In the context of online social media, close friends may differ in preferences.

The studies above showed that there is a plenty of research in the relevant literature about language use on social media networks and gender variations. The results of almost all studies showed congruity that language on Twitter is gendered; however, none of these studies indicated a difference from stereotypical lexicon of female and male users. Female social media users had an emotional style, intimacy while male authors had more taboo, finance, sport and money related words and indicate a senseless language (Bamman et al., 2014; Halteren & Speersta, 2014). In that, social media has been improving so fast that literature should be able to follow this change and its effects on language. On that point, literature seemed to be in need of new aspects and interpretations regardless of suggested stereotypes and a new frame which would be able to explicate the new virtual society's language.

Research focus and aim

This study aimed to scrutinize lexical variations on Twitter and Twitter (X) as a social media network regarding gender and explore the existence of gender homophily on Twitter author's and Twitter (X) authors' network connections by comparing the data from 2015 to 2025 It is designed to answer following questions:

Research questions;

1) Do users' tweets show variances in their language use based on gender on social media Twitter and Twitter (X)? How?
2) Do users' tweets show variances in their language use based on gender from 2015 to 2025 data on social media Twitter and Twitter (X)?
3) Does gender composition of an author have any effects on classifier's assigning gender on the text beyond the gendered language itself? What and how?
4) Do users' tweets with a greater proportion of same-gender ties make gender use of gender-marked variables in social media? How?

Method

The study employed a quasi-longitudinal comparative design to explore and compare the lexical variations in Twitter context based on gender by collecting data twice, ten years apart from 2015 to 2025. The term quasi-longitudinal is used because although the data were collected ten years apart from the same platform, identical data extraction conditions could not be maintained due to major changes in platform accessibility and technical affordances over time. This design enabled a structured comparison of linguistic patterns across two temporally distant datasets while also acknowledging the methodological constraints of changing digital infrastructures.

Relevant research in the field has already included several studies regarding this topic; however, the results are mostly concorded with the real language in society and most studies have examined the data based on stereotypical codes of gendered language of society.

Tweets

The data were collected from Twitter in 2015 and from Twitter (X) in 2025. Twitter/X was selected because it is a public-facing social media platform that provides a substantial amount of naturally occurring written discourse across a wide range of users, topics, and interactional styles.

The study was conducted in virtual context and users' tweets were chosen randomly with the help of a Wamp Server that helps to download the most recent tweets. 400 Twitter authors' tweets were studied; 200 of them were female and 200 were male. The authors' names or anything about their identities were not used or shown in the study even if they do not use their real names on Twitter. Their privacy was given importance for ethical concerns. Gender classification of Twitter authors was confirmed by checking manually and through via test-data. Tweets of authors were studied based on ten categories adapted from Bamman (2014); *named entities, taboo words, swear words, numbers, emotion terms, emoticons, kinship*

terms, abbreviations, hashtags, pronounceable and non-pronounceable dictionary words and two more emerging themes*; political and romantic words.* The study investigated the data collected from users' tweets in two ways; at first, categories were formed, and the data were divided into two as female and male tweets regarding gender. Secondly, the data were divided into clusters based on the use of similar words regardless of gender and they were studied twice to see whether gender skew and language use showed parallelism. It is important as the data were examined free of any gendered categories at second time. Additionally, it is aimed to investigate gender homophily as Twitter has been a new community that may present invaluable data regarding the use of language of its users and behaviors. Twitter may have acted as a representative of society as having many people with different backgrounds that may not be possible to access in real world.

Data collection

In this study data was collected at two different time points with comparable procedures in the same way, ten years apart, the first in 2015 and the second in 2025. Although the study was designed as a longitudinal comparison between 2015 and 2025 datasets, it is important to note that data collection procedures differed due to changes in platform accessibility and technical constraints. In 2015, tweets were collected via API-based tools (Wamp Server), whereas in 2025, data were collected manually due to restricted access to automated extraction tools. To mitigate potential inconsistencies arising from this difference, comparable sampling criteria were applied across both datasets, including the selection of recent tweets, exclusion of retweets, and balanced gender representation. However, this methodological variation constitutes a limitation and may affect the comparability of the datasets.

Twitter was preferred to other similar media as it is a public service that is open to everyone and provides a large-scale data with variant people and topics. When compared to other social media services, Twitter is more preferable among adults, academicians, politicians, and celebrities that offer the chance to take a wide range of participants into consideration. The platform is particularly relevant for sociolinguistic inquiry because it combines brevity, public visibility, interactivity, and topic-based circulation through hashtags and mentions, all of which may shape lexical choice and identity performance in distinctive ways.

It is possible to follow tweets by anyone as long as you are a member of Twitter; however, a program was needed to download tweets of others we were not following as a wide range of participants were used in this study. That is, the first data in 2015 was collected by the program named as Wamp Server to download tweets and make the corpus for this study.

- Localhost/Twitter API was programmed; recent tweets were downloaded
- Tweets were chosen randomly (400 was chosen out of 2K tweets; 200 male/ 200 female)
- Test/ training data were held out (80 % test data; % 20 training data)

In 2025, data was recollected through the social media Twitter (X) in the same way. However, as the Wamp Server was not accessible to the authors anymore, 2025 data was collected manually:

- 200 tweets were chosen randomly (recent tweets were copied)
- Test/ training data were held out (80 % test data; % 20 training data) to examine classifier confidence for gender attribution.

We have chosen users' tweets with a gender assignment rather than unmarked users. The gender assignment was checked manually in both 2015 and 2025 data regarding profiles, first names and photos, but Twitter authors personal information, names and accounts were not shared in the study due to the personal rights of the authors. It was assumed that Twitter authors tend to use their true names although there might have been exceptions at an unimportant level. Retweets were also excluded.

Gender classification was based on publicly available profile indicators such as usernames, profile descriptions, and profile images. While this approach is consistent with prior large-scale social media studies, it is subject to potential inaccuracies due to pseudonymity, non-binary identities, and

performative self-presentation in digital environments. Accordingly, the gender labels used in this study should be interpreted as inferred rather than verified identities, and the findings should be considered within this limitation. This limitation is particularly relevant in digital environments where identity performance may not align with offline demographic categories.

Classifier confidence

Although the profile, names and photos project the gender of the Twitter authors, Twitter still has user latency beyond the information published. As such, we assigned gender to the Twitter author and measured whether the language carried gender information or not. To do this, training data were used, and gender classification of the authors was compared to the explicit gender fields. The declaration of the Twitter author was accepted as the ground truth for the gender of the author. However, because digital self-presentation may not accurately reflect offline identity, and because users may adopt pseudonyms, ambiguous profile cues, or non-binary identifications, this procedure should be regarded as an inference-based classification rather than a verification of users' actual identities. Any of this information in terms of the authors identities were shared in this paper.

Data analysis

To examine classifier confidence

In 2015, 20 percent of the whole data (80 out of 400 tweets) were examined as the training data. The percentage of accuracy regarding gender attribution was calculated by comparing gender classification of the author and the explicit genders of authors by checking the profiles in Twitter.

In 2025, 20 percent of the whole data (80 out of 400 tweets) were examined as the training data. The same proportion was intended in the 2025 dataset; however, due to the smaller corpus size, the absolute number of cases differed across years. In the same way, the percentage of accuracy regarding gender attribution was calculated by comparing gender classification of the author and the explicit genders of authors by checking the profiles in Twitter (X).

To examine lexical variations based on gender

Downloaded tweets were examined to see whether they show any variances based on gender. As being different from conventional methods that focus on lexical items that are regarded as female or male gendered, this study adapted the reversed 'regularization' method of Bamman et al. (2014) by examining words and word-like items as independent variable and gender turns out to be the dependent variable. As such gender does not decide on lexical variation, whereas the frequency of a word that was repeated by men and women decides the gender identity.

The data were divided into two; test and training data so as to decide on the accuracy of the classifier. 80 % of the data were used as training data while 10 % were used as test data and 10 % were used as to test the gender prediction of the classifier. The fraction of each word was counted as male or female. These percentages were compared with the fraction of the total.

Training data were examined based on some certain categories. These categories were adapted from previous studies (Bamman et al., 2014). The categories are as follows;

Named entities; *people, places, things*
Taboo words; e.g. sex, make love, prostitute
Swear words; e.g. *toff, gob shite*
Numbers
Emotion terms and emoticons; e.g. *love, glad, sorrow*
Kinship terms; e.g. *mother, mommy, aunt, father, auntie, bro, wife…*
Abbreviations
Hashtags; *any word following #*
Pronounceable dictionary words; e.g. *nope, nah, haha, lol*

Non-pronounceable dictionary words; e.g. *omg*

The authors' tweets were examined in *clusters.* Clusters represent the words by the same author, and they were formed without considering gender. Similar tweets that had similar words and were in similar length were grouped by using N-vivo 10. The analysis focused on the distribution of lexical categories across groups rather than on isolated lexical items alone, allowing for a broader comparison of discourse tendencies within each dataset.

To examine homophily on Twitter and Twitter (X)

An undirected social network from direct conversations was constructed. Twenty users' tweets were taken into consideration ten years apart from 2015 to 2025. Twitter authors homophily tendencies were observed based on the data and whether the gender composition of a Twitter author suggests any information about the gender. The statistical hypothesis for this is to see how gender composition of these twenty tweeter authors' individual networks would diverge from 50 percent male / female balance. The cumulative distribution of twenty participants was measured under binominal distribution (p=. 50) and N= (number of friends).

The analysis of gender homophily was conducted on a relatively small sample (n = 20 per group), which may limit the generalizability of the findings. Accordingly, the results related to network structures should be interpreted as exploratory rather than definitive.

Findings

Classifier confidence

The accuracy of Twitter and Twitter (X) authors' gender attributes were analyzed by checking the explicit gender profiles manually.

The accuracy of gender attribution was examined by comparing inferred gender classifications with publicly available profile indicators. In the 2015 dataset, the classifier showed relatively higher alignment rates compared to the 2025 dataset.

The data of 2015 Twitter authors' accuracy percentage of 20 % of whole data was 80 tweets. The data of 2025 Twitter (X) authors' accuracy percentage of 20 % of whole data was 40 tweets in total, were shown in Table 1.

Table 1: The accuracy of gender attributes.

Gender	**Tweets**	**Gender attribute accuracy**	**Percentage**
Female (Twitter author)	43	38	**88.3%**
Male (Twitter author)	37	31	**83.7%**
Female (X author)	24	17	**70.8%**
Male (X author)	16	13	**81.25%**

The results showed that gender attribution of the classifier was accurate more than 50 % for the 20 % of the data for both 2015 Twitter and 2025 Twitter (X) authors. Female and male users' tweets were not equal as they were chosen without checking the explicit genders; however, the percentage for each was calculated separately.

Lexical variations based on gender

Lexical variations in female and male language use on social media were analyzed with the help of N-vivo 10. The data were classified by coding with the help of N-vivo 10 and word frequencies for each gender was calculated and 2015 data presented in Table 2 and 3. During the analysis, two more codes emerged, which are romantic, and politics related words.

2025 data was presented in Table 4 and 5. During the analysis, one more code emerged, which is natura related words.

The frequency results of female and male authors for each category were compared with the help of ANOVA- One Way (SPSS Version 15) to examine whether there was significant difference. ANOVA test was preferred as the number of participants were more than thirty (N > 30) and the groups were independent. While formal assumption testing (e.g., normality and homogeneity of variance) and **effect size calculations** were not explicitly reported, the analysis provides an indicative overview of distributional differences across categories.

The results were presented below.

Table 2: One way ANOVA results for each variable, sorted by lexical variation (2015 Twitter authors).

	NE	**TW**	**SW**	**N**	**#**	**EW**	**E**	**KW**	**ABB**	**NPD**	**PD**	**PW**	**RW**
Female	$\bar{x}_{sıra}$=6; 8	$\bar{x}_{sıra}$=4; 1	$\bar{x}_{sıra}$=5; 2	$\bar{x}_{sıra}$=2; 5	$\bar{x}_{sıra}$=22;82	$\bar{x}_{sıra}$=2; 0	$\bar{x}_{sıra}$=22; 9	$\bar{x}_{sıra}$=9; 3	$\bar{x}_{sıra}$=6; 6	$\bar{x}_{sıra}$=4; 4	$\bar{x}_{sıra}$= 2;3	$\bar{x}_{sıra}$= 4;	$\bar{x}_{sıra}$=11; 21
Male	p> .05	p> .05	p>.05	p>.05	**p<.05**	p>.05	**p< .05**	**p< .05**	p> .05	p> .05	p>.05	**p< .05**	**p< .05**

*****NE= Named entities; TW= Taboo words; SW= Swear words; N=Numbers; # = Hashtags; EW= Emotion words; E=Emotions; KW= Kinship words; ABB= Abbreviations; NPD= Non-pronounceable words; PD= Pronounceable words; PW= Political words; RW=Romantic words.

Table indicated that female and male authors differ in their use of language mostly. Female and male authors did not differ in terms of named entities, taboo and swear words significantly, though female authors used slightly more taboo and swear words than male authors (*p<.05;* $\bar{x}$ =4.1; $\bar{x}$ =5.1). Concerning abbreviations, female and male authors did not indicate any difference.

Regarding numbers, female and male authors recruit more words with numbers when compared to female authors (*p<.05;* $\bar{x}$ = 2.5) and male authors had more romantic words, as well.

Emotion words and emoticons were more in female tweets compared to male tweets. Emotion words did not indicate a significant difference while emoticons were significantly more in female tweets (*p<.05;* $\bar{x}$ =2; 0). Similarly, kinship terms appeared significantly more in female tweets (*p<.05;* $\bar{x}$ =9.3).

Regarding pronounceable dictionary and non-pronounceable dictionary words, the results did not indicate a significant difference while male authors used slightly more pronounceable and non-pronounceable dictionary words.

Results also indicated that female authors' tweets were more oriented with political words (*p<.05;* $\bar{x}$ =14.4) and female authors' tweets had more words that refer to romanticism (*p<.05;* $\bar{x}$ =11.21). Political and romantic categories emerged while analyzing the tweets. Political words included the tweets that refer to political issues while romantic words included love words, such as lower, kiss, love.

The frequency results of hashtags also indicated a significant difference between male and female tweets (*p<.05;* $\bar{x}$ =122.82). Female authors had more hashtags compared to male authors.

To examine gender in language use independent of gender stereotypes, tweets were clustered with the help of N-Vivo 10 based on similar words. 7 clusters were formed without considering gender but similar words. The reason why clusters were formed without taking gender into consideration is to examine whether language on Twitter is really gender based and to investigate language free from the stereotype codes. The results were shown in Table 3.

Table 3: Clusters based on lexical variations, sorted by word class (2015 Twitter authors)

Word class%																
	Female %	**Male %**	**Named entities**	**Taboo words**	**Swear words**	**Numbers**	**Emotion words**	**Emoticons**	**Kinship terms**	**Abb.**	**Hashtags #**	**Pd words**	**Npd words**	**Romantic words**	**Politic words**	**Top words**
C1	10	10	3				1				8					#religion
C2	16	7			4	2		1	3		10	1		1	1	
C3	13	8				1		1	3		15			1		# HAPPINESS
C4	12	6						10			12					
C5	8	15				3					10	1			1	# freedom
C6	8	14				3		0	1		14		1		2	
C7	16	9		1				3	2		16				9	#INEQUALITY
Total																

** PD = Pronounceable dictionary words; NPD = Non-pronounceable dictionary words; Abb.= Abbreviations*

** The percentages of word classes and lexical variations*

The results indicated that though clusters were formed free of gender, almost all of them were found gendered except for cluster 1. Cluster 1 (henceforth; C1) was equal in terms of male and female distribution.

C2 had swear, politic and romantic words and it was female skewed. In accordance with gender-oriented analysis, C3 which had many kinship terms was female skewed while C5 which had many number words was male skewed. Similarly, the results of C7 were in accordance with the first analysis that was shown in Table 3. C7 had many political words, and it was female skewed and had many emoticons in it. C6 was a male skewed group, and numbers became prominent in this cluster.

Ten years later, in the same way lexical variations in female and male language use on the new version of 2025 Twitter (X) were analyzed with the help of N-vivo 10. The data were classified by coding with the help of N-vivo 10 and word frequencies for each gender was calculated and presented in Table 4. In comparison to 2015 Twitter, newly emerged category political words hardly appeared, and romantic words category continued its existence by getting stronger. Additionally, nature words emerged as a new category with frequent use of related words.

Table 4: One way ANOVA results for each variable, sorted by lexical variation (2025 X authors).

	NE	**TW**	**SW**	**N**	**#**	**EW**	**E**	**KW**	**ABB**	**NPD**	**PD**	**PW**	**RW**
Female Twitter(X) author	$\overline{x}_{sıra}$=26;28	$\overline{x}_{sıra}$= 1;2	$\overline{x}_{sıra}$=1;1	$\overline{x}_{sıra}$=4;3	$\overline{x}_{sıra}$=110;170	$\overline{x}_{sıra}$=85;50	$\overline{x}_{sıra}$=100;70	$\overline{x}_{sıra}$=15;10	$\overline{x}_{sıra}$=1;1	$\overline{x}_{sıra}$=0;0	$\overline{x}_{sıra}$=1;1	$\overline{x}_{sıra}$= 5;6	$\overline{x}_{sıra}$=39;20
Male Twitter(X) author	p> .05	p> .05	p>.05	p>.05	**p<.05**	**p<.05**	**p< .05**	**p< .05**	p> .05	p> .05	p>.05	p>.05	**p< .05**

*****NE= Named entities; TW= Taboo words; SW= Swear words; N=Numbers; # = Hashtags; EW= Emotion words; E=Emotions; KW= Kinship words; ABB= Abbreviations; NPD= Non-pronounceable words; PD= Pronounceable words; RW=Romantic words; NW= Nature words

Table 5 indicated that female and male 2025 Twitter (X) authors differ in their use of language in the use hashtags, emotion words, emoticons and romantic words. Female and male 2025 Twitter (X) authors did not differ in terms of named entities, taboo and swear words, numbers significantly, and more significantly, abbreviations, NPD and PD words hardly appeared in 2025 (X) authors' tweets.

Regarding emotions and emoticons, female X authors recruit more words when compared to male authors (*p<.05;* $\bar{x}$ = 65,50) and male authors had more named entities and hashtags, as well. Similarly, kinship terms appeared significantly more in female tweets (*p<.05;* $\bar{x}$ =25, 20). Results also indicated that female 2025 (X) authors' tweets had more words that refer to romanticism (*p.05;* $\bar{x}$ =25, 20).

When compared to 2015 Twitter and 2025 Twitter (X) authors results, there are some differences in terms of predominant use of romantic words and kinship words by female 2025 (X) authors. More importantly, new emerging political words category of 2015 Twitter hardly appear in 2025 Twitter (X) platform though a new category with nature words came out with corresponding amount of use by both genders.

To further synthesize the findings across both datasets, Table 6 presents an interpretive comparison of relative differences across lexical categories based on observed group means. This comparison provides a descriptive overview of variation across categories beyond statistical significance.

Table 5: Interpretive comparison of relative differences across lexical categories (2015–2025 Datasets).

Variable	**Female (m)**	**Male (m)**	**Significance**	**Relative magnitude**	**Interpretation**
Hashtags	110	170	p < .05	High	Male-dominant
Emotion words	85	50	p < .05	High	Female-dominant
Emoticons	100	70	p < .05	High	Female-dominant
Kinship words	15	10	p < .05	Moderate	Female-dominant
Relationship words	39	20	p < .05	High	Female-dominant
Named entities	1	2	n.s.	Minimal	No clear pattern
Taboo words	1	2	n.s.	Minimal	No clear pattern
Swear words	1	1	n.s.	None	No difference
Numbers	4	3	n.s.	Minimal	No clear pattern
Abbreviations	1	1	n.s.	None	No difference
Political words	5	6	n.s.	Minimal	No clear pattern
Nature words	40	43	n.s.	Minimal	No clear pattern

These relative magnitude categories are based on observed differences and should be interpreted as indicative rather than standardized effect size measures. Overall, the findings suggest that gender-based lexical variation is not uniformly distributed across categories but appears to be concentrated in specific domains, particularly those related to emotional expression and social interaction. In contrast, several categories display minimal or no variation, indicating that gendered patterns in digital discourse may be selective rather than pervasive.

To examine gender in language use independent of gender stereotypes, tweets were clustered with the help of N-Vivo 10 based on similar words in the same way for 2025 Twitter (X) authors. 5 clusters were formed without considering gender but similar words.

The results were shown in Table 7.

Table 6: Clusters based on lexical variations, sorted by word class (2025 X authors).

Word Class%																	
	Female %	**Male %**	**Named entities**	**Taboo words**	**Swear words**	**Numbers**	**Emotion words**	**Emoticons**	**Kinship terms**	**Abb.**	**Hashtags #**	**Pd words**	**Npd words**	**Romantic words**	**Politic words**	**Nature words**	**Top words**
C1	17	23	10	1	1	2	17	36	3		76			8	1	14	# HAPPINESS
C2	23	19	15	1		3	49	50	6	1	43	1		23	2	23	# freedom
C3	20	22	5			1	20	23	4		70			11	2	16	#INEQUALITY
C4	18	20	12	1		1	16	24	5	1	54			5	3	15	#sun
C5	22	16	12		1		23	37	7		37	1		22	3	6	#nature
Total																	#love

** PD = Pronounceable dictionary words; NPD = Non-pronounceable dictionary words; Abb.= Abbreviations*

** The percentages of word classes and lexical variations*

The results in clusters indicate that clusters which are female skewed, such as C2 and C5 were found to be predominant with emotion words, emoticons, romantic and kinship words while male skewed clusters, such as C1 was found to be predominant with hashtags. More significantly, when compared to 2015 Twitter authors (see Table 4), 2025 Twitter (X) authors' results scatter more proportionate in terms of named entities, political words, numbers of PD words, NPD words and nature words. As another difference, while political words cluster was predominantly female skewed previously, 2025 results indicate a more even distribution and the emerge and rise of nature category with an increasing number of vocabulary.

Gender homophily

20 female and 20 male Twitter authors were randomly recruited to examine gender homophily. Each authors' Twitter connections were examined based on binomial parameters. In each network, the contacts without gender such as, groups, clubs were excluded.

To update the results for 2025 Twitter (X) authors, 20 female and 20 male Twitter (X) authors were randomly recruited to examine gender homophily. Each authors' Twitter connections were examined based on binomial parameters as well. The results for both were shown in Table 8.

Table 7: The distribution of gender on authors' network and gender homophily(from 2015 to 2025).

2015Twitter Authors	**# Following (total)**	**# female / # male *f***	**Percentage %**	**2025 Twitter (X) Authors**	**# Following (total)**	**# female / # male *f***	**Percentage %**
Female author	115	Female 48 Male 67	Female 41.73 %	Female author	1,934	Female 1224 Male 710	Female 63.28%
Female author	183	Female 90 Male 93	Female 49.18%	Female author	303	Female 170 Male 133	Female 56.10%
Male author	190	Female 22 Male 168	Male 88.42%	Male author	506	Female 401 Male 105	Male 20.75%
Male author	641	Female 403 Male 238	Male 37.12%	Male author	709	Female 403 Male 306	Male 43.15%
Female author	308	Female 76 Male 132	Female 24.67%	Female author	4,492	Female 2,102 Male 2,390	Female 46.79%
Female author	194	Female 82 Male 112	Female 42.26 %	Female author	890	Female 375 Male 515	Female 42.13%
Male author	186	Female 40 Male 146	Male 78.49 %	Male author	703	Female 479 Male 224	Male 46.76%
Male author	116	Female 35 Male 71	Male 61.20%	Male author	1,673	Female 900 Male 773	Male 46.20%
Female author	186	Female 56 Male 120	Female 30.10 %	Female author	2,302	Female 958 Male 1344	Female 41.61%
Female author	559	Female 130 Male 149	Female 23.25%	Female author	402	Female 150 Male 252	Female 37.31%
Male author	175	Female 53 Male 102	Male 58.28 %	Male author	256	Female 104 Male 152	Male 59.37%
Male author	237	Female 154 Male 83	Male 34.29%	Male author	1,360	Female 864 Male 496	Male 36.47%
Female author	242	Female 58 Male 120	Female 23.96 %	Female author	2,200	Female 1004 Male 1196	Female 45.63%
Female author	101	Female 32 Male 69	Female 31.68 %	Female author	608	Female 378 Male 230	Female 62.17%
Male author	168	Female 55 Male 113	Male 67.26%	Male author	1,113	Female 700 Male 413	Male 62.89%
Male author	62	Female 13	Male 79.03 %	Male author	1,406	Female 621	Male 55.83%

		Male 49				Male 785	
Female author	64	Female 29 Male 35	Female 45.31%	Female author	675	Female 400 Male 375	Female 59.25%
Female author	44	Female 16 Male 28	Female 36.36%	Female author	809	Female 455 Male 354	Female 56.24%
Male author	198	Female 68 Male 130	Male 65.65%	Male author	345	Female 128 Male 217	Male 62.89%
Male author	191	Female 31 Male 160	Male 83.76%	Male author	1,205	Female 705 Male 500	Male 41.49%

The previous and recent results of Twitter authors differ from each other considerably in terms of gender homophily. That is, the previous results of Twitter indicated that randomly chosen 10 female Twitter authors had more male contacts than female contacts. In that, female authors' contacts did not show any sign for gender homophily. None of the female authors' fellow contacts exceeded 50 %. On the other hand, 8 out of 10 randomly chosen male authors had more male contacts than female contacts, which was at around 80 %. In that, male authors showed homophily signs of gender in their network connections.

On the contrary, 2025 results of Twitter (X)'s randomly chosen 10 female authors had an even distribution among male and female contacts, with 5 more female; 5 more male fellow contacts. As regards male X authors, unlike previous results they had a tendency of having more female contacts with 6 out of 10 authors' female exceeded fellow contacts. In that, 2025 Twitter(X) authors showed no sign of gender homophily.

Discussion of results

As it is referred in literature review, previous studies in the literature have indicated that female-authored discourse is oriented with emotion (Bamman, 2014), kinship and romantic words while male language is equipped with numbers (Ikae & Savoy, 2022), non-emotional, dictionary, taboo (Bamman, 2014) and swear words. However, this study results were not completely in accordance with previous studies and indicated a different language on Twitter. In addition, the results were presented in comparison ten years apart from 2015 to 2025 indicating variances in terms of predominance lexical variance by female and male social media users and gender homophily.

In addition, while certain patterns appear to diverge from traditional gendered language norms, these findings should be understood as context-dependent and reflective of specific digital environments rather than universal linguistic behaviors.

Building on this pattern, the findings indicate that gender-based lexical variation in digital discourse is not evenly distributed across all categories but is instead concentrated in specific domains, particularly those related to emotional expression, interpersonal communication, and relational language. This suggests that gendered language use in social media contexts operates selectively rather than systematically, challenging earlier assumptions in the literature that portray gender differences as stable and pervasive across linguistic features (e.g., Lakoff, 1975; Tannen, 1993; Bamman et al., 2014). This finding also aligns with more recent perspectives that conceptualize gender as a context-dependent and performative construct, enacted through discourse and interaction (Butler, 1990).

These findings are also consistent with recent empirical research on digital communication, which suggests that gendered language use in social media is neither fixed nor uniformly distributed across contexts. For example, Arshad et al. (2022) demonstrate that while women tend to adopt more relational and supportive linguistic styles, and men more assertive forms of expression, such tendencies are shaped by interactional and contextual dynamics rather than stable gender traits. Similarly, Romadloni and Sari (2025) report that although women's language on X (formerly Twitter) appears more emotionally expressive, these differences are not always statistically robust, indicating variability across datasets. In line with this, Elmahdi et al. (2024) highlight that gendered communication patterns are recontextualized in online environments, where platform affordances and user practices play a significant role.

Classifier confidence

The results showed that gender attribution of the classifier was accurate more than 50 % for the 20 % of the data, which meant that the study was reliable in terms of gender attribution.

Lexical variation based on gender

The results were discussed for both 2015 and 2025 results of Twitter separately, and compared in terms of variances.

2015 Twitter results indicate a discrepancy between female and male Twitter authors at almost each lexical variations though all of them do not show a significant difference.

First of all, taboo and swear words outweighed in female tweets. In that, in contrast to the expected result based on literature, female Twitter authors used more taboo and swear words on Twitter. It can be suggested that this does not mean male users do not use taboo and swear words; however, they are certainly not 'manly' words but 'womanized' to some extend on Twitter or it can be interpreted that these words are genderless on Twitter.

Secondly, female authors' tweets seemed to be politicized as they indicated a significant difference when compared to politic words in male tweets. When politicized mails were investigated, it was seen that they were mostly Iranian or Middle Asian woman authors. However, it should not be forgotten that the study was conducted on a limited data. The reason might be interpreted such that Twitter offered a free platform for female to voice their ideas. They were mostly about freedom and equality. Some examples from female authors tweets as follows;

Twit : In Congress, Income Inequality Fact of #Life for Food Servers - #ABCNews http://t.co/3vlSrGl03s #eyebalz #buzz
Date : 2015-05-04 09:41:20

Twit: Even Barack filters news and media because it is destructive and toxic #productivity #life… http://t.co/6I1k6jMQpz http://t.co/Qzjdvb09Ed
Date: 2015-05-06 14:41:51

Twit: Empowering patients to take charge of their own #wellbeing for years to come http://t.co/tER8Rdo7fY #wellness #quality #life #tips
Date: 2015-05-07 09:30:46

Regarding romantic words, not in accordance with previous studies, male authors' tweets outweighed female tweets significantly. In that, male Twitter authors seemed more romantic in their use of language. It might be possible to explain with the permissiveness of Twitter environment. Male authors may enjoy being free from social pressure though this is another dilemma. It is believed that romantism make people powerless and weak. As most men see themselves as the symbol of power in society, they avoid using romantic words except for flirting. However, it might be personality rather than gender so when they have the chance to reveal themselves, it might have come out. Some examples from romantic e-mails of males are as follows;

Twit: Good Day Sunshine today you better make plans! #Toronto #MyCity #FeelingGood #Music #Life http://t.co/6Twbh1ZsSg
Date: 2015-05-06 14:42:08

Twit: Beautiful day to embrace a beautiful life!! #DC #LA #Love #Life
Date: 2015-05-06 14:44:33

Twit: #life yup pretty much true http://t.co/0x4eUKk0IM
Date: 2015-05-06 14:43:43

Twit : (11) "the beginning of #love is to let those we love be perfectly themselves.." https://t.co/Cdg6DB1zR8 #change #positive #life #quotes
Date: 2015-05-08 11:30:31

However, female authors still have more emotion related words in their tweets and they use significantly more emoticons. The use of emoticon has been a new way of communication today. It

expresses emotions or helps to exaggerate emotions in a direct way. That is, it may be said that emoticon use might be representative for expressing emotions. Female Twitter authors might be interested in sharing their emotions more than male authors. Some examples of female authors' tweets with emoticons;

Twit: #GiveThanks🙏🙏🙏🙏🙏🙏 for the #smallThings in #Life Everyday things like running water 🚿 #Wata🛁 Be #Happy You didn't have to run & Get it.
Date: 2015-05-06 14:46:40

Twit: Exciting!!!!!!! 🙈🙉🙈 #vote #election2015 #love #life #choice 💝 https://t.co/hv8djfhNXF
Date: 2015-05-07 09:26:01

Regarding kinship terms, female authors' results showed accordance with previous studies and outweighed. Female Twitter authors mentioned their family and relatives more in their tweets. It might be because female authors have more intimate relations within family or they do not exclude their family members on Twitter while male authors may have the tendency to have other connections rather their family members on Twitter. Some examples from female tweets were as follows;

Twit: Swing your swing 👭 #DamiaKamelia #mother #daughter #moment #capture #love #life #without #beach… https://t.co/uQ3Sdwq9bZ Date: 2015-05-07 09:58:00

Twit: Love them! #maciel #salazar #andrade #cousins #primitos #life https://t.co/DNIiaWEGJm Date: 2015-05-07 11:12:11

Concerning named entities, abbreviations, PDW and NPDW, there was not a significant difference; however, hashtags showed a significant difference in support of female Twitter authors. There might be a reason for that as the results mostly indicated the desire for female authors to make themselves visible and take part in society free from gender-biased stereotypes. It was derived from their politicized and non-romantic use of language. Hashtag is a way of taking part in social media and direct interaction. So, women might have the tendency to use hashtags more to participate in social media directly.

As regards clusters, they were formed based on similar words regardless of gender and the results of cluster analysis have confirmed that stereotypical lexicon based on gender cannot be adapted to the digital environment. The clusters with political, swear, taboo, kinship words and emoticons intensive were female skewed, while clusters oriented with more romantic words and numbers were male skewed. That has importance since cluster analysis was independent of stereotyped lexical categories and prejudges regarding female and male lexicon. The clusters were arranged with similar words, and they indicated a gender skew in parallel with already formed categories. The possible explanation might be that virtual environment has reformed the language; however, it still seems gendered.

However, results repeated ten years later in 2025 indicated a more proportionate distribution in terms of lexical variation. Outstanding political words among female authors seemed to disappear and instead female authors' tweets were predominant with emotion words and, similarly, emoticons. On one hand, the platform female authors could have been depoliticized. On the other hand, social media such as You tube, Tik Tok., etc have been pluralised which might have reduced the importance of Twitter as digital platform to express political opinions.

In the same way, 2025 results of Twitter (X) showed a difference in terms of predominant use of swear and taboo words of female authors. Not only female authors but also male authors seemed to avoid using swear and taboo words less. Though the study was conducted on a limited data, the reason might be interpreted such that lynching culture is very popular with fellows on social media currently, which could possibly make authors be more careful and explain themselves to the full with more attentive words.

Another interesting recent result was with romantic words previously in 2015 weighted by male authors as the results were reversed for 2025 Twitter (X) authors. That is, female X authors outweigh male

X authors in terms of the use of romantic words. Some examples from romantic tweets of males are as follows;

> Twit:As a quiet rebel searching for deeper truths of who we are and why we're here, I made this in the spirit of freedom. I went with the flow, integrated mistakes, and loved it despite imperfections. Do you think freedom is a state of mind? #Freedom #mind #consciousness Date: 2025-02-07 15:03:10

> Twit:Vanilla swirls in silky streams, golden foam rising gently. Sunshine melts into every sip, warmth lingers on sugared lips. Morning unfolds in quiet moments, a café cup of happiness. #vss365 #coffee **#Happiness** Date: 2025-02-07 16:04:03

Differing results from 2015 to 2025 may indicate that digital platform Twitter has transformed its authors' use of lexical variation by gender to some extend which may be influenced by both the changes in the platform itself such as extending word limit, video uploads, users and social changes in the society. In addition, the purpose of the platform might have been transformed by changing social norms or authors' preferences.

Gender homophily

The results of the study from 2015 to 2025 differed with regard to gender homophily. Firstly, the 2015 study results indicated gender homophily among male authors whereas there were no signs of it among female authors. Almost all of the male participants had homophilic connection. These results were therefore surprising, as the issue of homophily on Twitter was gendered.

Male Twitter authors have tended to connect with other male authors more than with female authors. It may be because they feel more comfortable with the same gender and more powerful in groups. Belonging to a group makes people feel stronger. This group may be of the same gender. As discussed, males have the tendency to be powerful. Additionally, groups have power to validate people. Males may need to feel confirmed and powerful more than females do. As mentioned in the literature review, Johnstone confirmed that women's talk involves social power through community whereas men's talk involves power that comes from the individuals themselves (as cited in Tannen; 1993).

In contrast to the male authors, none of the female authors had gender homophily among their network contacts. This suggests that female Twitter authors do not have a tendency to socialise in groups with people of same gender. One might expect women to support each other more and move in groups as they are often perceived as weak and fragile creatures who are vulnerable to danger and expected to lack self-esteem and rapport for each other. However, contrary to expectations, female Twitter authors are more open to communicating with men than women, and do not show any predisposition to being in groups or communicating with people of the same gender. This may be explained by the new virtual societal norms that offer women a degree of freedom they have never experienced before.

Conversely, unlike 2015, recent results from Twitter (X) 2025 indicated no gender homophily among male and female authors, which might reinforce the notion that the digital social world has its own rules and is subject to change based on its own social norms. This suggests that male authors might be adapting more slowly to this new world than female authors, or that the Twitter digital society is becoming more like a community.

This study examined lexical variations and gender homophily on Twitter, categorized by gender. The results of the research questions can be summarized in four aspects: 1) Language on Twitter is gendered; however, it is almost completely different from the stereotypical gendered language in society. The newly born digital environment may have reformed language how it is interpretated in this new society, which seems to be free from conventional social codes; 2) While some lexical categories such as abbreviations, named entities, NPD words and PD words did not indicate a significant difference between female and male Twitter authors the other categories indicated a significant discrepancy compare to previous studies

(Burger et al., 2011; Bamman et al., 2014; Halteren & Speersta, 2014) and the present study. Hashtags and political words appeared more frequently in female tweets, whereas romantic words appeared more frequently in male tweets. Additionally, swear and taboo words appeared more frequently in female tweets. Kinship terms and emoticons, however, did not differ from previous studies, and were found to be out more prevalent in female tweets. However, these results were reversed for 2025 Twitter (X) authors. Hashtags appeared more frequently in tweets by male authors and were not predominant in political words while romantic words appeared more frequently in tweets by female (X) authors. Also, swear and taboo words showed no significant difference appeared rarely. 3) Clusters were formed based on similar words, regardless of gender, and it was found that the clusters produced similar results to those of the previous analysis. Clusters containing more political, swear and taboo words were female-skewed, while clusters containing more romantic words were male-skewed. The opposite was true for 2025 Twitter (X) clusters. Clusters with a high number of romantic and emotional words, and emoticons were female-skewed, while hashtag-intensive clusters were male-skewed. Swear and taboo words were distributed fairly evenly. 4) In contrast to previous studies (Bisgin et al., 2010; Zamal et al., 2012), male authors' network connections showed strong indications of gender homophily while female authors' network connections were almost balanced and even slightly male-skewed. The 2025 Twitter (X) platform did not confirm this either, indicating no gender homophily for either female or male authors.

Regarding the above strands, several interpretations can be offered as to why the so-called 'manly' lexicon has been exchanged for the 'female' lexicon. One possible explanation is that the environment has changed from real society to a virtual one. This could have led to variety in vocabulary and language use. Secondly, users of language may have changed in parallel with changes in the world. Particularly, female authors in 2015 seemed to show a tendency to declare their freedom from social codes that restrict and shape their speech in both their choice of words and their use of language. Furthermore, it has been suggested that women may praise individualism more in the new digital society, as it has been observed that women do not primarily socialize with people of the same gender. However, within ten years, the digital society more closely, where women's softer communication is more widely accepted and men communicate more freely. In addition, political words appeared to replace natural words, which may indicate a change in societal preferences and interests. Compared to 2015 results, there was a decrease in swear and taboo words in 2025, particularly among female users. This may indicate an increase in the way society expresses itself on digital platforms, or it may be that female users have already established their own views and their anger subsided.

In summary, the results of this study have indicated that social media and the virtual society are changing the language in terms of gender. This was found to be true even within constraints of Twitter' 140-character limit in 2015 and its developed form in 2025. The communication style has become more open to everyone with access to social media; it is not the gender that decided the choice of word, but rather the environment and the topic. Currently, the virtual environment on Twitter indicates that female and male authors seem exchange roles in terms of lexical choice. However, ten years from now, it may resemble real society more closely, and it can be presumed that, in the future, the language of virtual society can be completely gender-neutral and transparent.

Based on statistical results, it can be concluded that male and female-authored discourse use differs, and both Twitter and Twitter (X) platforms have a gendered language. However, while the gendered language on Twitter in 2015 mostly differed from the stereotypical female and male language used in real society, Twitter (X) in 2025 seemed more like the language used in real society.

The reason why the language used in Twitter differs from the language used in society is perhaps because people feel freer from the social codes and social pressures of society that influence speech and language. In society, it is a well-known fact that female and male children are socialized into using gender-typical language, though this starts at slightly different ages, from the time when they start uttering their first words. Boys are encouraged to use harsh words and are mostly stopped from being emotional or

using romantic language. They are also made to watch cartoons whose plots are mostly involve war or fight. Even their games involve swords, guns, fight and cars which symbolise bravery, strength, courage, mastery and speed. As such, it is an inevitable that males may end up with a language distilled from emotion and shaped accordingly. Similarly, female children are modelled by others and encouraged to use language that is free from swear and taboo words. Once they utter a word which is not 'suitable' to the society, they are warned harshly and reminded that it is not appropriate for a woman to use utter a ''manly' word.

Another reason might be that gendered language is not completely a biological code, as the society suggests, but mostly a social one. When the environment changes, language evolves in accordance with the new environment, as well as reflecting what people bring from their own backgrounds. Twitter is a new environment offering freedom and the chance to use the language without fear of judgement from the immediate environment. Twitter is like a community; however, users communicate through a screen that makes them feel safe from direct criticism. On the other hand, Twitter is a community in which criticism is accepted. Some people may even carry the identities and the language they use in real society to this new virtual environment. In particular, female users may luxuriate in this virtual environment to relish their free use of language as they wish.

Another factor that should not be overlooked is that Twitter 2015 was limited to 140 characters. This may be another reason why Twitter authors needed to be direct, clear, and concise in their explanations. This is why every author, regardless of gender, used direct language on Twitter. However, authors in 2025 are freer to express themselves without limitations, which is why their tweets are longer and more expressive.

Additionally, Twitter has a feature that provides an opportunity for interactive media, so Twitter authors also use language to participate in TV programs. It is clear that Twitter language also differs according to the context. It is freer among friends, but changes in other contexts. Intimate chatting is not always possible in society but it is on Twitter. This study examined samples of intimate conversations between friends to reveal the elements of vernacular language.

On the other hand, over time, people have become familiar with digital platforms and as they have adjusted to this new world, it has become more like the real society. The number of people using digital platforms increased dramatically transforming existing online communities into a real community. This could explain why the 2025 Twitter (X) results were not in line with the 2015 results.

Implications

The results of 2015 and 2025 data to explore and compare the lexical variations on Twitter and Twitter (X) as social networks based on gender and gender homophily indicated variances ten years apart. In 2015, the language of digital environment differed from the non-virtual environment. The virtual/digital environment offered a completely different social context to its users. This context was free from suppressions, expectations, limitations, codes, roles and forms that are imposed by the society. The findings suggest that this newly formed society showed variances in terms of lexicon from the language in non-virtual environment regarding gender. Though biological differences make a slight change in language use such as tone of voice, it is the society that determines linguistic evolution (Vygotsky, 1987) more that inborn differences. In that, 2015 Twitter re-formed the language in its own context as being different from conventionally gendered language in society.

However, 2025 Twitter (X) results indicated a more even distribution and a language more similar to real society in terms of gender-coded language use (Bamman et al., 2014; Halteren & Speersta, 2014). While 2015 results indicate a gender-reversed language use in digital platforms, 2025 results seemed to be closer to the gender language of the society.

As such, it would be wise to take this into consideration, since it may show that today's world which is oriented with technology is forming the language again and genders may be exchanging the roles in the

use of language or in time language may be getting genderless in virtual contexts and may be ten years apart from today it will be "gender-blind" (Pedersen and Macfee, 2007).

This finding has implications for lesson designs. That is, pedagogy might give preference to changing society and language through social media over those that students are restricted around predetermined codes. New lesson designs may include social media and get introduced with changing language use in newly born digital societies.

Many other studies of this area are needed; the factors such as nationalities, status and family backgrounds could be added to the participants and more detailed, longitudinal further studies in the field could be conducted. Also, rather than gender, many other variances and interactions on social media networks are needed to be studied to show whether the language is reforming in virtual society in all aspects.

Limitations

The study was conducted with a limited number of tweets and the number of Twitter authors with various backgrounds can be added in forthcoming studies. Language is not limited to English though English is used as a lingua franca by some non-natives. In that, the study might be conducted in different languages as well as Turkish in Turkish Twitter context in forthcoming studies and the results might be compared with the use other languages on Twitter regarding gender.

Secondly, the datasets from 2015 and 2025 differ in size and data collection procedures, which may affect direct comparability. Gender classification also relies on inferred profile information, which may not accurately represent users' identities, particularly in the context of non-binary or anonymous accounts.

Third, the statistical analysis does not include effect size calculations or formal testing of ANOVA assumptions, which limits the interpretative strength of the findings. Additionally, the analysis does not control for potential confounding variables such as cultural background, topic variation, or platform-specific affordances, which may influence language use.

In addition, Twitter (X) platform tweets were compiled and examined manually which limited the number to 200 tweets, which restricts the generalizability of network-related conclusions. Future research should employ larger datasets and more advanced statistical modeling to address these limitations.

References

Aiseng, K. (2025). Unveiling linguistic ideologies in South African twitter (X) discourse: A corpus-assisted discourse study. *Communicatio: South African Journal of Communication Theory and Research, 50*(2), 30-51.

Argamon, S., Koppel, M., Fine, J., Shimoni, A. R. (2003). Gender, genre, and writing style in formal written texts. *To appear in Text, 23*, 3.

Arnold, J., Miller, H. (2000). Same old gender plot? Women academics' identities on the web. Paper presented at Cultural Diversities in/and Cyberspace Conference, University of Maryland

Arshad, A., Jamil, H., Yousaf, C. H. (2022). Analyzing the differences in use of language by men and women on social media. *Annals of Human and Social Sciences, 3*(2), 136-147. https://doi.org/10.35484/ahss.2022(3-II)13

Bahammam, L. (2018). *Gendered discourses and discursive strategies employed in Twitter-hashtagged debates about Saudi-women's issues* (Doctoral dissertation, University of Reading).

Bakshy, E., Rosenn, I., Marlow, C., Adamic, L., (2012). The role of social networks in information diffusion. *Proceedings of the International World Wide Web Conference,* Lyons, France.

Bamman, D., Eisenstein, J., Schnoebelen, T., (2014). Gender identity and lexical variation in social media. *Journal of Sociolinguistics, 18*(2), 135-160. https://doi.org/10.1111/josl.12080

Bisgin, H., Agarwal, N., Xu, X. (2010). Investigating homophily in online social networks. In 2010 *IEEE/WIC/ACM international conference on web intelligence and intelligent agent technology* (Vol. 1, pp. 533-536). IEEE.

Burger, J., Henderson, J., Zarrella, G., (2011). Discriminating gender on twitter, *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP),* Stroudsburg, PA, USA: Association for Computational Linguistics (ACL), (pp. 1301-1309).

Butler, J. (1990). Feminism and the Subversion of Identity. *Gender trouble, 3*(1), 3-17.

Cioroianu, I., Coffé, H. (2025). Social media homophily among women and men political candidates. *Parliamentary Affairs, 78*(3), 555-580. https://doi.org/10.1093/pa/gsae033

Cohen, R., Ruths, D., (2015). *Classifying political orientation on twitter: It's not easy!*, Proceedings of School of Computer Science McGill University.

Crawford, M. (1995). *Talking difference: On gender and language* (Vol. 7), London: Sage.

De Choudhury, M., Sundaram, H., John, A., Seligmann, D. D., Kelliher, A., (2010). 'Birds of a feather': Does user homophily impact information diffusion in social media?, *CoRR,* Retrieved on September 15, 2021, from https://dblp.org/db/journals/corr/corr1006.html#abs-1006-1702.

Dunn, O. J. (1961). Multiple comparisons among means. *Journal of the American Statistical Association,* 56, 52-64.

Elekaei, A., Faramarzi, S., Afghari, A. (2014). Lexical variation, linguistic choice and style in writing emails of Iranian male and female. *International Journal of Language Learning and Applied Linguistics World (IJLLALW), 7*(4), 298-306.

Elmahdi, O. E. H., Balla, A. A. S., Abdelrady, A. H. (2024). Gender variations in linguistic styles across online platforms. *International Journal of Linguistics, Literature and Translation, 7*(12), 62-74. https://doi.org/10.32996/ijllt.2024.7.12.10

Fishman, P. M. (1983). Interaction: The work women do. B. Thorne, C. Kramarae & N. Henley (eds.), *Language, gender and society* (pp. 89-101). Rowley, Massachusetts: Newbury House.

Fishman, P. M. (1978). Conversational insecurity. *Language: Social Psychological Perspectives: Selected Papers from the First International Conference on Social Psychology and Language held at the University of Bristol* (pp. 127-132). England: Pergamon.

Freed, A. F. (1996). Language and gender research in an experimental setting. In V. Bergvall (ed.). *Rethinking language and gender research: Theory and practice* (pp. 54-76). Routledge.

Graddol, D., Swann, J. (1989). *Gender voices*. Oxford: Basil Blackwell.

Haas, A. (1979). Male and female spoken language differences: Stereotypes and evidence. *Psychological Bulletin, 86*(3), 616.

Herring, S. C. (Ed.). (1996). *Computer-mediated communication: Linguistic, social, and cross-cultural perspectives*. John Benjamins.

Halteren, H., Speersta, N. (2014). Gender recognition on dutch tweets. *Computational Linguistics in the Netherlands Journal, 4,* 171-190.

Holmes, J. (1997). Women, language and identity. *Journal of Sociolinguistics, 1*(2), 195-223.

Ikae, C., Savoy, J. (2022). Gender identification on twitter. *Journal of the Association for Information Science and Technology*, *73*(1), 58-69. https://doi.org/10.1002/asi.24541

Khanam, K. Z., Srivastava, G., Mago, V. (2022). The homophily principle in social network analysis: A survey. *Multimedia Tools and Applications, 82*, 8811-8854. https://doi.org/10.48550/arXiv.2008.10383

Kunsmann, P. (2013). Gender, status and power in discourse behaviour of men and women. *Linguistik Online, 5*(1). 00

Kwak, H., Lee, C., Park, H., Moon, S., (2010, April). What is twitter, a social network or a news media?. *Proceedings of the 19th international conference on World Wide Web* (pp. 591-600).

Lakoff, R. (1975). *Language and Woman's Place.* New York: Harper

Nichols, P. C. (1983). Linguistic options and choices for black women in the rural south. In B. Thorne, C.

Kramarae & N. Henley (eds.). *Language, gender and society* (pp. 54-68). Rowley, Massachusettes: Nwebury House.

Pedersen, S., Macafee, C., (2007). Gender difference in British blogging. *Journal of Computer-Mediated Communication, 12,* 1472-1492.

Post, H. (2010). *Twitter user statistics revealed.* Huffington Post.

Rizi, A. K., Michielan, R., Stegehuis, C., Kivelä, M. (2025). Homophily within and across groups. *Nature Communications, 16*, 11351.

Romadloni, A., Sari, L. (2025). Gender and communication: Analyzing tweet length, sentiment, and lexical patterns on X (Twitter). *Journal of English Language and Education, 10*(4), 878-889.

Shang, Y., Zhou, B., Zeng, X., Wang, Y., Yu, H., Zhang, Z. (2022). Predicting the popularity of online content by modeling the social influence and homophily features. *Frontiers in Physics, 10*, 915756.

Tannen, D., (1993). *Gender and conversational interaction.* New York: Oxford University Press.

Vygotsky, L. (1987). Thought and language. *The Journal of Mind and Behavior Wintet, 8*(1), 115-178.

West, C., Zimmerman, D. H. (1987). Doing gender. *Gender & Society, 1*(2), 125-151.

Zamal, F. A., Liu, W., Ruths, D., (2012). Homophily and latent attribute inference: Inferring latent attributes users from neighbours. *Proceedings of the Sixth International AAAI Conference on Weblogs and Social Media* (pp. 387-390).

Appendix

Appendix A.

Table 8: The lexical variations based on gender.

Gender		Named entities	Taboo words	Swear words	Numbers	Emotion words	Emoticons	Kinship terms	Abbreviations	Hashtags	Pd words	Npd words	Politic words	Romantic words
2015	Female	6	4	5	2	2	22	9	6	122	2	4	14	11
	Male	8	1	2	5	0	9	3	6	82	3	4	4	21
2025	Female	26	1	1	4	85	100	15	1	110	1	0	5	39
	Male	28	2	1	3	50	70	10	1	170	1	0	6	20

* *PD = Pronounceable dictionary words; NPD = Non-pronounceable dictionary words*

* *Word frequency in female and male tweets*

Cooperative or misaligned? A conceptual model of the relationship between language, action, and context in linguistic education

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Abstract
In educational settings specialized in linguistic instruction, an assumption is made of a direct and clear relationship between the utterances of the teachers, the activities of the learners, and the setting of the instruction, particularly treating instruction as a case of mechanical input-output functioning where there are instructions delivered and there are actions generated without considering the possibility of alternate or multiple outcomes. Nonetheless, the actual scene in the classroom is often much more complicated: language and action seem to work harmoniously, and just as often, they seem completely disconnected, yielding misunderstanding, disaffection, and bizarre results. This paper puts forward a new model for understanding the relationship between language, action, and context in the context of language teaching. It seeks to understand the conditions under which the phenomena come into alignment, or misalignment, as well as the reasons why it happens. The paper applies various understandings from applied linguistics, the study of classroom discourse, sociocultural theory, and psycholinguistics to propose a number of distinct patterns of alignment and cooperation, as well as various degrees of misalignment (semantic, procedural, affective, and contextual). The model does not consider language to be merely an uncritical means of conveying messages; it considers it a social activity that is understood and performed within particular contexts of organization, culture, and discourse. The paper subsequently claims that there is a tangible teaching consequence of making these patterns visible. With language–action–context considerations, reframing tasks, instructions, feedback, and assessments enables educators and curriculum developers to better predict learners' misunderstandings, reluctance to engage, or difficulties in shifting verbal instructions to purposeful action. The article closes by offering practical suggestions concerning task design, classroom interaction, and teacher training, and sets out future directions for empirical research aimed at evaluating and fine-tuning the model put forth. In so doing, the article attempts to encourage researchers and practitioners to go beyond the "if we say it, they will do it" approach to promoting a more sophisticated grasp of the way in which teaching is transformed into learning, achieved through the complex interplay of language, action, and context.

Keywords: *alignment and misalignment, classroom discourse, language–action–context, linguistic education, psycholinguistics, sociocultural theory, task design, teacher education.*

Introduction

The prevailing attitude of many linguists is that teaching is a linear process: instruction is given, actions are taken, and learning ensues. Classroom practice seems to be organized along the mechanical lines of an input-output ratio, where an utterance automatically draws a response. In this perspective, language is used almost instrumentally: utterances are made, tasks are given, and the expectation is that the processes will happen almost seamlessly. Nevertheless, the actual classroom reality challenges this assumption many times over. At times, there is a harmonious integration of language and action. For example, one instruction results in a purposeful group discussion, a rubric brings the learner close to the desired outcome, and praise notes tangible advancement. However, there is a large proportion of the time when there is a disconnect. Most commonly, learners will not understand the instruction provided. They may fail to follow the instruction, comply only superficially, not engage emotionally, or produce work that is meaningless relative to the work the teacher required. A single prompt can also produce a multitude, or one that is paradoxical, of actions across learners and contexts at the same time. Instead of a straightforward cause and effect scenario, the relationship pertaining to what is said and what is done and the rest of the location details is tenuous, negotiated, and highly contingent.

This paper attempts to explore the phenomenon of teaching as learning which entails dispelling the "If we say it, they will do it" myth. It touches on the teaching of language (linguistic education) on the level of language, action, and context. The paper attempts to develop a conceptual model integrating the findings of applied linguistics, discourse in the classroom, sociocultural approaches, and psycholinguistics. It attempts to show that language should not, in any case, be seen as a neutral carrier of information, but as a type of social action situated within specific organizational, cultural, and interaction contexts. The model analyses classroom phenomena in terms of alignment and misalignment phenomena: semantic (what is intended vs. what is understood), procedural (what is planned vs. what is acted upon), affective (what is planned vs. what is felt), and contextual (what is planned vs. what is appropriate in the setting).

To address the models' intention of not being purely theoretical, and rather, generating practical lenses that can be used to reengage and reconceptualize tasks, instructions, feedback and assessment workflow, the patterns need to be made explicit. It has been argued that understanding language as a system of action and context can assist educators and curriculum developers in predicting omission, misunderstanding, disengagement, and failure in the translation of any verbal instruction into action and purposeful engagement. In doing so, it unblocks avenues that would allow for more refined instructional planning and more realistic anticipations regarding learner understanding and engagement with classroom talk. To further investigate this aim, the article attempts to answer the following research questions:

1) How can the relationship between language, action, and context in linguistic education be conceptualized in a way that accounts for both cooperation and misalignment?

2) In what ways can a language–action–context model inform the design of tasks, instructions, feedback, and assessment so as to better support meaningful learner engagement and learning outcomes?

Scope of the study

This conceptual framework revolves around the discipline of linguistic education with special attention to the intersections of language, action and context within the classroom. The hinges of this study focus on advancing and constructing a conceptual model of the language–action–context framework which attempts to explain the patterns of alignment and misalignment of instructional language and learner behavior. The document incorporates concepts and findings from applied linguistics, sociocultural theory, classroom discourse analysis, psycholinguistics, and related fields, and attempts to synthesize more important concepts instead of providing a comprehensive review of the literature. Having sufficient breadth to cover multiple language-learning settings (EFL, ESL, and ESP as well as other strands of language instruction), the model captures various levels and types of instruction and provides practical tools for reframing task design, classroom instruction, feedback, and assessment.

Theoretical background

Language as social action

The use of language in an educational context is often considered a means of transporting information from the teacher to the learner as if "clear input" guarantees the "correct output." Within linguistics and applied linguistics, the so-called "transmission" theory has received a number of challenges, especially with the development of speech act theory and pragmatics. Austin in his seminal book "*How to Do Things with Words"* (1975), has had to defend the position that utterances do not only serve to report something. They perform actions such as promising, ordering, requesting, questioning, apologizing, and others. In this regard, having students respond to, "Open your books," "Work in pairs," and "Can anyone answer number three?" is more than giving instructions; it helps maintain social order and dynamics by assigning and managing roles, turns, and even opening and closing teaching sessions. Hence, an instruction is more than an utterance about the lesson; it impacts the lesson in and through speaking.

Sinclair and Coulthard's 1975 classroom talk analysis, with further contributions from Mehan (1979) and Cazden (2001), outlines how classroom discourse and much instructional interaction engage within the widely

used Initiation–Response–Feedback (IRF) framework. The IRF framework describes a classroom structure where a teacher asks a question and more than just an answer is elicited. The student is also chosen as a speaker and is guided as to what is expected from the answer while also being communicated the position of the teacher in regards to the answer as the one with the ultimate judgment of its correctness. When someone says “Any Questions” or “Is that clear”, there is always an intent behind. These phrases demonstrate an intention behind using moves that might seem ‘neutral’ or ‘neutralism’, such as closing the floor for discussions, or passing the floor back to the learners to gauge their understanding without support. Seedhouse (2004), refers to the role of the classroom as an interactional institution and demonstrates that the classroom serves different purposes (for example, focus on accuracy vs. focus on fluency), which have different activity patterns and interaction rules that govern them. These types of activities are conversationally structured and described as primary in the language used. In this context, directives, inquiries, comments, and evaluations are not merely vehicles for messages to be delivered; they are crucial tools for structuring engagement, authority, and opportunities to learn.

The integration of sociolinguistics into pedagogy has emphasized the social and actional components of classroom language discourse. For van Lier (1996), the classroom is described as an ecology of interaction in which various affordances of learning emerge. For instance, teacher talk and learner talk are theorized as co-constructed deeds which determine learner attention, attempts, and appropriation. Hall and Walsh (2002) also describe classroom discourse as a form of “local social practice”. They argue that it is much more than a ‘neutral’ form, and they elaborate on how various types of questions, scaffolding, and feedback open learners’ windows to participation and their obstructions as well. The way a teacher rephrases a learner’s answer, offers feedback, or ignores a contribution is not merely about managing information; rather, it is a set of identifiable social actions, such as endorsing, reformulating, marginalizing, or terminating a line of conversation. Misalignment in the classroom—students doing something that was not meant to be done—is not a lack of information; rather, it is a discord between what the teacher assumes to be the social action taking place (which could be inviting negotiation or checking for understanding) and what the learners actually interpret (which could be that the teacher is testing, or closure is being signaled).

Analyzing the use of language as social action is central to the framework constructed in this article. If one considers the verbal exchanges in a linguistic educational setting as acts situated in particular social-political and cultural paradigms, then the connection between language and student engagement is far more complex than a linear input-output model. Instead, each instruction, question, or feedback must be analyzed as a case in a larger unfolding series of social activities, where uptake depends on how participants understand previous turns, their own part, and the classroom environment in general. This action-based view of the interaction provides the rationale for simultaneously attending to language, action, and context as closely related aspects of educational practice, and to studying not only when they work in tandem, but when and why they diverge.

Action and learning in educational contexts

Within the framework of a classroom, ‘action’ is not confined solely to the observable behaviors such as speaking or writing. It entails a wide range of participatory, visible and invisible activities associated with the working and learning processes. At the surface level, action captures the performance of tasks, answering questions, group work, note taking, and even material handling. Students may be engaged in other activities that are less apparent such as language rehearsal, thinking about translation, preparing what to say, watching other speakers, and making tactical decisions to remain silent. From a discourse analytic perspective on a lesson, participation consists of speech as well as a range of non-speech activities including eye contact, hand and body movements, head and body position in relation to the activity, and other activities that may be considered attention focused (Cazden, 2001; Seedhouse, 2004). Within this context, a ‘silent student,’ one who does not actively participate in a conversation, may nonetheless ‘perform’ in a manner that is pedagogically relevant by understanding the structure of the dialogue and actively working on a potential reply, even if these actions are not actively visible.

Psycholinguistic perspectives consider the notion of action more complicated due to internal, cognitive

processes simultaneously achieved with mechanical classroom behavior. Language understanding and articulating involve processes like focusing, remembering, managing, and correcting (Levelt, 1989; Ellis, 2005). During the learner's understanding of step-by-step instructions, silent sentence and word rehearsal, and the outlining of talk scripts, they are performing actions which, though crucial for learning, are seldom formally recognized and are certainly not observable in classroom configurations. As noted in Swain (2000), the term "languaging" clarifies the act of using language to think through and explain which is a critical moment for the learner in knowledge construction and knowledge restructuring. Actions such as thinking aloud, negotiating meaning with peers, or self-explaining a rule are not peripheral, but central, to this stage of language development, even when they do not lead to a sculpted, tangible outcome.

Sociocultural theory breaks down the connection between action and learning even further by describing learning as a form of mediated action. In volume and part of the Book of the Mind, Vygotsky (1978) conceives of the higher mental functions of an individual as starting from the engagement in social activities. These activities are organized and socially structured, and the participant's action is mediated through the tools and the sign systems, and foremost, the language. From this perspective, classroom learning is not the integration of information received from other people, but the slow evolution of engagement: what learners can attain initially with the assistance of more skilled individuals within their zone of proximal development, the learner eventually comes to do autonomously. Asking for assistance, receiving scaffolding responses, imitating a model, or co-constructing an utterance with the teacher, are all important mechanisms for development, not peripheral results of instruction (Lantolf & Thorne, 2006).

Within this sociocultural framework, scaffolding becomes a crucial form of pedagogic action. When teachers reformulate a learner's utterance, provide a sentence starter, slow down their speech, or segment a complex task into manageable steps, they are guiding that learner's participation in productive ways that enable new forms of action (Wood et al., 1976; Donato, 1994). Concurrently, the learner's actions, which include signaling confusion, attempting a solution, and assuming more control over the task, constitute feedback that enables the teacher to adjust the degree and kind of assistance offered. Learning, therefore, results from a constantly changing interaction of collaborative actions, and not from a one-directional pass. Misalignment is defined as a situation when there is a gap between scaffolding provided and the actual needs of a learner as a result of contextual and institutional factors which impose restrictions on what learners can reasonably do.

Reconciling these perspectives, action within educational contexts can be viewed as a construct with multiple components, including overt task performance, modes of engagement, and various internal cognitive and affective processes—all of which are mediated by internal and external tools, symbols, and diverse interpersonal relations. This means that the conceptual model developed in this article goes beyond simply checking to see if students "do the task." Evaluating the association between language and learning involves looking deeper to the quality and characteristics of their performances—who engages, in what manner, using what resources, what types of support are given, and what level of autonomy is afforded. Acknowledging action in this broader sense offers the opportunity to understand when language, action, and context cooperate productively and when they diverge, resulting in procedural failure, withdrawal, and lost learning opportunities.

Context as organizational, cultural, and interactional space

In the field of linguistics, context is considered more than a neutral backdrop. It is a defined set of restraints and resources around which certain meanings and actions are more probable than others. On an organizational level, context is made up of institutional culture and set practices, curricula and its ordering, timetable structuring, the ratio of students per instructor, and grading systems which prescribe what is considered valuable and permissible in the process of teaching and learning. In Bernstein's (1990) analysis of pedagogic discourse, including the functions of distribution, pacing, and timing of knowledge in schools and universities, it outlines the form of talk and activity that is approved at the institution. An example is exam systems that favor quantifiable outcomes and systematically correlate learning activities to testing templates,

aiming at teacher talk that is predominantly instruction, display question intensive, and learner engagement that is answer-focused at the expense of discussion. Within the framework developed by Bronfenbrenner (1979), these aspects of the institution constitute elements of the "exosystem" and "macrosystem" which covertly shape classroom practice at the local level.

At the cultural level, context includes mutual understandings regarding roles, power, respect, and proper engagement. As Kramsch (1993) contends, teaching a language is always done in the context of language and culture; what a culture and society considers a "good student," "respectful question," and "active participation" differs from one culture and system of education to another. While some contexts may frame engaging with a teacher's statement critically more positively than others, some may view it as a form of disrespect or a challenge. These culturally driven perceptions shape how students comprehend the illocutionary force of utterances by the teacher—for example, whether a question constitutes an invitation to guess, a recall question, or a formality to demonstrate comprehension—and thus, influence the possible or safe choices students consider taking (Duff, 2002). According to Bourdieu (1991), some forms of communication are tied to relations of symbolic power; their use in social practice depends on the social fields in which the behavior occurs.

On the interactional level, context is constructed gradually through classroom activities, participation frameworks, and contextually developed meanings. Seedhouse (2004) describes a language classroom as an 'interactional institution' with unique types of activities (e.g. form-focused drills, meaning-focused discussions, assessment sequences) where particular turn-taking, repair, and contribution norms govern each type of interaction constituents. These micro-contexts shape how individual utterances are interpreted; the same student response may be treated as correct, incomplete, or off-task depending on the ongoing activity type. Lave and Wenger's (1991) concept of 'communities of practice' stresses even further that learners are not only recipients of input; they are, step by step, learning to function as members of specialized discourse communities, mastering expectations that go with the linguistic and extralinguistic forms about timing, relevance, and positioning in the interaction.

Context has these dimensions as well—material and technological. A classroom configured as rows of desks facing a board and a classroom set as clusters of desks around tables afford different patterns of gaze, gesture, and interaction. A teacher who stands behind a lectern and one who moves about the students' desks perform different actions. Digital technologies such as smartboards and learning platforms provide new semiotic resources such as written instructions on a platform, automated feedback, and even the mute/unmute functions of online teaching resources that control how learners receive and respond to language. Goodwin (2000)'s concept of "professional vision" makes us aware that tools and artifacts (slides, rubrics, worksheets) do not only assist communication; they also assist in crafting what is seen, what is heard, what is considered relevant, and as a consequence, what actions are made normatively available.

In combination, these context dimensions – organizational, cultural, interactional, and material – are powerful influences on meaning in any contexts of language use and on which actions are feasible in language education. A wide range of interpretations and subsequent actions can be taken when hearing and implementing the instruction, "Work in groups and discuss the questions" in an examination-oriented institution, in a cultural context which does not encourage peer-to-peer critique, in a classroom where group work is considered a rare occurrence, and in a crowded space with immobile desks. Accordingly, the balance or imbalance between speech and action cannot be ascertained by considering the text of a set of instructions only; it emerges from the alignment—or its absence—between those utterances and the situational matrices wherein they are embedded. To the conceptual framework of the construct under consideration in this article, context is therefore not an exogenous variable but rather a constitutive dimension of the language–action nexus, determining both what utterances can meaningfully be construed as and what actions they realistically make available for the teachers and learners.

Existing work on language–action links in linguistic education

The body of research concerning pedagogic discourse has focused greatly on the frameworks,

assignments, and communicative strategies employed during lessons on practical language use and lessons on discourse at the level of the classroom. The exponents of the IRF cycle, like Sinclair and Coulthard (1975) and Mehan (1979), formed the foundation of classroom discourse by showing that, as information-gathering moves, teacher questioning and subsequent moves do far more than just retrieve information. They, in fact, facilitate participation and scaffold the actions which learners are capable of carrying out. Subsequent scholars of language pedagogy (e.g. Long, 1985; Ellis, 2003; Nunan, 2004) framed pedagogical tasks in terms of plans for action designed to achieve specific language use and interactional goals. Within this approach, instructions are seen as part of the critical "pre-task" discourse which sets the frame for learner action, while interactional elements such as meaning negotiation, clarification, and confirmation are treated as action systems through which learners together resolve understanding difficulties and advance the tasks (Gass & Varonis, 1991; Pica, 1994). Seedhouse (2004) and Markee (2008) describe research that uses conversation analysis to study interaction within classrooms and expanding on it has shown that different pedagogical goals (for example, form-focused practice vs. meaning-focused discussion) correspond to different interactional structures and action sequences, underscoring the close interconnection between institutional goals, teacher discourse, and learner behavior.

In parallel, earlier investigations analyzed how instructional language interacts with learner response to produce miscommunication, uptake, and engagement. Studies on corrective feedback and uptake (Lyster & Ranta, 1997; Nassaji, 2010) suggest that during some teaching episodes, the form and timing of teacher responses result in different learner moves, from self-repair to no observable reaction, which implies that the same linguistic signal may or may not "land" as intended. Research on student engagement (Fredricks et al., 2004; Mercer & Dörnyei, 2020) identifies and analyses behavioral, emotional, and cognitive dimensions of action, which show that learners may follow instructions at the behavioral level, but at the same time, disengage affectively and adopt a passive cognitive stance. Recent studies focused on conversation analysis in the classroom (Waring, 2011; Sert, 2015) capture instances in which students do not complete the assigned tasks, reframe the given instructions, or bootstrap side-sequences. Such instances highlight that learner action cannot simply be considered an output, but rather, a complex response to the immediate contextual interaction and institutional framework. Collectively, these studies unambiguously portray language and action in the classroom as relationally coupled, shaped by expectations, roles and types of activities rather than determined by the utterances alone.

Regardless of this rich body of work, there still exists a visible gap: a lack of studies providing an integrated conceptual model methodically outlining the triad of language, action and context, while also formulating different models of alignment and misalignment. Existing research tends to focus on specific segments of this triad, such as the design of the task and the interaction it governs, the architecture of repair sequences, or engagement frameworks and dynamics, often in a context-light or context-deficient way, treating background factors (institutional norms, assessment regimes, cultural conditions, material conditions) as primary rather than as secondary to the language–action relationship. Equally, although the terms 'miscommunication' and 'non-uptake' are often defined, they are seldom described within distinct underlying forms (e.g. semantic, procedural, affective, contextual) in a unified approach. Thus, a model is needed that integrates the above understandings to account for the circumstances and reasons underlying the alignment and disengagement of classroom language and learner actions, and how various contextual elements shape these outcomes. The present paper attempts to fill this gap and model the insights to be able to use them in reconsidering existing findings in linguistic education within a unified language-action-context model.

Methodology

This study employs a qualitative conceptual framework as the primary research method, relative to descriptive and analytical processes. Instead of collecting primary empirical data, this research centers on a systematic and interpretive review of the extant works on teaching and learning languages, particularly within the nexus of action, language, and context in educational practice. Within the corpus, the texts comprise theoretical and empirical works spanning applied linguistics, studies of classroom discourse, sociocultural

psycholinguistics, and educational research, alongside portions of sociolinguistics and studies of multimodal interaction. There is no intention here of providing a comprehensive account of all these works. Instead, the focus is on distilling and integrating fundamental ideas and repeating motifs and explanatory models that illuminate the ways in which the discourse of teaching is understood, performed, and pushed back in actual teaching contexts.

The analysis was divided into three phases. In the first phase, the researcher located and chose documents that concerned some classroom interaction, the use of language in teaching, learner activity, and the impact of context on teaching and learning. In the second phase, the relevant literature was thematically and conceptually analyzed, where repeated accounts of instruction and learner action were divided and coded as cooperative and breakdown in multiple dimensions semantic, procedural, affective and contextual. Third, these finally formulated ideas were synthesized and represented in a new model termed the language–action–context framework, which is aimed at unifying the phenomena of alignment and misalignment in linguistic education. In all these steps, the focus was on model construction and clarifying concepts. As a result, the framework constructed represents a methodological outcome that serves as a guide for future empirical investigations, task and curriculum construction, and practitioners' reflective practice on the realized and non-realized translations of their pedagogical intentions into classroom actions.

A conceptual model of language–action–context

Core components

Within this model, the relationship between language, action and context is described as a dynamic triad rather than as a linear sequential input–output chain. Each component is analytically separate yet empirically entangled: language does not merely "carry" information, action is more than just a response, and context does not function as a blank space. Rather, language, action, and context constructively engage with one another in ways that can promote either alignment or misalignment in the field of linguistic education (Seedhouse, 2004; van Lier, 2004).

In this model, language comprises various oral and written communication processes involved in teaching and learning: classroom instructions, questions, explanations, feedback, rubrics, and digital prompts on learning platforms. Based on speech act and classroom discourse research, these utterances are regarded as social actions that distribute turns, set boundaries, assess input, and shape self and other images, rather than as neutral information transfer (Cazden, 2001; Sinclair & Coulthard, 1975). A rubric, an online message, and a spoken directive can all be considered as designed invitations to particular types of engagement and output.

Within the context of language, both teachers and students undertake a plethora of activities referred to as action, which include complying with and opposing set tasks, clarifying, remaining mute, collaborating, improvising different procedures, and even changing topics. All action involves visible behaviors; talking, gesturing, moving, performing a task, and some activities, which are less visible, such as planning, monitoring, and even rehearsal of language (Levelt, 1989; Swain, 2000). These actions can be understood from a sociocultural standpoint as activities of a mediated form through which learning is achieved in collaboration or interactions with others and with tools (Vygotsky, 1978; Lantolf and Thorne, 2006).

The term context refers to the multifaceted organizational, cultural, spatial, and interrelational settings incorporating language and action use. It comprises institutional policies and evaluation systems, classroom activities and engagement patterns, culturally defined patterns of authority and politeness, as well as the physical and technological resources of the environment (Bernstein, 1990; Kramsch, 1993; van Lier, 2004). Such contextual parameters influence the framing of an utterance—consider when a question is posed and the difference between it being regarded as a test versus an invitation to dialogue—and constrain the set of actions to which participants can reasonably, appropriately, and safely resort to carry out (Seedhouse, 2004; Duff, 2002).

In fact, these fundamental components construct the foundation of the language–action–context model: language as patterned social action, action as participation of some sort, and context as the environment that organizes and conditions the structuring meanings and possibilities. The rest of the paper uses this framework

to describe alignment and misalignment patterns in linguistic education.

The language–action–context triad

In the proposed model, the relationship between language, action, and context can be visualized as a triad—for example, a triangle with the vertices labelled Language, Action, and Context, with arrows showing bidirectional connections. This visual representation suggests that each of the three elements is not thoroughly comprehended in isolation. Language represents the realm of *designed intentions*: the instructions, explanations, questions, rubrics, and feedback through which teachers project particular pedagogical goals and anticipated learner behaviors (Sinclair & Coulthard, 1975; Cazden, 2001). The language used here does not just communicate topical information; there are also built-in predictions as to what might occur next in this session: who will talk, what actions they might undertake, and what their actions will be assessed against. Thus, language is the main instrument through which anticipated conduct is suggested and made visible in the classroom.

In contrast, action pertains to behavior within its undertaken scope which includes what instructors and learners do with, though, and at times in opposition to those linguistic projections. This includes overt behaviors such as following a given instruction, initiating a repair, working in a group, and even 'sitting in' as well as covert behaviors such as inner speech, planning, and monitoring (Levelt, 1989; Swain 2000). From a sociocultural standpoint, these are not simple acts, but rather actions of participation that learners take while advancing from the margins to the center of involvement in a classroom practice. Of fundamental importance, fulfilled actions may conform to the intent of the teacher's design very closely, may approximate them, or may differ greatly, thereby reflecting varying levels of alignment or, conversely, misalignment within the triad.

Context is the third vertex of the triangle, and is understood as the mediating boundary that defines interpretation of language, and determines what actions are possible, permissible, or meaningful. It includes organizational normative and evaluation practices, meso-level structure and function of the class, social culture of the classroom about power and participation, and the concrete/technological resources of the educational environment (Bernstein, 1990; Kramsch, 1993; van Lier, 2004). Such contextual layers influence which directives are considered negotiable and non-negotiable, which questions are open to speculation and which ones are meant to elicit a recollection or answer, and to what extent learners feel empowered to act or are restricted to very little to do.

The central assertion of the language-action-context triad is that the interrelations among the three components are multidimensional and reciprocal, rather than one-dimensional and unidirectional. Language influences action by anticipating subsequent moves and narrowing down feasible courses of action; action influences context by creating new sets of routines, norms and participation over time; and context influences language by governing the types of discourse that are culturally and institutionally permissible, such as examination talk or instructor-student discussion (van Lier, 2004; Lave & Wenger, 1991). The gap between a learner's actions and a teacher's intentions – or 'misalignment' – does not derive only from language not being understood. In this case, there appears to be some form of tension within this triad (for example, in a command contrary to a local custom, or actions that a given set of conditions allows). This article's conceptual model adopts this triadic, mutually constitutive perspective to analyze cooperation and breakdown patterns in linguistic instruction.

Patterns of alignment and misalignment

Cooperative patterns

The cooperative patterns which concern the alignment of goals of the instruction with the instructional language and the learner action(s) in the language–action–context model is referred to as the moments in which the learner and teacher have consonance of purpose in the advancing and the achieving of certain goals in the instruction. These patterns do not refer to one item. They are relatively simple cases or customized forms of cooperation. These customized forms of cooperation are complex cases in which learners do exactly what is asked of them. Recognizing the differences between direct, supportive, and transformative alignment

enables one to go beyond the simple “success” and “failure” to elaborate the ways in which language and action can synergize in linguistic education.

Direct alignment concerns situations in the learning process whereby the instructional language is understood as intended and the learners execute the related actions in a way that closely follows the teacher’s thought-out sequence. As an instance, a command with the phrase “In pairs, please compare your answers for exercise three,” may result in immediate pairing, focused comparison with timely reporting back, without the need for clarification. Regarding classroom discourse structure, these instances coincide with relatively smooth micro-Initiation-Response-Feedback (IRF) sequences wherein the teacher's move achieves the desired response type. Several studies on Conversation Analysis have captured instances where speakers seem to understand what the next action is and are able to perform it without trouble. This indicates that there is a striking disconnect between the intentions built into the communicative utterances and the actions carried out by the learners (Seedhouse, 2004).

Supportive alignment refers to instances in which words and actions come together but only with the support of additional semiotic and social means outside the original verbal command. In this case, the alignment is not only with the task wording; it is also with the gestures, the demonstrations, the other written materials, peer help, and other physical objects that assist learners in understanding and performing the required actions. Previous investigations regarding classroom interactions involving multiple modes of communication have demonstrated how a teacher's gestures displaying focus, such as pointing, modelling, and the use of boards/slides clarify vague directions and lead students to beneficial ways to participate in class (Goodwin, 2000; Mortensen, 2008). Likewise, sociocultural research on scaffolding emphasizes how peers and teachers construct understanding together through contingent support, reformulation, and collaborative problem solving (Wood et al., 1976; Donato 1994; Lantolf & Thorne, 2006). In these cases, the alignment of language and action is the result of multiple agents and multiple modes working together; the instruction “works,” but only because it is situated within a denser ecology of supportive practices and resources (van Lier, 2004).

Transformative alignment occurs when there is stronger cooperation and the learner’s actions go beyond the teacher’s original intentions and add to or reinterpret them productively. The learner goes beyond the surface of the task and views it as an opportunity for wider critical and creative engagement. A task which includes ‘tell me your thoughts on the pros and cons of distance learning’ may have students reflect on their own lives, challenge the fundamentals that may be lacking, broaden the scope (equity, surveillance, and even monitoring, and labor), or come up with other solutions that were never even contemplated by the instructor. This sort of alignment corresponds with the dialogic and inquiry approaches to teaching, where discussion in the classroom is viewed as an opportunity to build a shared understanding of the topic, rather than simply answering ‘stock’ questions that have predetermined answers (Alexander, 2008; Wells, 1999). The definition of transformative alignment in Swain (2000) and Mercer & Littleton (2007) refers to instances when learners engage in language-in-action collaborations to reconfigure their knowledge systems which in turn transform an assignment into a genuine opportunity for conceptual growth. The cases where the interface of language and action goes beyond the interface of the ‘cooperative’ design suggest that alignment does not have to be reproduction but rather a creative and agentive response to the underlying pedagogical purposes.

Misalignment patterns

Unlike cooperative patterns, misalignment patterns focus on instances of instructional language and learner behavior which do not “fit,” although all of the actors may be honestly trying to do the right thing. Within the language–action–context model, four analytically distinct, though often overlapping, types can be identified: semantic, procedural, affective, and contextual misalignment. Each type focuses on a different locus of the chain where intention (language) designed and lived behavior (action) may break or bend.

Semantic misalignment takes place when learners do not understand the meaning of certain words, grammatical structures, or discourse markers as the instructor does. The teacher’s instruction, “summarize the author’s stance and provide a critical reflection” is a case in point where some students understand the

instruction as simply, “repeat the main ideas.” The problem lies in the fact that the students do not relate the words stance and critical to their extremely broad, non-academic meanings. Likewise, different ESP or CLIL contexts may provide students with some key terms (“compare qualitative and quantitative data”) which may result in their misunderstanding or only partially grasping what is being asked. The relationship between vocabulary load and comprehension has been studied (Nation, 2001; Webb & Nation, 2017) and it has been established that the presence of unfamiliar or partially known lexicon dramatically hinders learners’ ability to respond appropriately to given directive speech acts, both written and spoken. In such cases, lack of alignment is not a case of unwillingness or lack of effort, but a difference in the underlying semantic constructs contained in the teacher's discourse and the learner's available vocabularies. For example, in my session, many students, when I ask them to 'justify their choice with evidence,' take justify to mean 'explain what you did,' so I end up with opinions without evidence. Also, in a specific medical ESP task where I instructed participants to ‘administer the drug’, some students interpreted the phrase as ‘recommend’ or ‘give advice’ as opposed to a more accurate professional meaning of ‘deliver/dispense according to specific medical procedures’, thus altering the professional meaning completely. In business ESP courses, students misunderstood 'stakeholder' as 'shareholder', neglecting clients, regulators, and employees. As a result, their analyses presented a lack of breadth in conceptualization.

Procedural misalignment occurs when the meaning of instruction is understood, yet the learner is unable to determine what actions are needed to actualize this instruction. The concern is not about the intrinsic meaning of the instruction. The question that remains unanswered is, what do we do next? Research in task-based activities has shown that learners might understand a task goal but struggle with the order of actions, the participants, or the outcome (Ellis, 2003; Nunan, 2004). In this scenario, a teacher might give the instruction, “In your groups, plan a short role-play of a misunderstanding that happens at work.” They may notice that students sit in silence, waiting for further instruction. This might be the case because students do not know who should begin the role-play, the expected duration of the role-play, if it should be scripted beforehand, or what a satisfactory “misunderstanding” truly is. According to Samuda and Bygate (2008), the completion of tasks is associated with the learners having sufficient knowledge of the procedural details of the tasks, ‘how to go on’, in Wittgenstein’s sense, and also having to tackle poorly described instructions which almost always leads to a state of confusion and off-task engagements. Off-task engagements of this type represent a misalignment of gaps between a teacher’s internal monologue regarding the activity, and the learners’ understanding of how to perform the learners’ internal dialogue. For example, when I first ask and tell them to provide me with a “short incident report” they understand the topic and the focus, but they do not understand the required structure line, such as time, place, who, what happened, what particular action is taken, and then the recommendations, and so they come up with a report in the form of a story rather than an actual report.’ When I ask students to compare the two graphs and summarize the trends, students lack the process and go straight to the conclusion instead of describing the key figures first, i.e. describing. Additionally, when composing emails, the content is often present, but the authors frequently do not observe the principle of structuring emails as follows: subject line, greeting, statement of purpose, requests, suggested deadlines, and closing—they therefore come across as informal and vague.

Affective misalignment occurs when instructions are clear and unambiguous, yet learners' emotional or motivational behaviors lead to counterproductive actions, in this regard, fully participating. An example would be when a student is fully aware of “Raise your hand and share your opinion with the class,” but chooses to remain quiet due to a serious case of anxiety, fear of judgement, or a disregard for their own ability to perform. An example could be asking a group of learners to “debate the pros and cons of online surveillance’’ and they almost all remain static with very little usable output. This is a sign of boredom, exhaustion, or doubt about the relevance and importance of the task. Motivation, in conjunction with anxiety, and language learning research highlight the importance of affective variables that mediate whether learners transform understanding into doing. Within this perspective, misalignment is not a breakdown in understanding, nor a breakdown in a sequence of actions, but rather a gap in the emotional requirements of the intended behavior (e.g. the projected behavior of speaking in front of a class) and the emotional investments a learner is

prepared to make (Dörnyei, 2005; Horwitz, 2001; Fredricks et al., 2004). Based on my experience, I can say that many students will not make corrections for peer reviews because they are afraid of 'hurting' someone. It is not just because of the language of the task. It is because the social structure of group work is more valuable than receiving and responding to criticism in the task. Further, even with the guidance provided, learners still do not utilize the polite refusal strategies ('I'm afraid I can't…') as they fear that it may appear impolite within their culture, which subsequently molds their language choices.

Contextual misalignment highlights circumstances of a mismatch between the organizational, cultural, physical, or technological context, and the intended actions. These factors could be perceived as conceptually aligned, as well as synthetic and emotive, but contextually, they are difficult, risky, or outright impractical to carry out all the same. While a professor may invite the class to 'Challenge the author's argument and propose alternatives', due to the heavily examination-oriented system, students might feel that their divergent thinking will not be rewarded, and might limit their efforts to 'safe' analyses expected during testing. In the other scenario, a class where students are expected to mobilize and work in groups might be greatly undermined because the class does not have movable desks, the desks are in rows, or while the desks are in pairs, students are expected to work in virtual rooms which their unstable internet connections and poorly functioning microphones greatly hinder. Research on sociolinguistics and sociological aspects of education (Bernstein, 1990; Bourdieu, 1991), and on ecological perspectives of language learning (van Lier, 2004) underscore how institutional grammar, evaluation systems, and resource availability impose boundaries on what is considered practical or approved behavior. Contextual misalignment thus captures the tensions between what the instruction envisions learners performing, and what the context constrains them to performing, without incurring punishment or significant challenge. As an example, courses right after long exams yield low levels of attention, and group discussions become fragmented. Context also shifts margin success, as the same task is accomplished seamlessly on another day. Also, when I do 'pair negotiations' in large classes, I have to deal with significant noise and students switching to Arabic during the task. I tackle this issue by trying to uncover the classroom ecology that has been constraining the English interaction I aimed for.

These four patterns of misalignment highlight how unresolved instructional language and learner action problems are deep and multi-faceted. Some single episodes, such as students not participating in discussion, can involve semantic ambiguities, procedural gaps, affective blocks, and contextual barriers at the same time. In this context, the model proposed in this article illustrates that distinguishing patterns is useful not when they are treated as exclusive categories, but when they provide greater precision for identifying the failure of language, action, and context to integrate. In doing so, we can highlight where pedagogical action is likely to be most needed.

Interplay and movement between states

The relationship between action, context, and language, in a real classroom, is not a state of "working" or "not working." It is a dynamic process where constant movement between alignment and misalignment is observed. Studies in conversation analysis focus on classroom discourse demonstrating that there is a sequence of turns in which participants are managed locally. Participants focus on trouble and repair endlessly, going from a state of smooth progressivity to one of breakdown and returning to it (Walsh, 2011). A task may begin in direct alignment and in a synchronistic manner—students follow instructions and begin working as intended—but as the activity unfolds, possible ambiguities, procedural gaps, or emotional barriers may arise and cause a temporary misalignment. On the other hand, episodes that seem to be problematic at the beginning (silence after a question, off-topic conversation, or different understandings of a rubric) can, after a series of particular actions by the teacher and learners, be converted into constructive episodes of clarification, negotiation, and productive engagement (Waring, 2011). From this perspective, alignment and misalignment are better conceived as states through which interaction progresses, rather than as stable properties of tasks and participants.

These movements are interpreted as communication feedback loops where language, scaffolding, or task

structure changes are aligned and improved upon to restore and augment cooperation between action and language. Usually, teachers observe and address signs of trouble, or signs of degradation, such as hesitations, incorrect workings, and sidelong glances, by reformulating the instructions, providing extra illustrations, demonstrating the initial stage of a task, or partitioning sophisticated actions into smaller, sequenced components (Cazden, 2001; Samuda and Bygate, 2008). This type of scaffolding is especially crucial to the sociocultural view of learning wherein growth is perceived as deriving from help on a task within the zone of proximal development. At a macro level, ongoing confusion with an activity, a type of task with which someone does not fully engage, or a chronic discrepancy between assessment criteria and classroom activity, recurrent misalignments can lead to task redesign and rubric rewording or participation structure reconfiguration, showing how action and context 'feedback' to influence later language use (Black and Wiliam, 2009).

Recognizing alignment and misalignment as shifts that occur continuously in the classroom is significant in itself. It shows that misalignment is not simply a matter of failure; it offers insight: it shows where the present alignment of language, action, and context is most tenuous, and thus, where pedagogical change is likely to be most productive. In the language–action–context framework of the present proposal, these feedback processes are primary: language directs action, but the action that is taken, particularly when it is misalignment with expectations, reshapes the interactional context within the body of the lesson (through scaffolding) and the pedagogy of the lesson (through subsequent modifications to the lesson and curriculum as a whole). This cyclical view highlights the adaptive characteristics of a language education program and justifies the treatment of patterns of misalignment as opportunities for reflective practice rather than problems that need to be solved.

Pedagogical implications

Rethinking task and instruction design

Based on the language–action–context model, tasks and instructions should not be designed as creating an ideal pathway for input–output, but as creating flexible invitations for multiple potential actions. Most traditions on the views of tasks suppose that behaviors of learners will be uniform and predictable as long as instructions are "clear enough." Nonetheless, studies in task-based language teaching and classroom interaction have continuously demonstrated that learners' understanding of a given task can differ greatly, based on their pre-existing knowledge, objectives, self-conception, and surrounding situation (Ellis, 2003; Nunan, 2004). Instead of attempting to remove all variability, instructional design can allow for a range of reasonable outcomes by indicating permissible options ("You can select either X or Y"), defining goal(s) of the task while maintaining learner choice, and explicitly stating that different people may approach the task in different ways. For example, Samuda and Bygate (2008) contend that "task-as-workplan" and "task-in-process" are both apparent in effective pedagogic tasks, wherein the latter is learner-driven and variation is intrinsic. Developing directions that enhance this duality—specifying certain boundaries (duration, outcome, evaluative standards) and also multidimensional feedback—can help mitigate unproductive misalignment and foster productive divergence.

The second implication is the need to go beyond descriptions of different types of tasks and to systematically integrate modelling, exemplars, and visual aids. Research on multimodal interaction has demonstrated that the teacher, in the course of a lesson, systematically employs gesture, gaze, posture, and the use of various tools (boards, handouts, slides, etc.) to help learners understand the procedural and semantic dimensions of some tasks (Goodwin, 2000; Mortensen, 2008). From a sociocultural viewpoint, such resources act as guides and assist learners in understanding the assignment not only in terms of what is required, but also the steps to follow. Reducing procedural misalignment can be accomplished by learners being given models of what actions are expected, such as providing a brief demonstration of the first stages of a group discussion, presenting a model answer, or providing a sketch of the steps of a project (Dörnyei & Murphey, 2003; Samuda & Bygate, 2008). When learners work with visual prompts like flow charts and timelines, and checklists, and are prompted with specific text on slides and platforms, they are able to

adequately utilize their working memory to concentrate on basic criteria and vital instructions during tasks, instead of hearing lengthy instructions which tend to be forgotten easily. (Sweller, van Merriënboer, & Paas, 1998).

In this case, designing flexible, multimodal instruction fosters opportunities to address the semantic and affective dimensions of alignment. Key technical vocabulary can be visually glossed or exemplified; potential misconceptions can be pre-empted by contrasting “appropriate” and “less appropriate” responses; and anxiety can be alleviated by modelling partial, work-in-progress contributions, rather than only polished performances (Horwitz, 2001; Mercer & Littleton, 2007). It is noteworthy that the design choices here are not arbitrary. Rather, they are attempts to make adjustments to the language–action–context triad ‘better’ so as to make it easier to convert instructions into something that is performable and reasonable. Rethinking tasks and instructions therefore requires seeing them as design spaces, not just clauses: there is provision to map out various pathways, frame instructions and actions through several shifts, and painstakingly mesh the desired activities with the situational context of the class.

All in all, as a teacher, I always observe the modelling provided to students in the previous parts to check for understanding and then I switch to a template and example strategy where I show students a complete example for each section to then fill in the example in a way that is meaningful to them. Also, I use 'ICQ' (instruction checking questions): 'What is the first step?' 'How many points is it worth?' 'What is the deadline?' and that reduces procedural drift immediately.

Classroom interaction and feedback

Within a language–action–context perspective, the classroom interaction is the central place for monitoring what instructional language has been transformed into the intended learner actions, and where instructional misalignments can be addressed. A critical set of practices revolves around student monitoring and questioning strategies that reach beyond the mechanical, “Is that clear?” that often elicits a polite nod. Studies and reports on classroom discourse and formative assessment have shown that more effective strategies include asking learners to perform tasks that demonstrate understanding—paraphrasing instructions, providing an example, identifying the first step of the task, and modelling a short segment of the required performance (Black & Wiliam, 1998; Cazden, 2001). For example, a teacher asking, “Do you understand the task?” might prefer saying, “What is the first thing you and your friend are going to do?” or “Who can demonstrate how we begin the role-play?” These actions treat understanding as a behavioral phenomenon, allowing them to identify definitional and operational inconsistencies as early as possible as opposed to allowing them to become deeply set. As noted in case studies of conversation analysis (Walsh, 2011), such checks often occur at pivotal transition points such as after task instructions, prior to group work, or immediately after an explanation. These moments of interaction are critical because they can greatly influence learner behavior in the entire lesson that will follow.

In this regard, feedback is not simply an evaluation of accuracy but rather a central element to tie what was uttered to what was executed, and to close and/or open gaps between intended design and behavioral outcome. The different types of feedback (recasts, prompts, metalinguistic comments) that capture various learner responses have been the focus of the corrective feedback and uptake studies (Lyster & Ranta, 1997; Nassaji, 2010). In building upon this work, a language–action–context model proposes that effective feedback must connect: (1) the focus of the instruction or the goal (“We said the purpose of this summary was to show the author’s stance”), (2) the learner’s action or observable product (“In your summary, you repeated the examples but did not state the stance”), and (3) the instruction’s building block, a feasible next action (“Try adding one sentence that explains whether the author supports or criticizes the policy”). Such feedback enables learners to understand how their actions are aligned to, or how divergent they are from, the task, making the patterns of alignment and misalignment visible and actionable. Research on formative assessment and “feedforward” (Hattie & Timperley, 2007; Black & Wiliam, 2009) emphasizes that feedback is the strongest when it responds to all three questions—Where am I going? Where am I now? What next? which all assume a bounded, though contextualized, mapping of the discourse (criteria, goals), performance (current

action), and surrounding conditions (time, tools, support).

Interactionally, feedback is also a dialogic process: learners' replies to feedback (acceptance, resistance, partial uptake, self-repair) inform the teachers about the state of alignment in the class. In the case of a teacher clarifying a task to try to resolve the students' concerns, if the students still show hesitance or go off target with the actions, it is likely that deeper semantic, procedural, affective, or contextual issues are at play, and so further scaffolding or even a redesign of the task is warranted. Hence, classroom interaction aspects such as checking-for-understanding strategies and 'systems of feedback' serve as ongoing diagnostics loops because they monitor and readjust instructional discourse, learner action, and contextual boundaries and affordances. In the model proposed in this article, these are the primary places where the triad of language–action–context can be actively designed, as opposed to neglected, for the purpose of creating richer and more equitable learning opportunities.

Assessment and curriculum design

In the lens of context and language in use perspective, assessment is more than matching a product with the 'criteria'. It needs to be aligned with the actions that the tasks trigger in a real classroom setting. Work in constructive alignment (Biggs, 1996, 2003) argues that intended learning outcomes, activities, and assessment tasks should be tied together in a system. Viewing from this lens, a writing activity that is assessed on grammatical accuracy only, or an "oral interaction" activity that is primarily a monologue, creates systematic misalignment between what the learners have to do and what is finally assessed. A more action-sensitive approach starts by understanding the manner in which learners are likely to perform a task. What forms of participation and what forms of collaboration and strategic behavior exist? Then, these in turn develop assessment criteria described in terms of observable behavior (for instance, "builds on contributions of peers," "used examples to justify a claim," "revised text after receiving feedback"). These criteria establish a direct connection between the task's language, the action needed, and the reasoning for the assessment, thus minimizing discrepancies between the provided instructions, the action taken, and the assessment provided (Black & Wiliam, 2009; Hattie & Timperley, 2007).

In terms of curriculum design, incorporating a language–Action–Context framework means understanding curricula not simply as bounded lists of content and skills, but as intended pathways for participation for particular types of classroom action. Ecological and sociocultural perspectives (van Lier, 2004; Lantolf & Thorne, 2006) advocate for syllabi to be designed with careful consideration of the contexts of learning: institutional constraints, the tools at hand, the dominant interaction patterns, and the local cultural norms. Such a curriculum would delineate different tasks intended for increasing learners' repertoires of linguistic and interactional activities (e.g., from tightly scaffolded IRF exchanges to increasingly open dialogic tasks), while also adding recurring opportunities for teachers to monitor (mis)alignment and modify subsequent designs. To put it practically, this means writing learning outcomes that address ways of doing and ways of interacting (not just knowledge of forms), incorporating reflection on instruction and task uptake into teacher education, and revisiting task types, rubrics, and routines for how they occur in actual contexts on a periodic basis.

Implications for teacher education

Including a language-action-context perspective on teacher education involves helping teachers understand the concept of the classroom in a radically new way: not as a venue for clear explanations followed by appropriate, robotic behaviors, but as dynamic spaces where language, learner actions, and context in the classroom mildly and severely encroach upon alignment and misalignment. This type of professional vision will necessitate 'Goodwin (1994)' systematic training on how the various types of instructions given are taken up, where the learners hesitate or derail, and how various institution, culture, or material factors define what is achievable. The work on the cognition of the teacher and reflective practice (Borg (2006), Schön (1983), Farrell (2015)) indicates that such noticing does not result from experience; it is manufactured by the carefully controlled reflective appraisal of actual teaching and learning encounters. For

example, with the help of Walsh (2011), teachers can be guided to mark their video-recorded lessons, focusing on the coding of instances of semantic, procedural, affective, and contextual misalignments, and possible misaligned alternative interactional moves, including how they could have acted otherwise. In this way, the categories of the language–action–context model serve as frameworks for analyzing the possible explanations behind a learner's inaction or intended actions.

The model also serves as an additional lens in teacher education and professional learning communities for holistic understanding and collaborative lesson reflection. Discussions anchored to micro-analyses of transcripts or videos in response to What was the teacher trying to achieve with this instruction? What did the students actually do? and What aspects of the context did, and did not, support 'alignment', can facilitate movement away from global statements about children (e.g. 'They weren't motivated') to detailed descriptions on the interplay of language, action, and context in a particular moment (Richards & Lockhart, 1994; Freeman, 1998). Over time, such practices may help teachers in closing the feedback loop between analysis and pedagogy. This is accomplished in the feedback loop through the redesigning of tasks, rephrasing of instructions, and modifying attendance patterns relative to recurring alignment gaps. The language–action–context model in this case is not merely a theoretical construct, but a practical mediational tool (Lantolf & Thorne, 2006) for structuring reflective practice and structuring teachers' decisions and context-responsive pedagogical innovation in language education.

Directions for future research

Building on the conceptual groundwork laid in this paper, several avenues for future research emerge from the proposed language–action–context model.

- Undertake systematic instructional investigations that categorize occurrences of semantic, procedural, affective, and contextual (mis)alignment in enacted lessons.
- Consider how each type is distributed across various task types and levels, along with the responses of teachers and learners during interaction.
- Connect types of alignment or misalignment to various engagement metrics and learning outcome indicators (e.g. task fulfilment, output standards, involvement).
- Employ video analysis and multi-modal analysis to examine alignment as influenced by speech, gesture, gaze, space, and movement.
- Examine the use by teachers of multiple forms of scaffolding (pointing, modelling, using artefacts) to rectify or prevent misalignment, gaps, or disruptions in the completion of the task during instruction.
- Examine the impact of varying technological environments on the language, action, and context triad in the context of physical, online, and hybrid classrooms.
- Implement the model in the relevant fields of ESP (for example, medical, engineering and technologies, and business) to determine the impact of professional practices and technical language on realignments and misalignments.
- Explore CLIL classes to observe the interplay between the content and language objectives, and how this influences learner engagement and task uptake.
- Invest further in multilingual immersion classes to pinpoint how learners' entire linguistic resources are utilized to cope with or solve varieties of misalignment.

Limitations, empirical validation and future research agenda

Even though this study constructs a theoretically based model, the model will only prove its worth when its predictive capabilities are validated in real-life classrooms. Therefore, future work must ensure the theoretical framework is tested using qualitative methodologies that document the real-time unfolding of classroom interactions, including participant observation, classroom-based action research, and teacher autoethnography. Under specific institutional and interactional conditions, participant observation can track how learners interpret, negotiate, and resist teachers' instructional language. By employing action research, teachers can transform the model into iterative cycles of interventions (plan, act, observe, reflect). This

permits educators to implement specific changes (e.g., task instruction modifications, feedback adjustments, sequencing redesign) and assess the extent to which the changes reduce persistent patterns of misalignment. Using autoethnography, along with reflective journaling and artefact collection, can elucidate the complexities of teachers' decision-making and lived interactions that help form the pressures influencing their pedagogical choices. Depending on the approach, data can be classroom audio/video recordings, field notes, lesson plans, student artefacts, teachers' journals, and post-lesson interviews or stimulated recall sessions, and analyzed thematically and interactively to trace patterns of alignment and misalignment over time. Such empirical work would not only provide opportunities to confirm or refine the categories of the model, but also provide opportunities to narrow down which contextual variables (assessment regimes, classroom ecology, institutional policy, cultural expectations) play the strongest mediating roles in alignment outcomes.

Conclusion

This paper has proposed a conceptual model of the language-action-context relationship in pedagogical linguistics. It argues that classroom processes are not linear input-output chains, but are better understood as the interaction of intended designs, performed actions, and surrounding contexts. Based on applied linguistics, classroom discourse, sociocultural theory, and psycholinguistics, the model reconceptualizes instructions, questions, and feedback as social action; learner behavior as multilayered (visible and invisible) participation; and context as space that is complexly organizational, cultural, physical, and interactional. With this in mind, the record has defined types of cooperation (direct, supportive, transformative alignment) and types of misalignments (semantic, procedural, affective, contextual) and investigated the consequences of all these in task design, interaction in the classroom, assessment, curriculum and teacher training.

The first question concerns the relationship between language, action, and context in relation to educational linguistics, and how this relationship may be framed in a way that captures both cooperation and alignment. A proposed triadic model addresses this by providing a synthesis in which language is described as a form of social action, action as mediated participation, and context as a structuring ecological environment that shapes both interpretation and feasibility. Within this framework, alignment and misalignment are not treated as simple success/failure labels, but as analytically distinct states through which classroom interaction continuously flows. In this case, the second research question focused on how a language–action–context model can shape task design, teaching, feedback, and assessment so that the support provided to learners is better aligned with the needed engagement and desired learning objectives. The discussion of pedagogical implications addressed this by illustrating how the model delineates the construction of more adaptable, multimodal instructions; the engagement of interactional checks for understanding; the crafting of feedback that explicitly connects what is uttered with what is performed; and the formulation of assessment and curricular goals that reflect more accurately the behavior of learners in specific situations.

When combined, these contributions reinforce the main argument that linguistic education cannot remain within the simplistic framework of "if we say it, they will do it." Such an analysis shows the extent to which and the manner in which learners engage with instructional language is the result of an intricate set of configurations related to semantic clarity, procedural transparency, affective factors, and contextual opportunities and limitations. Understanding teaching as an arbitrary or unmanageable activity does not make sense, and complexities do not help the cause. Rather, the complexities help the reality of how teaching becomes learning through an understandable or improvable synergy of words, actions, and contexts. The language–action–context model is proposed not as a fully formed theory, but rather as a resource for constructs and reflections which can be tested, modified and augmented across a range of educational concepts, serving, in the end, more flexible, context-aware, and fair educational practices in the teaching of language.

References

Alexander, R. (2008). *Towards dialogic teaching: Rethinking classroom talk* (4th ed.). Dialogos.

Austin, J. L. (1975). *How to do things with words*. Harvard university press.
Basturkmen, H. (2010). *Developing courses in English for specific purposes*. Palgrave Macmillan.
Bernstein, B. (1990). *The structuring of pedagogic discourse*. Routledge.
Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education, 32*(3), 347-364.
Biggs, J. (2003). *Teaching for quality learning at university* (2nd ed.). Society for Research into Higher Education & Open University Press.
Black, P., Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice, 5*(1), 7-74.
Black, P., Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability, 21*(1), 5-31.
Borg, S. (2006). *Teacher cognition and language education: Research and practice*. Continuum.
Bourdieu, P. (1991). *Language and symbolic power* (J. B. Thompson, Ed.; G. Raymond & M. Adamson, Trans.). Polity Press.
Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
Cazden, C. B. (2001). *Classroom discourse: The language of teaching and learning* (2nd ed.). Heinemann.
Dalton-Puffer, C. (2011). Content-and-language integrated learning: From practice to principles? *Annual Review of Applied Linguistics, 31*, 182-204.
Donato, R. (1994). Collective scaffolding in second language learning. In J. P. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research* (pp. 33-56). Ablex.
Duff, P. A. (2002). The discursive co-construction of knowledge, identity, and difference: An ethnography of communication in the high school mainstream. *Applied Linguistics, 23*(3), 289-322.
Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Lawrence Erlbaum.
Dörnyei, Z., Murphey, T. (2003). *Group dynamics in the language classroom*. Cambridge University Press.
Ellis, N. C. (2005). At the interface: Dynamic interactions of explicit and implicit language knowledge. *Studies in Second Language Acquisition, 27*(2), 305-352.
Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.
Farrell, T. S. C. (2015). *Promoting teacher reflection in second language education: A framework for TESOL professionals*. Routledge.
Fredricks, J. A., Blumenfeld, P. C., Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59-109.
Freeman, D. (1998). *Doing teacher-research: From inquiry to understanding*. Heinle & Heinle.
García, O., Wei, L. (2014). *Translanguaging: Language, bilingualism and education*. Palgrave Macmillan.
Gass, S. M., Varonis, E. M. (1991). Miscommunication in nonnative speaker discourse. In N. Coupland, H. Giles, & J. M. Wiemann (Eds.), *Miscommunication and problematic talk* (pp. 121-145). Sage.
Goodwin, C. (1994). Professional vision. *American Anthropologist, 96*(3), 606-633.
Goodwin, C. (2000). Action and embodiment within situated human interaction. *Journal of Pragmatics, 32*(10), 1489-1522.
Hall, J. K., Walsh, M. (2002). Teacher–student interaction and language learning. *Annual Review of Applied Linguistics, 22*, 186-203.
Hattie, J., Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81-112.
Horwitz, E. K. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics, 21*, 112-126.
Kramsch, C. (1993). *Context and culture in language teaching*. Oxford University Press.
Lantolf, J. P., Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford University Press.
Lave, J., Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
Levelt, W. J. M. (1989). *Speaking: From intention to articulation*. MIT Press.
Long, M. H. (1985). A role for instruction in second language acquisition: Task-based language teaching. In K.

Hyltenstam & M. Pienemann (Eds.), *Modelling and assessing second language acquisition* (pp. 77-99). Multilingual Matters.

Lyster, R., Ranta, L. (1997). Corrective feedback and learner uptake. *Studies in Second Language Acquisition, 19*(1), 37-66.

Markee, N. (2008). Toward a learning behavior tracking methodology for CA-for-SLA. *Applied Linguistics, 29*(3), 404-427.

Mehan, H. (1979). *Learning lessons: Social organization in the classroom*. Harvard University Press.

Mercer, N., Dörnyei, Z. (Eds.). (2020). *Engaging language learners in contemporary classrooms*. Cambridge University Press.

Mercer, N., Littleton, K. (2007). *Dialogue and the development of children's thinking*. Routledge.

Mortensen, K. (2008). Selecting next-speaker in the second language classroom: How to find a willing next-speaker in planned activities. *Journal of Applied Linguistics, 5*(1), 55-79.

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.

Nassaji, H. (2010). Corrective feedback, learner uptake, and feedback perception in L2 classrooms. *International Review of Applied Linguistics in Language Teaching, 48*(1), 35-57.

Nunan, D. (2004). *Task-based language teaching*. Cambridge University Press.

Pica, T. (1994). Research on negotiation: What does it reveal about second-language learning conditions, processes, and outcomes? *Language Learning, 44*(3), 493-527.

Richards, J. C., Lockhart, C. (1994). *Reflective teaching in second language classrooms*. Cambridge University Press.

Samuda, V., Bygate, M. (2008). *Tasks in second language learning*. Palgrave Macmillan.

Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.

Searle, J. R. (1979). *Expression and meaning: Studies in the theory of speech acts*. Cambridge University Press.

Seedhouse, P. (2004). *The interactional architecture of the language classroom: A conversation analysis perspective*. Blackwell.

Sert, O. (2015). *Social interaction and L2 classroom discourse: Conversation-analytic perspectives*. Edinburgh University Press.

Sinclair, J. McH., Coulthard, R. M. (1975). *Towards an analysis of discourse: The English used by teachers and pupils*. Oxford University Press.

Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97-114). Oxford University Press.

Sweller, J., van Merriënboer, J. J. G., Paas, F. (1998). Cognitive architecture and instructional design. *Educational Psychology Review, 10*(3), 251-296.

van Lier, L. (1996). *Interaction in the language curriculum: Awareness, autonomy and authenticity*. Longman.

van Lier, L. (2004). *The ecology and semiotics of language learning: A sociocultural perspective*. Kluwer Academic.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Walsh, S. (2011). *Exploring classroom discourse: Language in action*. Routledge.

Waring, H. Z. (2011). Learner initiatives and learning opportunities in the language classroom. *Classroom Discourse, 2*(2), 201-218.

Webb, S., & Nation, P. (2017). *How vocabulary is learned*. Oxford University Press.

Wells, G. (1999). *Dialogic inquiry: Towards a sociocultural practice and theory of education*. Cambridge University Press.

Wood, D., Bruner, J. S., Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry, 17*(2), 89-100.

Mapping meaning in fantasy lexicons: a computational linguistic exploration of Enchanta - Encantadia language

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Abstract
This study investigates the constructed language Enchanta from the Filipino fantasy franchise Encantadia (2005, 2016, 2025), examining its lexicon through computational linguistic methods. Enchanta, devised by Suzette Doctolero, enhances narrative immersion by embedding a culturally symbolic language influenced by Philippine and Romance linguistic features. The lexicon comprises over eighty entries spanning kinship, spirituality, performative commands, and abstract concepts. Using Python-based tools such as NLTK for morphological tagging and phrase parsing, this study analyzes lexical frequency, semantic domains, and recurring syntactic templates (e.g., Verb–Modal–Object). High-frequency expressions such as Ssheda! and Avisala! highlight the language's performative and ritualistic functions. Findings indicate that Enchanta exhibits consistent morphosyntactic patterning and lexical productivity. These patterns can be interpreted through both generative and functional linguistic frameworks, though the present dataset is not designed to adjudicate between competing theoretical models. The study demonstrates that Enchanta operates as a structurally coherent conlang, offering insights into the intersection of fantasy linguistics, cultural semiotics, and computational analysis.

Keywords*: computational linguistics, fantasy lexicon, Encantadia lexicon, morphosyntax*

Introduction

Encantadia, a Filipino fantasy television franchise first aired in 2005 and reimagined in 2016, introduced viewers to a mythical realm divided into elemental kingdoms—air (Aera), water (Adamya), earth (Sapiro), and fire (Lireo), each ruled by powerful female warriors known as Sang'gres. Within this richly imagined universe, the language of Enchanta was born—not only to immerse audiences in its fantasy setting but also to deepen its cultural mythology and narrative coherence (Baldwin & Meyer, 2015).

Constructed languages, or conlangs, serve both artistic and communicative functions in media, often reflecting societal ideals and mythic frameworks through their lexical and syntactic structures (Okrent, 2009). Enchanta is one such language—developed specifically for the series with phonologically melodic forms, symbolic vocabulary, and thematic structuring that echo the lore and philosophy of Encantadia. Its lexicon reveals recurring motifs of kinship, spirituality, authority, and emotional expression. From greetings like Avisala to commands like Ssheda!, Enchanta embodies fantasy storytelling and functions as a tool for immersive world-building (Peterson, 2015).

This study applies computational linguistic methods to analyze the structure and semantic distribution of Enchanta's vocabulary. Using Python-based tools such as NLTK's tree module and WordCloud visualizers, the research generates frequency plots and thematic mappings to reveal lexical priorities, morphological tendencies, and symbolic logic embedded in the language's design (Bird, Klein, & Loper, 2009). Such methods bridge fantasy linguistics and empirical analysis, demonstrating how digital tools enrich our understanding of constructed languages in media.

Theoretical background

This study draws on multiple linguistic frameworks to interpret the structure and function of Enchanta.

Halliday and Hasan (1989, 3) conceptualize language as a *"social semiotic,"* emphasizing its role in encoding cultural meaning and communicative function. Language is shaped by context and reflects social relations and

ideology (Halliday & Hasan, 1989, 12-26). This perspective is particularly relevant to Enchanta, whose lexicon encodes ritual, authority, and kinship.

In contrast, the generative framework conceptualizes language as a rule-governed system. Syntax is described as "a set of rules for generating well-formed sentences" (Chomsky, 1965, 65), highlighting productivity and structural regularity. Enchanta's recurring phrase templates suggest similar rule-based organization (Chomsky, 1965, 64-65).

While these frameworks differ—one emphasizing function, the other form—both recognize systematic patterning in language. Enchanta's structure is therefore amenable to analysis under both perspectives.

Additionally, Jackendoff's (1997, 40-46) lexicalist hypothesis informs this study by proposing that grammatical information may be stored within the lexicon itself. This provides a useful interpretive lens for examining phrase-level constructions in Enchanta.

Methodology

The present study seeks to conduct a systematic analysis of the Enchanta language, as conceptualized within the televised fantasy series *Encantadia*. Specifically, it aims to quantify lexical frequency and identify the predominant semantic domains embedded in the Enchanta lexicon. Furthermore, the research investigates morphological and thematic structures that embody and reflect the socio-cultural constructs inherent to the Encantadia universe, as suggested by Crystal (2004). Lastly, the study highlights the potential of computational linguistics—particularly through parsing techniques and categorization frameworks—as a means of deepening scholarly understanding of invented languages in fictional media narratives.

Lexicon as data: cultural and linguistic semiotics

The Enchanta lexicon comprises over eighty unique words and phrases spanning thematic domains such as:

- **Kinship** (*Ada*, *Ado*)
- **Spiritual Authority** (*Emre*, *Sanctre*)
- **Performative Command** (*Ssheda!*, *Ena-i!*)
- **Abstract Ideals** (*Amarteya*, *Corra*)

These elements demonstrate a ritualistic phonology and consistent morphological roots akin to ceremonial or liturgical language structures (Halliday & Hasan, 1989). Some features parallel natural languages, including:

- **Definite Markers** (*ivi*) reminiscent of Tagalog case particles (Schachter & Otanes, 1972)
- **Gendered/Societal Identifiers** (*Mo-re*, *Sang'gre*, *Encantado*)
- **Temporal Anchoring Lexemes** (*Yanarteya*, *Adoyaneva*)—serving as narrative timestamps

By treating this lexicon as a linguistic dataset, the study utilizes categorization based on semantic fields. Tools from Natural Language Toolkit (NLTK) enable morphological tagging and tree structures to assess lexical depth and distribution, while visualization libraries facilitate interpretation through symbolic mapping

Corpus and data sources

The dataset was derived from a curated corpus of *Encantadia* dialogue across three versions of the series:

- 2005 original (Episodes 1–20)
- 2016 reboot (Episodes 1–10)
- 2025 continuation (Episodes 1–5)

A total of 312 Enchanta utterances were manually identified and transcribed from subtitle files and verified against audiovisual dialogue.

The lexicon (84 entries) was compiled from:

1. Manual transcription of dialogue

2. Official GMA materials
3. Encantadia Wiki (cross-verified)

Translation Basis

Translations were derived from:

- **OS** – on-screen subtitles
- **OM** – official materials
- **CW** – community wiki (verified)
- **CI** – contextual inference

Context-based translations are interpretive and acknowledged as a limitation.

Phrase structure and lexical composition in Enchanta

Each phrase was segmented and aligned with the lexicon to identify its components and syntactic roles, revealing patterned constructions that reflect internal logic akin to natural languages (Crystal, 2004). This consistency validates Enchanta's designed linguistic cohesion as more than narrative artifice—it becomes a model for linguistic structure in media-based conlangs (Okrent, 2009).

Phrase	**Structure breakdown**	**Syntactic roles**
Ssheda musni verom	Ssheda (Stop), Musni (Give), Verom (Object?)	Command → Modal → Object
Ilantre ivi e correi?	Ilantre (Where), Ivi (Definite), E Correi (Love)	Interrogative → Marker → Abstract Concept
Ivi sanctre	Ivi (Definite), Sanctre (Death)	Subject → Predicate
E correi diu	E Correi (Love), Diu (You)	Verb Phrase → Recipient
Avisala meiste	Avisala (Greetings), Meiste (Formal particle)	Ritual Greeting → Modifier

These constructions exhibit root-syntax templates such as Verb + Modal + Object or Interrogative + Marker + Abstract, suggesting a consistent phrase formation system. Such regularity aligns with generative grammar principles that foreground syntax as rule-governed and productive (Chomsky, 1965). Moreover, the presence of performative verbs and pragmatic markers in Enchanta supports Halliday's functionalist view that language is shaped by its social purposes (Halliday & Hasan, 1989).

Implications for lexicon expansion

Phrase-level analysis reveals:

- The productive recombination of root terms into complex expressions;
- Opportunities for syntactic construction mapping in a conlang dictionary;
- Evidence of grammatical consistency and pragmatic encoding.

These findings support Jackendoff's lexicalist hypothesis, which posits that much grammatical information

resides within the lexicon, not merely syntax (Jackendoff, 1997). By treating phrases like *Ssheda musni verom* and *E correi diu* as compositional units, the Enchanta lexicon demonstrates capacity for lexically driven grammar development.

Phrase frequency and distribution

Using a curated corpus of Encantadia dialogue, Python-based frequency analysis identified *Ssheda!* (Stop!) and *Avisala!* (Greetings) as dominant. This mirrors how illocutionary acts recur in ritual and expressive registers (Austin, 1962). Compound expressions like *E correi diu* and *Ivi sanctre* appeared frequently in scenes requiring emotional or dramatic emphasis—reinforcing linguistic functions through narrative pragmatics.

Results and discussion

The quantitative findings reveal that Enchanta, while a constructed and fictional language, operates with linguistic coherence comparable to natural languages. High-frequency phrases such as Ssheda! and Avisala! confirm the lexicon's performative emphasis, especially in commands and ceremonial expressions. The recurrence of key root terms across compound utterances suggests the presence of an internal grammar—one that reflects both morphological productivity and thematic consistency.

Phrase parsing illuminated syntactic patterns: Verb–Modal–Object sequences in Ssheda musni verom, and Interrogative–Marker–Emotion structures in Ilantre ivi e correi?. These configurations mirror grammatical forms common in Austronesian and Romance languages, indicating the influence of Filipino and Spanish linguistic features on the language's design. Such patterns reinforce Enchanta's cultural hybridity while validating its application for linguistic modeling and symbolic analysis.

Table 1: Phrase frequency comparison table

Enchanta Phrase Frequency Comparison Table			
Series Phrase	**Translation / Function**	**Lexicon Match**	**Notes**
Ssheda!	Stop / Halt / Desist	Present	High-frequency command; appears in multiple episodes
Avisala!	Greetings / Goodbye	Present	Used in both formal and casual farewells
Ena-i!	Hurry! / Move quickly	Present	Urgent directive; often in battle or escape scenes

Furthermore, the overlap between the curated lexicon and actual usage in series dialogue shows how root terms serve as functional building blocks. Missing idioms like E correi diu ("I love you") point to an opportunity for lexicon expansion—where affective and narrative nuance can be better captured through compositional analysis.

Overall, this study highlights Enchanta as a symbolically rich and grammatically patterned lexicon, providing fertile ground for linguistic inquiry, especially at the intersection of computation, creativity, and language pedagogy.

NLTK output

A sample parse using NLTK was conducted for the phrase *Ssheda musni verom* using a custom CFG:

S → CMD MODAL OBJ
CMD → Ssheda
MODAL → musni
OBJ → verom

Resulting structure:

(S (CMD Ssheda) (MODAL musni) (OBJ verom))

Frequency distribution:

Token	Frequency
Ssheda	28
Avisala	21
Ena-i	15
Emre	12
Ivi	11

This confirms recurring lexical and syntactic patterns.

Results and discussion

The corpus consisted of 312 utterances, with:

- 87 (27.9%) performative commands
- 43 (13.8%) ritual/greeting expressions

The most frequent terms were:

- *Ssheda!* – 28 (9.0%)
- *Avisala!* – 21 (6.7%)

These findings indicate that Enchanta prioritizes performative and ritual speech, consistent with its narrative function.

Phrase analysis revealed structured patterns:

- Verb–Modal–Object (*Ssheda musni verom*)
- Interrogative–Marker–Abstract (*Ilantre ivi e correi?*)

Such regularity aligns with generative grammar's rule-based syntax (Chomsky, 1965, p. 65), while also supporting Halliday's view of language as socially functional (Halliday & Hasan, 1989, pp. 12-26).

The recombination of root lexemes suggests lexical productivity. These findings are consistent with Jackendoff's lexicalist hypothesis, though they do not decisively distinguish it from alternative syntactic explanations.

Conclusion

This research explored the phrase-level architecture of the Enchanta lexicon through the lens of computational linguistics, demonstrating how a fictional language can reflect deliberate thematic structure and syntactic design. Using Python to quantify phrase frequency, parse grammatical patterns, and compare dialogue expressions with lexicon entries, the study confirms that Enchanta is not only narratively expressive but linguistically coherent.

This study demonstrates that Enchanta exhibits systematic lexical and syntactic patterning despite its fictional origin. Computational analysis reveals consistent phrase structures, semantic clustering, and high-

frequency performative expressions.

These patterns can be analyzed using both generative and functional linguistic frameworks. However, the study does not provide independent empirical support for one theoretical model over another. Instead, it applies these frameworks as interpretive tools to illuminate the language's internal logic.

Future research may expand the corpus, generate full parse trees, and explore comparative analysis with Philippine languages to further evaluate competing linguistic accounts.

These findings underscore the potential of constructed languages to contribute to formal linguistic research and education—particularly when grounded in cultural mythology and applied through digital tools. Future research may build on this foundation by generating full parse trees, tracking discourse features across larger corpora, or integrating Enchanta into comparative studies with indigenous Philippine languages.

The convergence of fantasy lexicon, cultural symbolism, and computational methodology in this study offers a dynamic model for interdisciplinary engagement within language studies.

References

Austin, J. L. (1962). *How to do things with words* (J. O. Urmson & M. Sbisà, Eds.). Oxford University Press.

Baldwin, B., Meyer, T. (2015). Fantasy language and culture in fictional television. *Journal of Media Semiotics, 8*(2), 101-118.

Bird, S., Klein, E., Loper, E. (2009). *Natural Language Processing with Python: Analyzing Text with the Natural Language Toolkit*. O'Reilly Media

Chomsky, N. (1965). *Aspects of the Theory of Syntax*. MIT Press.

Crystal, D. (2004). *The Language Revolution*. Polity Press.

Halliday, M. A. K., Hasan, R. (1989). *Language, context, and text: Aspects of language in a social-semiotic perspective*. Oxford University Press.

Jackendoff, R. (1997). *The Architecture of the Language Faculty*. MIT Press.

Okrent, A. (2009). *In the Land of Invented Languages: Adventures in Linguistic Creativity, Madness, and Genius*. Spiegel & Grau.

Peterson, D. J. (2015). *The Art of Language Invention: From Horse-Lords to Dark Elves, the Words Behind World-Building*. Penguin Books.

Schachter, P., Otanes, F. T. (1972). *Tagalog Reference Grammar*. University of California Press.

Appendices

All computational analyses were conducted using Python's Natural Language Toolkit (NLTK), with scripts developed for frequency distribution and context-free grammar parsing. A sample implementation is provided in Appendix for reproducibility.

Phrase	Translation	Frequency (n)	%	Lexicon match	Notes
Ssheda!	Stop	28	9.0%	Present	Most frequent command
Avisala!	Greeting	21	6.7%	Present	Ritual expression
Ena-i!	Hurry	15	4.8%	Present	Urgent directive
Emre!	God	12	3.8%	Present	Spiritual invocation
Ivi	Marker	11	3.5%	Present	Functional syntax

Enchanta lexicon (Encantadia, 2005; 2016, 2025)			
Theme	**Enchanta term**	**Translation / meaning**	**Notable linguistic feature**
Kinship & identity	Ada	Mother	Simple root; common in familial contexts
	Ado	Father	Phonological parallel to *Ada*
	I-lo	Grandfather	Affix *I-* possibly age-related marker
	I-la	Grandmother	Gendered variation of *I-lo*
	Mo-re	A person (any gender)	Inclusive reference
	Sang'gre	Royalty	Societal role-specific lexeme
Commands & expression	Ssheda!	Stop / Halt / Desist	Exclamatory with sharp phonology
	Ena-i!	Fast! (imperative)	Hyphenated form indicates emphatic action
	Ashtadi!	Bad behavior!	Expressive reprimand
Greetings & ritual	Avisala	Greetings / Goodbye	Ritualistic dual-use form
	Emre	God / Bathala	Root for divine authority
Temporal concepts	Yanarteya	Past	*-teya* suffix suggests temporal framing
	Adoyaneva	Future	Prefix *Ado-* (root?) with future affix *-yaneva*
Places & mythology	Encantadia	Land of new beings	Root *En-* repeated in language terms

	Enchanta	The language of Encantadia	Meta-lexeme; language as cultural emblem
	Lireo	Kingdom of fairies (Diwata)	Proper noun with ethereal phonetics
Emotional/ abstract	Corra	Heart	Symbolic core of emotional vocabulary
	Amarteya	Freedom	Possibly from Spanish *amar* (to love) + *teya*
	Detrumvia	Liar	Polysyllabic moral judgment lexeme
Nature & objects	Ganto	Horse	Lexical borrowing or stable root term
	Kantao	Bracelet	Noun used in physical description or symbolism
Functional syntax	ivi	Definite marker (like 'si' in Tagalog)	Syntactic particle for nominal emphasis

Enchanta phrase frequency comparison table			
Series phrase	**Translation / function**	**Lexicon match**	**Notes**
Ssheda!	Stop / Halt / Desist	Present	High-frequency command; appears in multiple episodes
Avisala!	Greetings / Goodbye	Present	Used in both formal and casual farewells
Ena-i!	Hurry! / Move quickly	Present	Urgent directive; often in battle or escape scenes

Emre!	God / Bathala	Present	Invoked in prayers and blessings
Musti maste Lireo!	Peace to Lireo	Partial (*Musti*)	Compound phrase; modal + place name
Ivi sanctre	He is dead	Partial (*ivi*, *Sanctre*)	Combines definite marker and death term
Estasectu!	Get ready	Not listed	Possible future addition to command lexicon
Ebi meshne	You will regret this	Not listed	Threat phrase; expressive and dramatic
Avisala meiste	Formal goodbye	Partial (*Avisala*)	Extended farewell variant
E correi diu	I love you	Not listed	Emotional declaration; potential for abstract category
Ssheda musni verom	I won't give you what you want	Partial (*Ssheda*, *Musti*)	Complex command with modal negation
Ilantre ivi e correi?	Where is love?	Partial (*Ilantre*, *ivi*)	Interrogative + definite marker + abstract noun
Paneya	Bread	Present	Everyday object; appears in domestic scenes
Detrumvia	Liar	Present	Used in confrontations and accusations
Asshenti	Listen	Present	Often used in tense or emotional dialogue
Yanarteya	Past	Present	Temporal reference; used in flashback scenes
Adoyaneva	Future	Present	Temporal reference; used in prophecy or planning

Human, Non-Human, Post-Human – a report

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Human, Non-Human, Post-Human was an international conference organized in the Department of Modern Languages and the Department of German Studies at the University of Zielona Góra, Poland, on November 25–26, 2025. The conference was organized within the eleventh edition of Foreign Languages Days (known in Polish as Dni Języków Obcych – DJO), an annual event held since 2015 in the Department of Modern Languages and the Department of German Studies at the Faculty of Humanities. The conference was honored by the honorary patronage of Professor Wojciech Strzyżewski, Rector of the University of Zielona Góra.

The idea of the Foreign Languages Days is to bring together scholars working in different fields of science and different languages. Presentations can be delivered in English, German, French, Italian, Spanish, Russian, and Polish. The funding idea is to communicate beyond typical boundaries to widen scientific perspectives and see the interrelationship between various disciplines and the arts. In this way, the participants of the conference have an opportunity to look at their research from a new perspective and share their findings with experts in other fields. All eleven editions of the conference have brought over 280 presentations. While some of the participants took part in DJO only once, many scholars come back to the event every year. Thanks to the participation of foreign researchers, the conference now has the status of an international conference. Not only renowned specialists but also BA, MA, and PhD students are welcome to deliver a speech in a friendly, homelike atmosphere the conference is known for.

This year's conference brought, in a hybrid: onsite and online mode, 34 researchers who delivered 30 presentations on topics ranging from philosophy through literary studies and psychology to law. The speakers represented 7 Polish universities (University of Zielona Góra, University of Szczecin, University of Wrocław, Adam Mickiewicz University, Poznań, The Jacob of Paradies University, Gorzów Wielkopolski, Cardinal Stefan Wyszyński University in Warsaw, Nicolaus Copernicus Superior School), as well as 11 European, mainly Italian, universities: Roma Tre University, University of Genoa, University of Verona, Salesian University Institute of Venice, Pontifical Athenaeum Regina Apostolorum in Rome, Tuscia University, Pegaso University, Catholic University of the Sacred Heart in Milan, University of Milano-Bicocca, University of Malta and University of Potsdam as well as other institutions: Dante Alighieri Society in Wrocław and Cyprian Norwid Provincial and Municipal Public Library in Zielona Góra. The hybrid format once again proved highly effective, allowing participants from different countries to join the discussions regardless of travel limitations and fostering a truly international academic environment.

The topic of the conference brought discussions, among others, on the condition of the man, his future and a (re)definition of mankind, the existence of cyborgs and androids in speculative fiction, different aspects of life in the times of artificial intelligence, including its legal status in science, as well as its use in communication, education and research and its impact on human psyche and emotions. The debates frequently highlighted the accelerating transformation of contemporary societies under the influence of new technologies, raising questions about ethics, responsibility, and the limits of human agency in a digitally mediated world. Several papers focused on humanism, posthumanism, transhumanism, and its representations in philosophy and literature, e.g., in G. Deleuze, A. Huxley, N. Fyodorov, L. Floridi, N. Machiavelli, E. Cavazzoni, A. Belyaev, I. Calvino, F. Verso, A. Bioy Casares, F. Vallejo, or I. Scego. The speeches were delivered in Polish, English, Russian, Italian, and Spanish. This linguistic diversity not only broadened the reach of individual presentations but also underscored the multicultural character of the event, enabling participants to engage with ideas from multiple intellectual traditions. Others analyzed the position of women

in philosophy throughout centuries and their role in the history of sport, while another group of presentations focused on different aspects of online creativity as well as the condition of humans, their identity and loneliness in the virtual world. These contributions enriched the programme with interdisciplinary perspectives, demonstrating the growing relevance of gender studies, digital humanities, and cultural analysis in contemporary academic discourse, and shed light on the condition of mankind, man's relations with technology, nature, and the man himself in the world of humanism, posthumanism, and transhumanism.

For all those interested in taking part in the next year's edition of the Foreign Languages Days, please contact us at the e-mail address dnijezykowobcychuz@gmail.com or on Facebook https://www.facebook.com/profile.php?id=100010829776091 (Dni Języków Obcych UZ). The exact date is not established yet, while the topic will revolve around issues such as truth, lie, and values.

Exploring foreign language enjoyment and the teacher's role among university students from a dynamic systems theory perspective

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Abstract
This study investigates foreign language enjoyment (FLE) among university students of English for Specific Purposes (ESP) and the role of the teacher in shaping learners' emotional experiences, drawing on Dynamic Systems Theory. Descriptive and non-parametric inferential statistical analyses were used to examine levels of enjoyment and their relationship with selected variables. The results reveal a high overall level of foreign language enjoyment among ESP students, particularly regarding classroom atmosphere and cooperation with peers, while slightly lower levels of enjoyment were reported for oral presentations. No statistically significant differences in enjoyment were found with respect to gender, age, or year of study. While foreign language enjoyment was not significantly related to anxiety at the beginning of studies, a strong positive relationship was observed between enjoyment and a reduction in anxiety over time, alongside moderate to strong negative correlations with current anxiety levels, including presentation anxiety. Although many students reported negative emotional experiences in earlier educational contexts, high levels of enjoyment were reported in the current learning environment, suggesting that the teacher and classroom atmosphere play an important role in shaping learners' emotions. Overall, the findings support the view that foreign language enjoyment is dynamic and context-dependent.

Keywords: *foreign language enjoyment, teacher's role, Dynamic Systems Theory*

Introduction

Emotions play a significant role in foreign language learning, influencing not only the success of acquiring language skills but also learners' attitudes and engagement. Mihaljević Djigunović (2007) confirms the importance of affective factors for success in developing learners' speaking skills, especially in situations that require expressing opinions or participating in discussions. Her research shows that communicative competence is particularly sensitive to affective factors in language learning. Dewaele and MacIntyre (2014) highlight that anxiety and enjoyment represent two aspects of the emotional experience of language learning. Enjoyment and anxiety in foreign language learning are not simply opposite ends of a single continuum, where an increase in one automatically results in a decrease in the other. On the contrary, these two emotions can coexist, although in varying proportions. As research has largely focused on negative emotions such as language anxiety, Dewaele and MacIntyre (2016) introduced the concept of foreign language enjoyment to highlight positive emotions in the learning process that can facilitate more effective language acquisition. The study by MacIntyre and Gregersen (2012) further extends understanding of these emotional experiences through the lens of positive psychology, emphasizing the importance of positive emotions such as joy, interest, and pride, which promote cognitive development and social connectedness, whereas negative emotions, including anxiety, may narrow perception and hinder the learning process. Elahi Shirvan and Talebzadeh (2020) explain that foreign language enjoyment and anxiety can be understood through a complex dynamic systems perspective. They emphasize that emotions change over time, are interconnected, and vary depending on the learning context and situation. Learners respond differently to the same conditions, and emotional experiences are highly individual and shaped by the environment. Therefore, it is important to examine students' emotions in the foreign language classroom and the impact of the overall classroom environment, with particular emphasis on the teacher's role in this process.

Theoretical background

Foreign language enjoyment

Since emotions play an important role in foreign language learning, Krashen's (1982) theory provides a useful framework for examining how emotional factors influence the language learning process. According to Krashen (1982), affective factors include motivation, self-confidence, and anxiety. These factors do not directly affect learning outcomes but influence how much language input learners can process. When learners feel anxious, tense, or lack confidence, the affective filter becomes high and limits input, making language learning more difficult. In contrast, when learners feel relaxed, confident, and motivated, the affective filter is low, allowing them to better understand and acquire the language. Dewaele and Li (2020) describe emotions research in second language acquisition as developing through three phases. In the emotion avoidance phase, emotions were largely ignored and considered irrational, with emphasis on cognitive factors. This was followed by the anxiety-prevailing phase, in which emotions were acknowledged but research focused mainly on language anxiety. The most recent phase, the positive and negative emotions phase, broadened the scope to include a wide range of learner and teacher emotions, recognizing them as central to language learning and teaching. Within the framework of positive psychology, Fredrickson (2001) argues that positive emotions such as joy, interest, and love expand people's ways of thinking and acting and help them develop lasting personal resources, physical, intellectual, social, and psychological, which support long-term personal growth and resilience. A meta-analysis by Botes et al. (2022) found that the more learners enjoy the process of foreign language learning, the less foreign language anxiety they experience; they are more willing to communicate in the language, achieve better learning outcomes, and hold more positive perceptions of their own achievements in foreign language learning. A study by Dewaele (2019) showed that willingness to communicate in English among Spanish learners studying English as a foreign language at university or secondary school was reduced by feelings of anxiety, whereas enjoyment in the classroom increased this willingness. Łodej and Osmoła (2024) explain that interaction with peers is a significant source of foreign language enjoyment. Their study shows that activities such as group discussions, collaborative tasks, and exchanging feedback create a supportive learning environment. These peer-based interactions help learners feel more comfortable, engaged, and confident, which in turn increases enjoyment and positive emotions in the language classroom. Dewaele and MacIntyre (2016) described foreign language enjoyment as a complex emotion involving the interaction between challenge and a sense of personal competence, reflecting the human desire for success when confronting demanding tasks. Enjoyment arises when individuals not only meet their needs but also surpass them.

Dynamic Systems Theory

Research on foreign language enjoyment implies its dynamic nature (Dewaele & Dewaele, 2017; Dewaele & Dewaele, 2020; Elahi Shirvan et al., 2020; Elahi Shirvan & Talebzadeh, 2020), highlighting the relevance of Dynamic Systems Theory (Larsen-Freeman, 2013) for understanding how enjoyment develops and changes over time. In line with Dynamic Systems Theory, emotions in language learning are not static but change depending on a range of interconnected factors, from learners' personal characteristics to the instructional context and interaction with the teacher. MacIntyre (2017) states that emotions such as anxiety in language learning are not stable but change continuously through interaction with personal and situational factors, including linguistic abilities, self-evaluation, physiological reactions, interpersonal relationships, the topic of communication, and the learning environment. These emotions can vary over both short and long periods. As Dörnyei (2014) explains, a system is considered complex or dynamic if it consists of two or more elements which are interconnected, and each change over time. Thus, a complex or dynamic system comprises multiple components that influence one another, while each component can also change independently, leading to continuous changes in the system as a whole. Dynamic Systems Theory emphasizes that emotions in language learning are variable, influenced by multiple factors, and represent dynamic states tied to specific situations rather than stable traits (Larsen-Freeman, 2006). Larsen-Freeman (1997) uses the term *attractor* to refer to a pattern, state, or behavior toward which a system spontaneously moves and in which it tends to remain

stable. Thus, teacher feedback can function as an attractor in the foreign language classroom by shaping learners' emotional experiences over time. The presence of supportive teacher feedback can reduce anxiety and promote positive emotional states, while its absence may increase anxiety (Elahi Shirvan & Talebzadeh, 2020). The learning environment and situational factors shape learners' emotional states (Elahi Shirvan & Taherian, 2018; Elahi Shirvan & Talebzadeh, 2020), and even small changes in instructional approach can substantially affect levels of anxiety or enjoyment. Such changes in emotional states influence various aspects of learning and learner behavior; for example, they can increase or decrease learners' willingness to communicate, reflecting how ready learners are to use the foreign language in class (Dewaele, 2019). It represents a stable point to which the system repeatedly returns, even though it is constantly changing. Larsen-Freeman (2013) further explains that changes involving many interacting elements are often nonlinear, known as the butterfly effect, meaning that small causes can have large consequences, as language develops, changes, and is learned through dynamic use. Elahi Shirvan and Talebzadeh (2020) describe five aspects that link the complex dynamic systems approach with emotional states in foreign language classroom. First, dynamic systems constantly change and develop over time. Second, their components are interconnected, so a change in one element affects others. Third, learners' emotional states vary in response to external stimuli; for example, enjoyment may depend on the lesson topic, while anxiety may depend on whom the learner is communicating with. Fourth, the average behavior of the system does not necessarily reflect individual responses, as learners do not react in the same way to identical stimuli. Finally, emotional experiences in language learning are highly individual and strongly context-dependent, with the environment and situation playing a crucial role in shaping behavior. Complex Dynamic Systems Theory thus emphasizes that emotions in foreign language learning are variable, interconnected, and strongly conditioned by the instructional context.

Aim and research questions

The aim of this study is to examine the level of foreign language enjoyment among students of English for Specific Purposes, its relationship with learners' emotional experiences over the course of the study, and the extent to which teachers influence these experiences in the foreign language classroom. This study contributes to a better understanding of the relationship between affective variables in a specific higher education context and provides a basis for future research which, using a larger and more heterogeneous sample and a longitudinal research design, could offer deeper insight into the dynamic nature of enjoyment in foreign language learning.

In line with the aim of the study, the following research questions are formulated:

RQ1: What is the level of foreign language enjoyment among students of English for Specific Purposes?

RQ2: Is there a relationship between foreign language enjoyment and changes in foreign language anxiety over the course of the study?

RQ3: Do sociodemographic variables (gender, age, and year of study) influence the level of foreign language enjoyment?

RQ4: What is the role of the teacher in shaping students' foreign language enjoyment in the foreign language classroom?

Methodology

Research context

The University of Dubrovnik (UNIDU) provides a learning environment that emphasizes the importance of English for Specific Purposes (ESP) in higher education. Situated in one of Croatia's major tourist destinations, the university offers study programs that require a high level of foreign language proficiency, as they often involve communication within academic and professional communities. ESP is a compulsory course in many degree programs at UNIDU. While the University also offers other foreign languages, such as French, Italian, German, and Spanish, these are mostly elective. Given the University's strong focus on internationalization, foreign language skills are particularly important, making it necessary to further examine various aspects of

ESP instruction.

In the Hospitality, Restaurant, and Gastronomy study program English is a compulsory course in all three years of undergraduate study and both years of graduate study. In the first year of undergraduate study, students have four hours of English instruction per week, while in the second and third years they have three hours per week. At the graduate level, students have three hours of English instruction per week. English classes in the observed study program are taught by a single instructor, who is also the author of this study. The participant groups were deliberately selected so that students from all years of study were taught by the same teacher. This approach was adopted to examine whether foreign language enjoyment is related to the role of the teacher rather than differences between teachers. By keeping the teacher constant, the study allows for a clearer focus on the relationship between foreign language enjoyment and the teacher's influence.

Participants

The study was conducted on a sample of 38 students from the Faculty of Economics at the University of Dubrovnik, enrolled in the Hospitality, Restaurant, and Gastronomy study program. The sociodemographic characteristics of the participants are presented in Table 1. With regard to age, the largest proportion of participants were 21 years old (26.3%), followed by students aged 22 and 23 (23.7% each). Students aged 20 accounted for 21.1% of the sample, while 19-year-old students were the least represented (5.3%). In the academic year 2024/2025, a smaller number of students were enrolled compared to previous academic years. In terms of gender, 55.3% of the participants were female and 44.7% were male. Analysis of the study program shows that the majority of participants were enrolled in the undergraduate program in Hospitality, Restaurant, and Gastronomy (84.2%). A smaller proportion of participants attended the graduate program in Hospitality (7.9%) and the undergraduate program in Business Economics (7.9%), as Business Economics students, where Business English is an elective course, join the Hospitality study program group in the second and third years of undergraduate study. Regarding the year of study, the largest number of participants were enrolled in the third year of undergraduate study (50.0%), followed by the second year of undergraduate study (31.6%). First-year undergraduate students accounted for 10.5% of the sample, while 7.9% of participants were in the first year of graduate study. There were no participants from the second year of graduate study.

Table 1: Sociodemographic indicators

		N	%
How old are you?	19	2	5.3%
	20	8	21.1%
	21	10	26.3%
	22	9	23.7%
	23	9	23.7%
	Total	38	100.0%
What is your gender?	Male	17	44.7%
	Female	21	55.3%
	Total	38	100.0%
What is your study program?	Undergraduate program in Hospitality, Restaurant, and Gastronomy	32	84.2%
	Undergraduate program Business Economics	3	7.9%
	Graduate program Hospitality	3	7.9%
	Total	38	100.0%
What is your year of study?	1st year of undergraduate study	4	10.5%
	2nd year of undergraduate study	12	31.6%
	3rd year of undergraduate study	19	50.0%

	1st year of graduate study	3	7.9%
	Total	38	100.0%

The sample was a convenience sample, participants were selected based on their availability and relevance to the research, which focuses on learning English for specific purposes in the context of tourism and hospitality.

Instrument

The study used an adapted version of an existing **Short Version of the Foreign Language Enjoyment Scale** (Botes et al., 2021), which measures positive emotional aspects of foreign language learning, including feelings of satisfaction, pride, and enthusiasm during language-related activities. The instrument was modified through wording changes, translation, item reduction, and contextual adjustment. The instrument was not fully validated; instead, its reliability in the Croatian context was tested using the Cronbach's alpha coefficient. In its original English version, the scale consists of nine items, and participants indicate their level of agreement using a five-point Likert scale (1 – strongly disagree; 5 – strongly agree). For the purposes of this study, the following five items were selected: *I am doing well in English language classes; I feel proud of my accomplishments in English classes; I feel comfortable when giving presentations; It is a positive environment; The classroom atmosphere is good.*

In addition to the main instrument, the author developed a set of additional questions aimed at gaining deeper insight into participants' personal experiences and subjective perceptions related to changes in emotions during their studies, in order to examine its relationship with foreign language enjoyment. This part of the questionnaire consisted of four items. For each item, participants indicated their level of agreement or intensity of experience on a scale from 1 to 5 (1 = strongly disagree, 5 = strongly agree). The items were as follows: My foreign language anxiety has decreased since I started university; How strong was your foreign language anxiety at the beginning of your studies? (scale from 1 to 5; 1 = no anxiety at all, 5 = very strong anxiety); How strong is your foreign language anxiety now? (scale from 1 to 5; 1 = no anxiety at all, 5 = very strong anxiety); and Do you feel anxiety or discomfort when giving a presentation in English class? (scale from 1 to 5; 1 = no anxiety at all, 5 = very strong anxiety).

Procedure

The study was conducted in April 2025 on a sample of 38 students from the Faculty of Economics at the University of Dubrovnik, enrolled in the Hospitality, Restaurant, and Gastronomy study program. Data were collected through an online questionnaire administered via Google Forms. Before participating, students were informed about the purpose of the study and were assured of the confidentiality and anonymity of their responses. Participation was voluntary, and respondents were informed that they could withdraw from the study at any time. The estimated time required to complete the questionnaire was approximately 10-15 minutes.

Results and discussion

This section presents the results of the statistical analyses conducted to address the research questions. Descriptive and inferential statistical methods were used to examine foreign language enjoyment and its relationship with selected variables.

Table 2 presents the descriptive statistics for the foreign language enjoyment items, including the mean scores and standard deviations.

Table 2: Foreign language enjoyment

		N	%	$\bar{x}$	Sd
I am doing well in English language classes	Strongly disagree	0	0.0%		
	Disagree	0	0.0%		
	Undecided	3	7.9%		

	Agree	6	15.8%		
	Strongly agree	29	76.3%		
	Total	38	100.0%	**4.68**	.62
I feel proud of my accomplishments in English classes	Strongly disagree	1	2.6%		
	Disagree	1	2.6%		
	Undecided	5	13.2%		
	Agree	9	23.7%		
	Strongly agree	22	57.9%		
	Total	38	100.0%	4.32	.99
I feel comfortable when giving presentations	Strongly disagree	1	2.6%		
	Disagree	2	5.3%		
	Undecided	14	36.8%		
	Agree	10	26.3%		
	Strongly agree	11	28.9%		
	Total	38	100.0%	**3.74**	1.03
It is a positive environment	Strongly disagree	0	0.0%		
	Disagree	0	0.0%		
	Undecided	3	7.9%		
	Agree	6	15.8%		
	Strongly agree	29	76.3%		
	Total	38	100.0%	**4.68**	.62
The classroom atmosphere is good	Strongly disagree	0	0.0%		
	Disagree	2	5.3%		
	Undecided	0	0.0%		
	Agree	2	5.3%		
	Strongly agree	34	89.5%		
	Total	38	100.0%	4.79	.70

The results indicate that the vast majority of respondents have a positive experience in English language classes. The highest mean value was observed for the statement *The classroom atmosphere is good* (4.79), suggesting a highly positive perception of the learning environment. Similarly, most students strongly agree that they coped well in class and that cooperation with classmates is positive (4.68). A slightly lower, though still relatively high, mean value was found for comfort during presentations (3.74), suggesting that some students continue to experience a certain level of discomfort when speaking publicly in a foreign language. Overall, the results point to a high level of foreign language enjoyment among the respondents.

Before conducting further statistical analyses, the normality of the distribution of the foreign language enjoyment variable was examined. The results of the Kolmogorov–Smirnov and Shapiro–Wilk tests indicated that the distribution significantly deviated from normality ($p < 0.05$). Since the level of significance was not greater than 0.05, it can be concluded that the assumption of normality was not met. Therefore, non-parametric statistical tests were used in the subsequent analyses. The reliability of the questionnaire measuring foreign language enjoyment was assessed using Cronbach's alpha coefficient. The Cronbach's alpha value was 0.68 for the scale consisting of five items, which can be considered an acceptable level of internal consistency. This result indicates that the instrument used is sufficiently reliable for measuring the examined construct.

Table 3 presents the relationship between foreign language enjoyment and various variables related to foreign language anxiety as well as demographic characteristics.

Table 3: Spearman's correlation coefficient

		FOREIGN LANGUAGE ENJOYMENT
What is your year of study?	r	.032
	p	.850
	N	38
My foreign language anxiety has decreased since I started university.	r	**.559****
	p	.000
	N	38
How strong was your foreign language anxiety at the beginning of your studies?	r	-.154
	p	.357
	N	38
How strong is your anxiety of a foreign language now?	r	**-.381***
	p	.018
	N	38
Do you feel anxiety or discomfort when giving a presentation in English class?	r	**-.655****
	p	.000
	N	38

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The results indicate that there is no statistically significant relationship between foreign language enjoyment and year of study (p = 0.850), nor between enjoyment and the level of anxiety at the beginning of studies (p = 0.357). In contrast, a strong and statistically significant positive correlation was found between foreign language enjoyment and the reduction of foreign language anxiety during the course of study (r = 0.559, p < 0.01). In addition, moderate to strong negative correlations were observed between enjoyment and current anxiety levels, as well as anxiety experienced during presentations.

Table 4: Comparison by gender (Mann–Whitney U test)

		What is your gender?			p*
		Male	Female	Total	
FOREIGN LANGUAGE ENJOYMENT	Median	4.60	4.60	4.60	0.800
	Percentile 25	4.20	4.00	4.00	
	Percentile 75	4.80	4.80	4.80	

Table 4 presents a comparison of foreign language enjoyment levels between male and female participants. The median value is the same for both groups (Md = 4.60), and the differences between genders are not statistically significant (p = 0.800). These results indicate that gender does not represent an important factor in the experience of enjoyment in foreign language learning in this sample.

Table 5: Comparison by age (Kruskal–Wallis test)

		How old are you?					p*
		19	20	21	22	23	
FOREIGN LANGUAGE ENJOYMENT	Median	4.90	4.60	4.50	4.60	4.20	0.400
	Percentile 25	4.80	4.00	4.40	4.20	4.00	
	Percentile 75	5.00	4.90	4.80	5.00	4.60	

Table 5 presents differences in foreign language enjoyment with respect to the participants' age. Although minor differences in median values can be observed across age groups, the Kruskal–Wallis test did not reveal

statistically significant differences (p = 0.400). This suggests that students' age does not have a significant effect on the level of enjoyment in learning English.

Table 6: Comparison by year of study (Kruskal–Wallis test)

		What is your year of study?				p*
		1st year of undergraduate study	2nd year of undergraduate study	3rd year of undergraduate study	1st year of graduate study	
FOREIGN LANGUAGE ENJOYMENT	Median	4.70	4.50	4.60	4.00	0.687
	Percentile 25	4.10	3.70	4.20	3.80	
	Percentile 75	4.90	4.80	5.00	5.00	

Table 6 presents a comparison of foreign language enjoyment with respect to the year of study. Although students in lower years of study show slightly higher median values compared to graduate students, the differences are not statistically significant (p = 0.687). Therefore, it can be concluded that the year of study does not have a significant effect on the level of foreign language enjoyment in this study.

Table 7 presents students' responses on whether they experienced anxiety or discomfort while learning a foreign language in primary or secondary school, as well as the reasons for these feelings.

Table 7: Did you experience anxiety or discomfort when learning a foreign language in primary or secondary school? If yes, please specify the reasons

	N
Yes, because I did not know how to pronounce some words.	1
Yes, because teachers did not have an appropriate approach that encouraged learning from mistakes; instead, they created pressure based on mistakes.	1
Yes, during presentations.	1
Yes, due to lack of knowledge.	1
Yes, I was not confident in myself and no one encouraged me to make an effort.	1
Yes, because I did not have sufficient knowledge in primary school.	1
Yes, because I thought I wouldn't be able to learn and understand everything	1
Mistakes and fear.	1
The only problem in secondary school was a teacher who could not teach the language properly, insisted she was always right, and failed us for that reason. It was a great relief to see that this was not the case in Professor Hrnić's classes.	1
Yes, I was afraid that I wouldn't pronounce some words correctly or use correct grammar.	1
I was mostly afraid of making mistakes or not knowing something well enough.	1
No	19
A feeling of not knowing enough and being judged.	1
I feel discomfort when I have to prepare a speech in front of everyone.	1
Teachers expected memorized answers and did not explain mistakes, but only corrected individual words.	1
Fear of speaking.	1
Fear of teachers' dissatisfaction and the fact that others know more.	1
Fear of making mistakes.	1
Because of my speech impediment, I do not like situations where classmates and teachers have to wait while I speak due to stuttering.	1

Half of the responses indicate negative emotional experiences in earlier education, with the main sources of anxiety being the teaching approach, fear of making mistakes, giving presentations, lack of support, and feelings of being judged. Some students report that teachers created pressure, did not encourage learning through mistakes, or used an inadequate pedagogical approach. However, it is worth mentioning that a significant number of students did not experience anxiety or discomfort when learning a foreign language in earlier educational contexts. This suggests that learners' emotional experiences are not uniform and that positive language learning experiences also occurred in previous educational settings. However, despite this diversity of initial experiences, the results of the present study show a consistently high level of foreign language enjoyment among students across different years of study. Therefore, the results indicate that the teaching context may help mitigate earlier negative learning experiences.

In line with Dynamic Systems Theory, emotions in language learning develop through interaction between past experiences and the current learning environment. Although earlier experiences may shape initial emotional states, the findings of this study suggest that a consistent and supportive teaching approach can foster stable enjoyment regardless of students' previous experiences. With regard to RQ1, the results presented in Table 2 show high mean values across almost all items. Particularly high scores were observed for classroom atmosphere, doing well in class, and cooperation with peers, while slightly lower—though still relatively high—scores were found for comfort during presentations. Overall, the findings indicate a high level of foreign language enjoyment among ESP students, suggesting that learners generally experience positive emotions in English language classes. With regard to RQ2, the relationship between foreign language enjoyment and foreign language anxiety, the results indicate that enjoyment is not significantly related to anxiety at the beginning of the studies. However, a strong positive relationship was found between foreign language enjoyment and a reduction in anxiety over time, alongside moderate to strong negative correlations with current anxiety levels, including presentation anxiety. Overall, these findings suggest that higher levels of foreign language enjoyment are associated with lower anxiety and a greater decrease in anxiety during the course of the study. With regard to sociodemographic variables (RQ3), the results show no statistically significant differences in foreign language enjoyment based on gender, age, or year of study. These findings indicate that foreign language enjoyment is relatively stable across different student groups within the examined sample. With regard to the role of the teacher (RQ4), the findings suggest that despite students' negative emotional experiences in earlier educational contexts, high levels of foreign language enjoyment are reported in the current learning environment. The teacher and the classroom atmosphere play an important role in shaping learners' emotional experiences and can mitigate earlier negative language learning experiences. This is in line with research conducted by Dewaele and Dewaele (2020), which suggests that foreign language enjoyment (FLE) is more strongly associated with the teacher's personality and teaching style, whereas foreign language anxiety (FLA) is more stable and less dependent on the teacher. Teaching practices often represent an important factor that can either trigger anxiety or foster enjoyment in foreign language learning. These emotional experiences influence learners' decisions to continue or discontinue learning English and, consequently, the level of language competence they ultimately achieve (Dewaele & Alfawzan, 2018). The study by Dewaele and Alfawzan (2018) shows that emotions experienced during foreign language learning have long-term effects on how learners perceive and use the foreign language. The authors emphasize that teaching practices strongly influence these emotions; therefore, teacher education should promote awareness of the emotional dimensions of teaching in order to help teachers create a positive and supportive classroom atmosphere.

Conclusion

Overall, the findings of this study suggest that foreign language enjoyment among ESP students is shaped primarily by the current instructional context rather than by learners' sociodemographic characteristics or earlier educational experiences. High levels of enjoyment, together with a significant reduction in foreign language anxiety over time, indicate that positive emotional experiences in the classroom can develop and

stabilize through a consistent and supportive teaching approach. In line with Dynamic Systems Theory, the teacher and classroom atmosphere appear to function as key attractors that influence learners' emotional states, enabling the mitigation of earlier negative experiences and the maintenance of enjoyment in foreign language learning.

Several limitations of this study should be acknowledged. The research was conducted on a relatively small and homogeneous sample, consisting of students from a specific higher education context and discipline. As a result, the findings cannot be readily generalized to students from other study programs, institutions, or educational levels. In addition, changes in foreign language enjoyment and anxiety over time are based on self-reported perceptions rather than direct observation of emotional development across different stages of study. Although the role of the teacher is addressed, it is examined indirectly, mainly through students' reflections on previous learning experiences.

References

Botes, E., Dewaele, J.-M., Greiff, S. (2022). Taking stock: A meta-analysis of the effects of foreign language enjoyment. *Studies in Second Language Learning and Teaching, 12*(2), 205-232. https://doi.org/10.14746/ssllt.2022.12.2.3

Dewaele, J.-M. (2019). The effect of classroom emotions, attitudes toward English, and teacher behavior on willingness to communicate among English foreign language learners. *Journal of Language and Social Psychology, 38*(4), 523-535. https://doi.org/10.1177/0261927X19864996

Dewaele, J.-M., Dewaele, L. (2017). The dynamic interactions in foreign language classroom anxiety and foreign language enjoyment of pupils aged 12 to 18: A pseudo-longitudinal investigation. *Journal of the European Second Language Association*, *1*, 12-22. https://doi.org/10.22599/jesla.6

Dewaele, J.-M., Alfawzan, M. (2018). Does the effect of enjoyment outweigh that of anxiety in foreign language performance? *Studies in Second Language Learning and Teaching, 8*(1), 21-45. https://doi.org/10.14746/ssllt.2018.8.1.2

Dewaele, J.-M., Dewaele, L. (2020). Are foreign language learners' enjoyment and anxiety specific to the teacher? An investigation into the dynamics of learners' classroom emotions. *Studies in Second Language Learning and Teaching, 10*(1), 45-65. ISSN 2083-5205. http://dx.doi.org/10.14746/ssllt.2020.10.1.3

Dewaele, J.-M., Li, C. (2020). Emotions in second language acquisition: A critical review and research agenda. *Foreign Language World*, *196*(1), 34-49.

Dewaele, J.-M., MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, 4(2), 237-274. https://doi.org/10.14746/ssllt.2014.4.2.5.

Dewaele, J.-M., MacIntyre, P. D. (2016). Foreign language enjoyment and foreign language classroom anxiety: The right and left feet of FL learning? In P. D. MacIntyre, T. Gregersen, & S. Mercer (Eds.), *Positive psychology in SLA* (pp. 215-236). Multilingual Matters.

Dörnyei, Z. (2014). Researching complex dynamic systems: 'Retrodictive qualitative modelling' in the language classroom. *Language Teaching*, *47*(1), 80-91.

Elahi Shirvan, M., Talebzadeh, N. (2020). Tracing the signature dynamics of foreign language classroom anxiety and foreign language enjoyment: A retrodictive qualitative modeling. *Eurasian Journal of Applied Linguistics, 6*(1), 23-44. doi: 10.1080/13670050.2018.1441804

Elahi Shirvan, M., Taherian, T. (2018). Longitudinal examination of university students' foreign language enjoyment and foreign language classroom anxiety in the course of general English: latent growth curve modeling. *International Journal of Bilingual Education and Bilingualism,* 1-19. doi: 10.1080/13670050.2018.1441804

Elahi Shirvan, M., Taherian, T., Yazdanmehr, E. (2020). The dynamics of foreign language enjoyment: An ecological momentary assessment. *Frontiers in Psychology*, *11*, Article 1391. https://doi.org/10.3389/fpsyg.2020.01391

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218-226. https://doi.org/10.1037/0003-066X.56.3.218

Krashen, S. (1982). *Principles and practice in second language acquisition*. Oxford, England: Pergamon Press.

Larsen-Freeman, D. (1997). Chaos/complexity science and second language acquisition. *Applied Linguistics, 18*(2), 141-165. https://doi.org/10.1093/applin/18.2.141

Larsen-Freeman, D. (2013). Chaos/complexity theory for second language acquisition. *The encyclopedia of applied linguistics,* 1-7. https://doi.org/10.1093/applin/18.2.141

Łodej, M., & Osmoła, A. (2024). Emotions in language learning: Understanding foreign language enjoyment and anxiety in higher education. *Neofilolog,* 62, 78-104. https://doi.org/10.14746/n.2024.62.1.6

MacIntyre, P. D., Gregersen, T. (2012). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching, 2*(2), 193-213. https://doi.org/10.14746/ssllt.2012.2.2.4

MacIntyre, P. D. (2017). An overview of language anxiety research and trends in its development. In S. Loewen & M. Sato (Eds.), *The Routledge handbook of instructed second language acquisition* (pp. 11-30). Routledge. https://doi.org/10.21832/9781783097722-003

Mihaljević Djigunović, J. (2007). Afektivni profil, aspiracije i zadovoljstvo nastavom engleskoga jezika kod hrvatskih učenika. *Metodika, 8*(14), 104-114. Downloaded from https://hrcak.srce.hr/26944

Language education in England and six other countries

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Abstract
This article examines how language education in England compares with that of six high-performing countries: Russia, France, Germany, the Netherlands, Estonia, and Finland. It focuses on policy and practice in teaching about language, whether this is the pupils' first language or any second language. Findings show that the other countries place language at the core of the curriculum, integrate first and second language instruction, and value explicit, linguistically informed teaching. In contrast, England, despite its pioneering contributions to language education theory, tends to ignore these innovations and pays little attention to knowledge about language. The review concludes with policy recommendations for embedding linguistic knowledge and teacher expertise in the English curriculum.

Keywords*: language education, England, Russia, France, Germany, the Netherlands, Estonia, Finland*

Introduction

This review asks how language education in England compares with that of other national systems, and how practices in other countries might inform curriculum reform in England. After reviewing language education in six other countries, it will draw general conclusions about how we, in England, should change our approach.

By *language education* I mean any kind of education where the focus is on language, so in England the term embraces most obviously first-language English and modern foreign languages, but in principle also English as an additional language, classical languages, and heritage or community languages, though I have little to say in this article about any of these other aspects. To simplify the picture, I simply contrast **L1** and **L2**, which for most pupils in England means English and a foreign language, though for many pupils English is actually a second language (L2).

This paper may be seen as a guide for those who are currently working in England on the revision of the National Curriculum and its associated assessment instruments (Anon, 2025a). The current context in England is one of crisis in both English and foreign languages, where falling numbers in the last years of secondary school and in university departments reflect a long-standing and ongoing decline in popularity among school children. However, the review also reveals that several other countries face their own challenges in language teaching, and in particular the need to take account of modern linguistics and applied linguistics.

The other countries chosen for the comparison are Russia, France, Germany, The Netherlands, Estonia and Finland. All these countries are (at least partly) in Europe, which somewhat reduces other cultural differences and raises the relevance of comparison with England. For France the discussion extends a little to include other countries where French is a national language: Switzerland and Canada (which, of course, is not in Europe). The discussion of Germany briefly touches on other German-speaking countries in Europe. I chose these particular countries partly because they figured prominently in the data I myself had collected over several decades, and partly because of published reports in English, French or German – the only languages I can read easily. This language restriction is an important limitation on what I say about Russia, The Netherlands, Estonia and Finland, where I could not access the local literature on policy and research so I had to rely on reports in my three languages. But for five of the countries this information was confirmed by individuals who knew the country concerned and had experienced its schools as pupils and/or as teachers.

My personal sources were as follows:

- Russia: Pavel Iosad, Viktoria Magne, Jenny Folkeryd
- France: Marie-Claude Boivin
- Germany: Eva Neu
- The Netherlands: Jimmy van Rijt, Willem Hollmann
- Estonia: Martin Ehala, Viktoria Magne (again)

I also benefited greatly from the international knowledge and experience of Robin Alexander and Terry Lamb, as well as from many others who have advised me over the decades[1].

The seven countries selected for comparison are displayed in Table 1, together with their ranking (out of 79) in the most recent (2022) PISA study of 15-year-olds[2]; since Russia did not take part in the 2022 iteration of Pisa, its rank is based on its scores for 2018[3]. All the selected countries sit firmly in the top third of all countries, so it is likely that the UK can learn from the others, but I express reservations about the significance of these figures in the next section.

Table 1*:* PISA rankings 2022

	Maths	Science	Reading	Average rank
United Kingdom	12	14	13	13
Russia	16	32	23	24
France	26	26	28	27
Germany	24	22	21	22
The Netherlands	10	25	35	23
Estonia	7	6	6	6
Finland	20	9	14	14

Background: Britain's legacy in language education

The UK's PISA results

It could be objected that the table of PISA results shows the UK in a very favorable light, in the 13th position worldwide and near the top of the European countries, and that this undermines my argument that the UK needs to change. There are two counter-objections.

The first is that the Pisa results are very variable, and the UK's performance isn't always, or even usually, as favorable as this; for example, the UK's ranking for reading ranged from 25th in 2009 to 11th in 2018[4]. It seems unlikely that the reality is so variable. Moreover, there is considerable uncertainty about the test's claims to be based on a representative sample of each country's 15-year-olds; for example, it has been calculated that the sample used in the 2018 test for England excluded 40% of the potential randomly-selected population, with low-achieving children particularly likely to be excluded (Jerrim, 2021). This proportion of excluded children is higher than for most other countries.

The second is that the average results in the table may hide a large gap between advantaged and disadvantaged students, which is often called the *achievement gap*. For example, in 2015 the retiring head of OFSTED (an agency which inspects schools) reported an achievement gap of 28%, which was exactly the same

[1] https://dickhudson.com/geography/

[2] https://worldpopulationreview.com/country-rankings/pisa-scores-by-country

[3] https://www.statista.com/statistics/1078434/pisa-score-of-russia-by-category/#:~:text=%22The%20Programme%20for%20International%20Student%20Assessment%20(PISA),of%20the%2079%20participating%20countries%20and%20economies.

[4] Government reports produced by googling for "Pisa [year] England"

as it had been ten years earlier[5]. This figure is the number of percentage points between the scores for the top 10% and the bottom 10%. Admittedly, a similar gap exists across most of the other countries in the PISA survey, and England's gap, measured in this case as 86, is actually below the OECD average of 93 (Ingram et al., 2023). Nonetheless, all is clearly less well in England's schools than the cheerful PISA results suggest, as witness the conclusion from a study across 2011-23 that "persistently disadvantaged pupils are almost one year behind by the end of primary school and almost two years behind by the end of secondary school"[6]. In literacy, very poor skills limit the lives of 18% of adults[7], a figure which, although it is below the average for OECD countries, is unacceptable, especially when compared with the figure of 12% for Finland[8]. The achievement gap translates into a lot of slow learners who, after struggling through their years at school, leave without the skills which our society considers essential for life. I suggest below how changes in language education might help such people.

British innovations in language education

Britain has produced internationally recognized innovations in language pedagogy, including the following (which are all explained below):

- Language Across the Curriculum (Bullock 1975)
- Systemic Functional Grammar (Halliday 1985)
- A-level English Language
- Language Awareness (Hawkins 1984)
- Translanguaging (Williams 1994)
- The Languages Diploma.

Despite global adoption — particularly of Halliday's linguistic frameworks, Hawkins's Language Awareness movement and the ideas of translanguaging — these approaches have all dwindled domestically as policy discontinuities and shifting priorities have eroded systematic language education. Only the A-level in English Language endures, and even these faces reduced uptake due to weakened foundations at earlier stages. The following paragraphs add some details.

Language across the curriculum

Language Across the Curriculum is a slogan that was introduced in the 1975 Bullock Report on English teaching, which argued that 'every teacher is a language teacher':

> Each school should have an organized policy for language across the curriculum, establishing every teacher's involvement in language and reading development throughout the years of schooling (Bullock, 1975: 514).

The Bullock Report was probably ahead of its time from an international perspective, and is quoted as a landmark by researchers in other countries such as South Africa (Walt & Ruiters, 2012).

Systemic Functional Grammar

Systemic Functional Grammar is the brainchild of Michael Halliday, conceived while he was at University College London during the 1960s (Halliday et al., 1964; Halliday, 1985). It is a general theory of language which embeds language in a social model relevant to teaching, and has had a major impact on schools thanks to a very large research project in the 1960s called Linguistics and English teaching (Pearce 1994). Halliday's ideas

[5]https://dera.ioe.ac.uk/id/eprint/26707/1/Sir%20Michael%20Wilshaw%27s%20speech%20to%20the%20Festival%20of%20Education%20-%20Speeches%20-%20GOV_UK.pdf

[6] https://epi.org.uk/annual-report-2024-disadvantage-2/

[7] https://literacytrust.org.uk/parents-and-families/adult-literacy/

[8] https://okm.fi/en/-/finland-a-leading-country-in-piaac-adult-population-survey

have also been taken up abroad, and particularly so in China[9], though much less so in the UK.

A-level English language

Another innovation in our language education which is admired internationally is the Advanced-level exam in English Language, taken in Years 12 and 13, which served as the model for similar examinations in Australia (Mulder, 2007) and Singapore[10]. The UK exam was directly inspired by the linguistics of Halliday's project at UCL, and started in 1983 with collaboration between enthusiastic school teachers and the linguist Katharine Perera (Perera, 1984).

Language awareness

The fourth major contribution to language education is the well-known Language Awareness movement, founded on the idea that schools should teach children to be 'aware' of language. This movement is entirely due to the inspiration and campaigning during the 1970s and 1980s of a UK linguist, Eric Hawkins[11], who managed the language center in the University of York, England (Hawkins, 1981; Hawkins, 1984). As we shall see in our survey of other countries, Language Awareness is now a global phenomenon, with an international association[12] and its own academic journal. It is so important that it deserves a little more explanation.

The main idea of Language Awareness has two simple parts: that school leavers' awareness of language should be conscious and that it should be comprehensive. **Consciousness** entails the ability to talk and think about language, and **comprehensiveness** means, on the one hand, that it should embrace all the language they meet in school (whether their first language or a second language, whether informal or formal, spoken or written, standard or non-standard), and on the other, that it should include all facets of these languages (structure, use and variation: so sounds, spelling, meaning, grammar and vocabulary but also how these patterns are used and how they vary between speakers, between styles, between places and between times). The cross-linguistic aim of language awareness necessarily brings together the teachers of English and foreign languages, in contrast with the tradition of isolation in the UK's schools (which we shall also see in some other countries).

Translanguaging

The Welsh word *trawsieithu* was used first in a PhD thesis by Cen Williams at the University of Bangor, in Wales (Williams, 1994), and was then translated into *translanguaging* by Colin Baker (Lewis et al., 2012). This term relates particularly to the education of bilingual or multilingual speakers, so it is relevant to a lot of schools outside Wales where bilingual pupils can often be in the majority. The idea is that when a person knows more than one language their languages constitute a single mental system, so they should be allowed, or even encouraged, to move freely between these systems rather than keeping strictly to one language at a time. The obvious limitation is that, in contrast with Wales, a bilingual pupil in England may be the only pupil in the class who speaks their particular home language. So in spite of a lively international research agenda, this idea hasn't yet had much impact on schools in England.

The languages diploma

It is not too fanciful to see the 1970s and 1980s as the heyday of innovations in language education in the UK, because little that happened since has deserved international attention. The one exception was a very exciting Languages Diploma[13] which was developed by a team led by Terry Lamb in the 2000s under the last

[9] http://www.isfla.org/Systemics/Courses/China.html (accessed June 2025)

[10] https://www.seab.gov.sg/files/A%20Level%20Syllabus%20Sch%20Cddts/2027/9508_y27_sy.pdf

[11] https://www.languageawareness.org/honorary/tribute.php

[12] https://languageawareness.org/

[13] https://hansard.parliament.uk/lords/2008-06-30/debates/0806301000002/Education14-19Reform

Labour government but scrapped by the incoming Tory/Liberal Democrat coalition government; otherwise it would probably have been adopted by France, Germany and Spain (Terry Lamb, pc).

Language education in England

Most of the major breakthroughs achieved here during the earlier decades have now almost vanished in the UK's own education system. Language Across the Curriculum never gained traction, Systemic Functional Grammar has almost vanished from UK schools and universities, translanguaging is still looking for applications in England, and Language Awareness is no longer mentioned in curriculum documents, though it was prominent, albeit under the title Knowledge About Language, in the 1990s and 2000s (Teramura & Svalberg, 2025). The only exception is the A-level exam in English Language, which still exists; but, thanks to changes in the curriculum lower in school, even this is struggling with decreasing uptake.

To be fair, there are small patches of language education in the current curriculum, but they are isolated and not integrated into a larger picture. One is the strong focus on phonics in the first two primary years, which includes 'grapheme-phoneme correspondences' and even uses parts of the International Phonetic Alphabet. The other is the very elementary grammar which is tested at the end of primary school by the compulsory exam in Spelling, Punctuation and Grammar. Both these items are taken seriously and occupy a lot of teaching time; but having been taught, they are forgotten, and neither survives into secondary school.

We shall see that the lack of a coherent program of language education sets England (and the UK) apart from the other countries in our survey, so it is reasonable to ask why our education system has evolved in this way. The answer is complex, and beyond this article, but one important point is that language education was taken much more seriously a century ago, even though we have probably never had the coherent partnership of L1 and L2 teaching that we dream of nowadays (Hudson & Walmsley 2005).

In the late 19th century, English teaching was heavy on facts about language – its grammar and vocabulary, its spelling, its history – thanks to school textbooks like the 400-page *Manual of English Grammar and Composition* by Nesfield, first published in 1898 and still printing (in a revised version) in 1978. And, of course, at the same time there was support for explicit teaching of rules in foreign-language teaching in opposition to the equally popular 'direct method' where pupils were left to create their own rules.

But this teaching about language was for the academic elite, and for the masses English was all about literacy and literature, and there were no foreign languages. Moreover, the university courses that prepared future teachers of English and foreign languages were very short of teaching about the language itself, so by the end of the 20th century language had more or less vanished from the syllabus in English, and direct teaching about the language was frowned on in foreign languages. The reforms of the 1990s and 2000s swung the balance towards language, but the curriculum introduced in 2014 has returned the balance to where it was before.

We now move to the comparison of England with six other countries.

International findings

Russia

Russia stands at the opposite pole from the UK because it takes language education very seriously, and its current system stands in an unbroken tradition which still guarantees a great deal of expertise among teachers (Pavel Iosad, Viktoria Magne, pc). At the heart of the system is a solid understanding of phonology, morphology and syntax, all of which are closely linked to writing skills – spelling in the case of phonology and morphology, and composition in the case of grammar. Here are some concrete examples.

The first is a lesson that was filmed by the British educationalist Robin Alexander's team in a typical Russian primary school (Alexander, 2001: 450-1); although it took place 30 years ago, in 1994-5, my Russian advisors say little has changed. The pupils are in the first year, so they are aged 6 or 7. The lesson starts with a discussion of the classification of consonants as soft (palatalized) or hard, and how this limits the range of vowels with which they can combine. The lesson continues with a presentation, from the blackboard, in which a selected pupil explains why a particular consonant should be classified as both hard and voiced. The lesson

shows a depth of linguistic analysis which would be unimaginable in any British primary school, let alone with such young pupils.

The second example comes from the same book, but with pupils aged 9-10 (ibid p.285-6). Table 2 is a minute-by-minute record of the first ten minutes of the lesson. For a British reader this lesson is extraordinary: within the first ten minutes of the school day, the class thinks hard about case agreement in five sentences, and one of the pupils has an argument with the teacher about a technical point of grammar – and loses. This is dialogic teaching of a very high order, with a high premium on problem-solving, deep understanding and verbal explanation, and no trace of rote learning. The aim of the lesson is transparent: to develop the children's explicit understanding of how their language works. 30 years later, such teaching may still be typical in Russian primary and secondary schools (Viktoria Magne, pc).

Table 2: A grammar lesson in a Russian primary school

time	**activity**
8.30	Teacher welcomes pupils and visitors.
8.31	Teacher questions pupils on definitions of *biography, catalogue* and *cushion*, ...
8.34	Teacher draws attention to 'word combinations' [i.e. syntactically correct phrases] on the blackboard. Pupils read them silently. Teacher asks pupils to prove that in the first line (*He arrived with a fish*) the words form a combination (i.e. their cases agree) rather than a random group.
8.36	Pupils are asked to elaborate and explain the combination/group distinction. A brief class discussion follows.
8.38	The teacher asks a series of questions to establish that the pupils understand that the verb is 'in command' of the first sentence and that it takes the instrumental case.
8.39	Teacher and pupils work through the remaining four combinations ... Pupils are asked (a) to determine whether the verb or the noun is in command and (b) to identify the cases used (respectively, dative, genitive, instrumental, accusative). During the course of this episode the teacher is challenged by one pupil who disagrees with the answer the teacher has accepted from another pupil. The pupil is asked to explain her objection, which she does in detail. The objection is not sustained.

Russian education maintains linguistic expertise in teachers and fosters metalinguistic reasoning in pupils (Alexander, 2001). Unsurprisingly, there are also weaknesses. The analysis is very prescriptive; so in a recent official Russian language exam, at least two thirds of the questions asked pupils to correct 'mistakes' (Pavel Iosad, pc). Moreover, the teaching ignores matters of usage (Bakhtin, 2004: 12). And pedagogically the teaching can be very didactic, avoiding anything approaching 'play' (Jenny Folkeryd, via Jimmy van Rijt, pc).

Nevertheless, my conclusion is that language education is much more center-stage and purposeful in Russia than it is in the UK. Moreover, the examples quoted show what is possible with primary-aged children, and suggest the cognitive benefits of early, explicit instruction about language structure. Another fact about Russia which may be relevant is that Russia had the lowest 'achievement gap' of all the countries in Europe in the 2015 PISA round (Anon 2018: 6); the nature of their language education may or may not have contributed to this levelling effect by focusing weaker learners' attention on their own language.

It is also worth mentioning an educational initiative in which Russian practice has already impacted on the UK's schools: the *Linguistics Olympiad*. A linguistics olympiad is a competition for school children in which they 'crack the code' of some unfamiliar language on the basis of a small amount of presented data. The idea was first launched in 1965 in Moscow, whence it spread to a growing number of other countries and

eventually reached the UK[14], albeit not until 2009. It has proved a great success in the UK, and in 2025 it attracted just over 6,000 competitors in UK schools. Its Russian roots are easy to explain given the high quality of language education in Russian schools.

France and Francophone regions

This section embraces not only France but also French-speaking parts of Canada and Switzerland, which seem to be united at least by a common research agenda. Like Russia, all these places take language education, and especially spoken language, seriously – for example, France devotes 3 hours per week to grammar through all the primary years (Belard et al., 2008: 10) – but unlike Russia, the development of modern linguistics has led to a widespread perception of crisis and enthusiasm for reform.

The innovations triggered by this perception, which started in the 1970s, apply at every level, from aims through curriculum to pedagogy (Bulea Bronckart, 2020). The aim is now both communicative and cognitive: not only practical mastery of the language in all its styles and genres (Sawyer & van de Ven, 2007), but also understanding how one's own language works as a system, rather than as a list of rules to be memorized (Nadeau & Fisher, 2006). More recently, exploring plurilingualism (as in translanguaging) has also become important[15].

In Switzerland and Canada the grammar taught is linguistically informed (Wilmet, 2015; Boivin, 2018), though the grammar taught in France is currently rather traditional (Marie-Claude Boivin, pc). And although the first goal is still to teach the standard language, the full range of varieties, standard and non-standard, is accepted and studied (Wilmet, 2015). Moreover, at least in principle, the pedagogy has changed from presentation by the teacher to research by the children (Bentolila 2006), though the reality can fall short of this aspiration (Boivin, 2018).

This new approach to grammar is supported by a large research literature which dwarfs that of Anglophonia. Just for the decade from 2005-2016, a review found no fewer than 45 reports of empirical studies (Boivin, 2018: 5). One of the findings of this research is that direct teaching of grammar does seem to have a measurable effect on students' writing (Arseneau, Foucambert & Lefrançois, 2018) – a finding which directly contradicts the mass of similar research in anglophone countries (Andrews et al., 2004; Andrews, 2005; Andrews, 2010). Moreover, in contrast with the UK, teachers do indeed study grammar at university before going back into schools as teachers, and modern reforms promote inquiry-based and plurilingual learning, with well-developed links to modern linguistics.

But another finding is the familiar preference of some teachers for teaching what and as they themselves had been taught at school in spite of reforms to curriculum and pedagogy (van den Akker, 2003). Another weakness seems to be the lack of links between L1 and L2 teaching (Marie-Claude Boivin, pc). In spite of these weaknesses, it is clear that language education receives a great deal of expert attention, including exciting new approaches to pedagogy, and also that major change is underway, with all that this entails in terms of teacher expertise and re-skilling. What I can't claim is that France's language education produces a smaller achievement gap, because France's gap is even wider than England's[16].

Germany

In spite of the independence of the states in Germany, generalization is possible thanks to a relatively unified research literature, and once again we find language education in a much more prominent position than in the UK. But, as in Francophonia, there is also a great deal of research underpinning attempts to innovate and in particular to accommodate modern linguistics (Funke, 2018).

Once again, the heart of language education is grammar, which is still central to *Deutschunterricht* in all

[14] https://www.uklo.org/

[15] https://approchesplurilingues.e-a-v.ca/grammaire-plurilinguisme/

[16] https://www.oecd.org/content/dam/oecd/en/about/programmes/edu/pisa/publications/national-reports/pisa-2018/featured-country-specific-overviews/PISA2018_CN_FRA.pdf

German-speaking countries (Funke, 2018). In Germany itself, grammar instruction is compulsory throughout the first ten years of education. According to one study, teachers spent about 17% of the time devoted to German studies on grammar; this figure stayed constant between 1970 and 2007 (Funke, 2018). For pupils continuing to grades 11-13, grammar is replaced by a broader study of communication or even some linguistic theory.

One of the points of disagreement regarding grammar teaching in Germany is the extent to which it has actually changed as a result of influence from modern linguistics. On the one hand, it is possible to trace a strong stream of debate about how best to bring linguistics into the classroom, starting in the 1950s with the impact of a single book, *Die Innere Form des Deutschen*, by Hans Glinz (Glinz, 1952; Moulton, 1953). Glinz introduced the idea of 'tests' for syntactic structure, and 'Glinz tests' (*Glinz'sche Proben*) are still an important part of grammar teaching. The influence of linguistics continues; for example, a textbook used in the 2010s discussed de Saussure, Chomsky and Whorf (Eva Neu, pc). On the other hand, it is also possible to object that this debate has had very little effect on what is taught in the classroom (Hlebec 2017). Presumably the truth is a complex mixture of these two views.

Another relevant fact about grammar teaching in Germany is that "courses on grammar constitute a basic component of the first academic phase of language teacher education at German universities" (Döring, 2020: 91). Given this wonderful opportunity for influencing the content of grammar lessons, together with the climate of openness to linguistics discussed above, we might expect teachers of German to be really well prepared for the task; and no doubt they are much better prepared than their equivalents in England. But, just as we noted above for France, trainee teachers still tend to revert to teaching grammar in the way they were taught when at school (Döring, 2020; van Rijt et al., 2022).

Because of such weaknesses it is possible for a recent survey (Hlebec 2017) to conclude that the actual practice of grammar teaching in Germany is still traditional: deductive (i.e. teacher-led) and focused on word classes and sentence parts (*Satzglieder*). The same is true of textbooks, which are used by most teachers (though less so by Gymnasium teachers) and which have been criticized for their deductive orientation and their lack of problem-solving. Other researchers have also reported significant gaps in teachers' knowledge of grammar (Eisner, 2021). Not surprisingly, perhaps, the result is that school leavers are less competent at grammatical analysis than the official documents would lead us to expect.

To summarize, Germany offers a model in which a great deal of teaching time is devoted to developing children's understanding of how their L1 works. This applies especially to the teaching of grammar, so German children, like French children, acquire a detailed framework of concepts and terminology for analyzing sentences which teachers of foreign languages (including, of course, English) can build on. This framework may be to some extent informed by modern linguistics, giving future generations of school teachers an intellectual foundation which they can share with pupils.

The Netherlands

The school curriculum in the Netherlands gives an increasing amount of attention to conscious language awareness:

> Within the language domain, students learn how language is structured as a system. They learn to reason functionally about spelling and grammar of Dutch … discover how you express identity by making choices in your linguistic repertoire … explore how language is used in society by looking at language variation and language change[17]. (Anon, 2025b)

This broad focus marks an extension of the long-standing tradition of grammatical analysis which dates from the late 19th century (van Rijt & Coppen, 2017). Moreover, teachers seem to be keen to go beyond the 'rules of thumb' of the traditional approach so as to deepen their pupils' understanding (van Rijt, Wijnands & Coppen, 2019).

[17] Translation by Jimmy van Rijt.

The Netherlands, like France and Germany, also has a very active and productive empirical research program including intervention studies related to conceptual understanding and linguistic reasoning (van Rijt & Coppen, 2017), and there are enviably strong links between universities and schools through a 'Mastery of Dutch' program[18] led by academics. In short, language education in the Netherlands not only has high profile, but is increasingly open to influence from research, including linguistics research.

The solid tradition of grammar teaching gives grammar-teaching a status which is the reverse of what we have in the UK: in the Netherlands, teachers of Dutch are typically enthusiastic experts on grammar, which for several decades they continued to teach in spite of discouragement from official documents which followed the Anglo-Saxon anti-grammar trend: "Teachers seem to like to teach grammar, although they know that it is not related to the quality of written production" (Rijlaarsdam, 2011). (We now note the more recent research which casts doubt on the latter claim.)

The Netherlands is particularly relevant to England because of the cultural similarity between the two countries, which makes educational differences especially significant (Alexander 2022: 329). If language education is different, we can hardly explain the difference as an inevitable result of other cultural differences.

Estonia

Estonia is noteworthy because it consistently figures among the top performers in the PISA tests; for example, in the 2022 results in Table 1 it came 7th in the world for its overall score and was the top-scoring European country.

What is especially interesting about Estonian education is the close link between schools and university research which is possible thanks to the country's very small population (1.4 million): most teachers are graduates of the university of Tartu, so this university has a major impact on schools. For language teaching this is important, because all the teachers graduate, knowing a great deal of linguistics, from the university's Department of Linguistics.

Another relevant fact is, of course, that until 1991 Estonia was part of the USSR, so about 20% of Estonia's population speaks Russian as L1. Since 1991, therefore, strategies have also been needed for teaching Estonian as L2, though Russian is now being replaced by Estonian as the medium in all schools[19]. More generally, minority languages are officially recognized and supported; so if a school has more than ten pupils who speak a language, the school must provide two hours per week of teaching in that language. As for foreign languages, every child is expected to study two, and to learn them to a respectable level[20].

As in so many other countries, grammar is the core of language education, and it is taken very seriously. It is part of the curriculum from Grade 4 to Grade 10 (out of 12 grades), with a strong focus on the complex morphology of Estonian and its effects on spelling. Estonia also shares the international dissatisfaction with purely form-focused grammar teaching, so its national curriculum has seen a series of revisions over the last few decades towards a broader focus on meaning and usage, and on stylistic and regional variation (Uusen & Müürsepp, 2010).

However, to compensate for the rather boring exercises which dominate grammar teaching in earlier years, Estonia has also introduced a broader course in linguistics for final-year students in Estonian-medium schools; this course lasts a year and (unlike the UK's Advanced-level course in English Language) is taken by all pupils in these schools. (Similar courses have also been introduced in nearby Denmark.[21]) The course books are all authored by linguists, so this is another excellent example of a strong bridge between linguistics and schools.

For example, Figure 1 (Ehala & Kitsnik, 2011: 38) is an exercise from the linguistics course. This is an

[18] https://nederlands.vakdidactiekgw.nl/

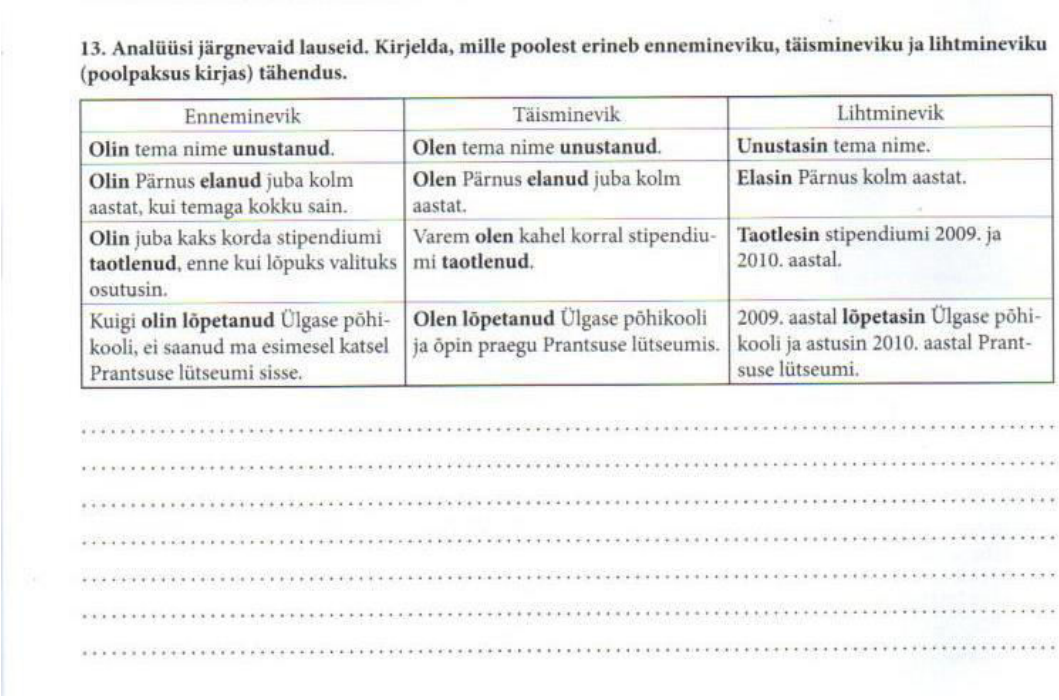
[19] https://www.educationestonia.org/estonian-education-language-reform/

[20] https://eurydice.eacea.ec.europa.eu/eurypedia/estonia/teaching-and-learning-single-structure-education

[21] https://da.wikipedia.org/wiki/Almen_sprogforst%C3%A5else

exercise in semantics in which students think about the meaning differences between the three past tenses of Estonian, called *enneminevik*, *taisminevik* and *lihtminevik*; the highlighted verbs in the first row are the relevant forms of 'forget'. Given that the first word in the sentence distinguishes past and present tense, these are formally similar to English *had forgotten*, *has forgotten* and *forgot*; but what about their meanings? The table data guide students in identifying subtle differences in aspect and temporal reference, and the space below the data allows students to write down their thoughts; so once again, as in France, the students turn into language researchers.

Figure 1: An exercise in Estonian



13. Analüüsi järgnevaid lauseid. Kirjelda, mille poolest erineb enneminevikku, täisminevikku ja lihtminevikku (poolpaksus kirjas) tähendus.

Enneminevik	Täisminevik	Lihtminevik
Olin tema nime **unustanud**.	**Olen** tema nime **unustanud**.	**Unustasin** tema nime.
Olin Pärnus **elanud** juba kolm aastat, kui temaga kokku sain.	**Olen** Pärnus **elanud** juba kolm aastat.	**Elasin** Pärnus kolm aastat.
Olin juba kaks korda stipendiumi **taotlenud**, enne kui lõpuks valituks osutusin.	Varem **olen** kahel korral stipendiumi **taotlenud**.	**Taotlesin** stipendiumi 2009. ja 2010. aastal.
Kuigi **olin lõpetanud** Ülgase põhikooli, ei saanud ma esimesel katsel Prantsuse lütseumi sisse.	**Olen lõpetanud** Ülgase põhikooli ja õpin praegu Prantsuse lütseumis.	2009. aastal **lõpetasin** Ülgase põhikooli ja astusin 2010. aastal Prantsuse lütseumi.

I cannot claim that such exercises for school-leavers explain Estonia's high performance in PISA, because the Pisa program tests 15-year-olds who cannot yet have taken this course. But it does seem reasonable to see a link between the high performance in PISA and the skills that both teachers and students must have in order to handle this kind of teaching.

The pedagogy of turning students into researchers is certainly worth noting, but it is not unique to Estonia. I am aware of similar initiatives in Portugal (Costa & Rodrigues, 2019), the USA (Honda, 1994) and the Netherlands (Van Rijt, 2024), as well as a number of very useful textbooks in the UK (Barton, 1999; Lury, 2017). On the other hand, what may be special to Estonia is the widespread use of this pedagogy.

Estonia is clearly well ahead of the UK in the quality and quantity of its language education, whether in the study of L1 Estonian or of foreign languages – or, for that matter, in the study of a child's family language.

One thing is very clearly relevant to this difference: the academic qualification needed to become a teacher, at any level of schooling, is a Master's degree[22], whereas UK teachers only need a Bachelor's degree followed by a Post-graduate Certificate of Education. Moreover, the linguistics courses available to trainee teachers mean that Estonian teachers are much better qualified to teach about language than their UK counterparts.

[22] https://eurydice.eacea.ec.europa.eu/eurypedia/estonia/initial-education-teachers-working-early-childhood-and-school-education

Finland

The Finnish language is very similar to Estonian, and until recently, Finland has had a similarly enviable record in the PISA tests. Moreover, language education has as high a profile in Finland as in Estonia. But unlike Estonia, Finland has a second official language – Swedish – although only 5% of the population speak it at home.

Finland has the special attraction for present purposes of bringing us back to the start of this article and the discussion of the British invention, Language Awareness. The National Core Curriculum is impressively enlightened, as can be seen in the extract in Figure 2 (Nupponen, Jeskanen & Rättyä 2019: 2), where the highlighting is added.

Figure 2*:* Language awareness in the Finnish National Curriculum 2016

> … plurilingual competence … comprises competences of different levels in mother tongues, other tongues, and their dialects. The basic principle of language instruction at school is using the language in different situations. It strengthens the pupils' **language awareness** and parallel use of different languages as well as the development of multi-literacy. The pupils learn to make observations on texts and in interaction practices in different languages, to use the concepts of **language knowledge** in interpreting texts, and to utilise diverse ways of language learning.

The Finnish National Core Curriculum (Finnish National Board of Education, 2016, 109) is especially interesting for us because of its focus on language awareness, emphasizing the similarity of language education in the mother tongue and in foreign languages, recognizing the plurilingual competence of many pupils, and highlighting competence in using linguistic concepts (Repo, 2023). Language awareness plays a central role in mother tongue and foreign language education, although both of these also aim at communicative skills. Consequently, good language awareness skills are naturally required of teachers.

Two other important features of language education in Finland are the frequent use of textbooks and the highly qualified teachers. According to one report, 76% of L1 Finnish teachers frequently used a textbook, and according to another the figure was 85%; and for foreign languages the figure is 98% (Nupponen et al., 2019: 10). As for the teachers, they all have a master's degree (as they do in Estonia) and their training qualifies graduates to teach language(s) at any level of the Finnish educational system, from the primary level to university level (Nupponen et al., 2019).

In spite of these very positive features of Finnish language education, teacher trainers in Finland also worry about a familiar range of issues: the rather old-fashioned approach to grammar in the textbooks, the continuing lack of collaboration between L1 and L2 teachers (in spite of the official statements to the contrary), and the dominance of the written medium in L1 education; and, above all, they worry about how to build a deeper understanding of grammar in all students (Rättyä, 2013).

A conclusion that emerges from both Finland and Estonia is the need for teachers to receive the training they need to deliver Language Awareness well. This is a major hurdle for the UK to cross. But another aspect of Finnish education which may be helpful in this regard is their respect for textbooks. Textbooks are important at a time of transition because they help teachers to overcome the inbuilt inertia which pushes them to teach as they were taught. Suppose the curriculum requires teaching about language that takes a teacher out of their comfort zone; in that case, the teacher can use a good textbook as a crutch. And of course, when the same topic comes up again the following year, the teacher will be in a better position to teach it. In

this way, textbooks can act as a tool of CPD (continuous professional development) in a changing curriculum.

Thematic synthesis

This section brings together a number of salient features that emerge from all these comparisons between England and other countries.

Centrality of language

All the other countries position language as foundational to learning across the curriculum. They all devote a lot of teaching time not only to developing the children's language skills, but also to deepening their understanding of how language works. This study dominates teaching in the schools of all these countries, so young people leave school knowing a great deal about the school's language (which may also be their own first language) – about its sounds and spellings, about its grammar, about its vocabulary, and in some cases even about its history and geography. Moreover, they combine this knowledge with skills in forming words and sentences and in choosing forms carefully so as to convey complex meanings in a context-appropriate way.

This central place of language is all the more important in the modern world of mass migration, in which 30% of school children in England speak a language other than English at home. These home languages are an enormous resource which we don't currently use – indeed, until recently our schools have tended to see it as a problem and children have seen their extra language ability as a source of embarrassment.

Although England's schools teach children reasonably well how to write and read, they teach very little about language. Bright children can no doubt work out for themselves some things about how language operates, but slower children may struggle, and none experience the excitement of a good project on language. Worse still, those who are multilingual never have the chance to admire their linguistic wealth.

Explicit teaching

In all these countries, teaching about language is explicit, so children learn and use a metalanguage for talking about grammar, vocabulary, sounds, letters and so on. It is taken for granted that children can learn this metalanguage and its associated concepts, just as they can in other subject areas such as science and history. It may be difficult for them, but with plenty of help and practice they can manage it.

The conceptual framework for this explicit teaching has its own roots. In Russia, it comes from school teaching in a tradition that goes back to the early 20th century (and in some respects long before that); and in France, Germany and The Netherlands there is a different school tradition which still counts. In contrast, Estonia and Finland have a tradition with roots in modern linguistics, and innovators in France, Germany and The Netherlands are trying to push their teaching in the same direction.

Does it work? Not surprisingly, teachers everywhere tend to cling to the expertise they developed as school children, and therefore tend to go on teaching in the way that they themselves had been taught. However, this tendency merely slows down change in education, rather than preventing all change, so the content of school teaching is still influenced by university research.

In contrast, England is just emerging from a century in which explicit teaching about language was deeply unfashionable. Until recently, the standard view among anglophone educators was that explicit teaching, especially about grammar, was a waste of time; the research evidence quoted was all reported in English, so research from France and Germany was ignored. Things changed when contradictory research evidence emerged in England (Myhill et al., 2012), but even that research evidence is ambiguous because any research project has to cope with teachers who know little about language, in contrast with all the teachers in our comparison countries.

Explicit teaching by well-informed teachers may be particularly helpful for slower learners who are responsible for the achievement gap which successive governments have failed to reduce in the UK. In the area of language, it was for a long time assumed that if anything needed to be learned, any child could pick it up from simple exposure under conditions of 'immersion'; the argument was that this must be so, because

this is how we all learn our first language. This assumption may have been justified for bright children fully immersed in the target language, whether L1 or L2, but it seems not to work for all learners, and especially not when exposure to the target language is as limited as it is in our L2 teaching.

Teacher expertise

Another major issue in language education is the subject knowledge of the teachers, given that a teacher can hardly teach beyond what they themself know. In all the other countries, teachers have themselves come through a school system which taught them a lot about language, and on top of that they often have a university course in linguistics which added to this knowledge. This being so, teachers can all be assumed to be relative experts on language, in contrast with UK teachers who typically know very little about language (apart from the expertise of a small number of specialists in areas such as special needs and English as an Additional Language).

It is true, as noted above, that the expertise found in other countries may be out of date when compared with modern linguistics. This is of course a serious issue, and there is no doubt that the knowledge taught in schools should as far as possible be compatible with the best available research. The analysis of language is complex, and research evidence is often equally complex, so the issue is by no means trivial. Indeed, as soon as we tie teacher knowledge to university research we face the prospect of constant change; but this is the case in every subject, and is infinitely preferable to the previous reality in which schools taught what had been taught to some previous generation, with little change between generations. This is why the updating experience of a university course is so important in the training of a teacher.

As for slow learners, a well-trained and knowledgeable teacher can help better than one who is poorly trained and knows less. This much is obvious. What is less clear is precisely what expertise is needed for helping different kinds of pupils.

Integration of L1 and L2

One of the pillars of Language Awareness is the principle that unifies L1 and L2 teaching: a shared view of language. What Language Awareness recommends is that children first study their own language – the language they bring from home and use in the playground – and learn to respect it as a complex human system. If this is different from English, so be it; this is the language in which they are already expert. Then they learn about other language systems: on the one hand, the standard spoken version of English, standard written English, and on the other, one or more foreign language. Each new language is viewed through the conceptual framework which children have already built for the languages already mastered, and each new language deepens their understanding of how language works.

In this approach, earlier languages create expectations which later languages may confirm or refute. At the very least, in talking about the target language an L2 teacher should be able to use the metalanguage built by L1 teachers, but they should also be aware of the structure of the L1. For example, the teacher of L2 should expect an English-speaking child to be shocked to the core on meeting the gender system of French, German or Spanish. Why on earth would a language classify everything in the universe as either masculine or feminine? And why is ‘moon’ masculine in German and feminine in French and Spanish? Language learning ought to be a thrilling exploration of cultural diversity, mixing the familiar and unfamiliar in a heady brew.

Most of the other countries manage this integration more or less successfully, with the possible exception (noted earlier) of France. But in the UK, L1 and L2 teachers rarely interact, and rarely see each other as colleagues in the teaching of language. Consequently, children typically learn one rough mental model for language in the English lesson, and a completely different one in their foreign language lesson. This is at best unhelpful for all students but must be very confusing for slower students.

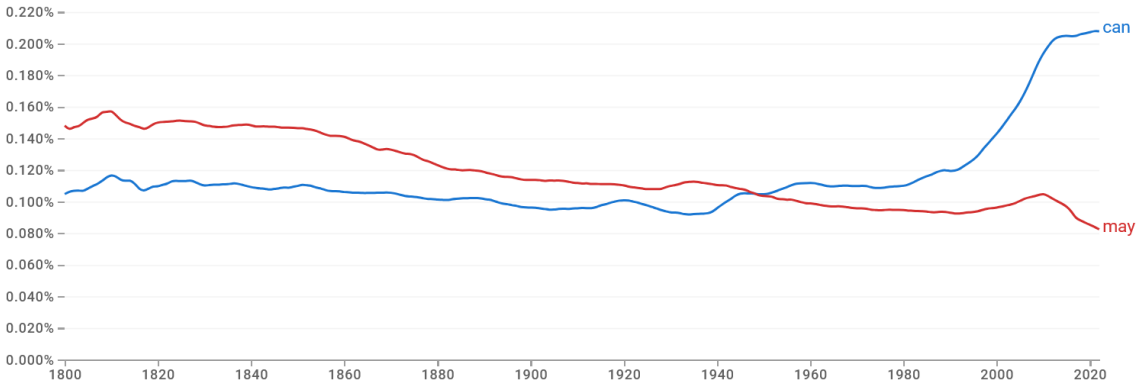
Inquiry-based pedagogy

The last general theme that emerges from my survey is the use of inquiry-based pedagogy, which was at least an ideal everywhere except Russia, albeit one which tended to be sidelined in Germany. In every country

the aim was deep understanding of the language system – an aim which surfaced very clearly in the primary lessons from Russia – but this aim was generally tied to the pedagogy of exploration and discussion instead of the more traditional top-down, teacher-led pedagogy. Not surprisingly, perhaps, reality sometimes falls short of the ideal, but the ideal is still important.

Language is an ideal area for classroom inquiry because it is so easily accessible. A classroom is full of both spoken and written language, but children can also explore the language spoken at home and by family, and they can gather examples from everyday language, books, the media and so on. For example, suppose a class is studying the meaning of words like *may* and *can*; the first step could be to collect examples invented by the class, but the second step could extend this collection by adding examples found elsewhere. A wonderful resource for such exploration is Google N-grams, which allows a class to produce an instant historical record like the one in Figure 3, which shows a gradual and slow decrease over the past two centuries in the use of *may* combined with a recent giant uptick in the use of *can* – something demanding discussion in class, but a discussion in which the teacher probably knows no more than the class.

Figure 3: The use of can and may since 1800



This pedagogy is a far cry from the old-fashioned pedagogy of memorized definitions associated with grammar teaching, and far easier to justify as part of education. It develops awareness of the realities of language – often called *noticing* (Keith, 1999) – as well as the ability to think and talk about language (*metalinguistic awareness*). Ultimately this kind of thinking counts as an example of scientific thinking (Honda, 1994). But above all, most children enjoy this kind of exploration, so it enhances engagement.

Once again, the curriculum in England has no place for this kind of activity in classrooms, although some excellent textbooks do promote it (Lury, 2017; Corbett & Strong, 2016). This is especially regrettable for slower learners, who stand to gain the most from the gentler pace of classroom explorations.

Implications for policy and practice

What conclusions can be drawn from this comparison of England with other countries? The answer clearly depends on many things, including how we interpret the 2022 PISA results.

On the one hand, we could accept the results as an accolade for the present arrangements. Being ranked 13th in the world is surely something we should be very proud of, so we meddle at our peril. The trouble is that previous tests have ranked us much lower, and there is a danger of going down rather than up. Moreover, a high rank doesn't solve the problems that everyone recognizes, such as the large cohort of young people who leave school every year without qualifications. Even if other countries share the problem, it still needs to be solved here. My conclusion is that, although PISA 2022 shows that our schools are doing really well in some respects, it is important to learn what we can from international comparisons, such as the one in this article.

The following is therefore a list of the changes that are needed if our schools are to align with international

best practice, at least as represented by countries in Europe such as those surveyed here.

Elevate language education as a core curriculum area.

We have seen that all the other countries give significant amounts of teaching time to language education, to the extent that language education can be seen, at least in primary school, as the core of education. This early focus on language makes really good sense when seen as an investment in solid foundations for almost all kinds of later learning.

But a language focus also has other benefits. For one thing, most of the teaching is focused on the children's own language, so it encourages them to take pride in their language, and also to take pride in their expertise in this area – in contrast with most other curriculum areas where they are definitely novices. And for another, building an intellectual framework for talking and thinking about language is an excellent exercise in mental development, in which they learn important things about mental activities such as categorization, relationships and social norms.

When this intellectual framework goes beyond the child's own language to embrace other kinds of language, we find the familiar 'spiral curriculum' in which concepts are revisited over and over again, becoming deeper and more reliable on every visit. It makes no difference whether the language is the L1 language of the school and of academic life, or the L2 language of a foreign country. And if all teachers share the same framework, they can all build it together, whether in science or in poetry, helping the children's minds to grow into mature adult minds.

Slow learners need language education more than others precisely because they have more difficulty in working things out for themselves. They need things to be spelt out explicitly. These are the 38% of children who don't achieve the 'expected standard' at the end of primary school in all subjects[23] – a shameful figure, which anticipates the 33% that fail GCSE exams five years later[24]. Whatever the PISA results show, we all know that the long tail of underachievement exists and should worry us. And one of the arguments for a clear focus on language education is that language is the main tool that children need in order to make progress. Slow learners have less language: less vocabulary, less grammar and (presumably) less metalinguistic awareness. Bolstering a child's language resources deserves top priority in any school system.

Reintroduce explicit instruction in both English and modern languages.

The explicit instruction in language which is so common in other countries helps children, and especially slower learners, to build a framework of concepts and terminology which they can apply in their learning. They can apply it to the technical language of school subjects; for example, if they can recognize past-tense verbs and know how they are normally used, they can see that English teachers are applying a special rule when they say *Shakespeare says ….* How can a dead person say anything now? And they can also apply their understanding of language outside the classroom when swapping jokes in the playground or even when switching languages at home.

The use of explicit instruction is especially important in foreign languages, given the pitifully small teaching time available for teaching in our schools. The unconscious absorption of language that happens when children are immersed in the target language simply doesn't have time to happen when children only meet that language for, say, two hours per week (Hawkins 1981: 97; Mitchell 2011). In that situation, they need a lot of help to speed up their learning, and explicit instruction ranks high among the possibilities, provided it is combined with practice time.

[23] https://explore-education-statistics.service.gov.uk/find-statistics/key-stage-2-attainment-national-headlines/2024-25

[24] https://www.gov.uk/government/publications/infographic-gcse-results-2024/infographics-for-gcse-results-2024-accessible

Reform teacher training to include linguistics

In most of the other countries (and perhaps in all of them), trainee language teachers study linguistics as part of their university training, as do generalist primary teachers. This training tops up the knowledge about language that they acquired at school and brings it up to date. Of course, the two bodies of knowledge may not sit comfortably together, and we have seen that some countries worry about the old-fashioned ideas that teachers go on teaching in spite of their university training. But the main point is that university linguistics is available, and in some cases helps to bring teaching up to date.

It is important to name the academic subject supplying these new ideas as *linguistics*, because this at least shows where the expertise lies. In other subjects, the academic link is clear: chemistry teachers teach the chemistry of universities, and so on for history teachers, literature teachers and all the other subjects. In the area of language, the linkage is too often ignored. For example, some versions of the National Curriculum were built without any input at all from linguists. This makes no sense at all, even if we agree that linguists need to improve their ways of collaborating with educationalists.

Promote collaboration between L1 and L2 educators.

Another theme of this article is the need for L1 English and L2 foreign-language teachers to work together, as advocated in the Language Awareness literature. The unifying factor is that both groups are teaching language, so each really needs to know what the other is doing. They can help one another in important ways: the L1 teacher can provide the intellectual framework for the L2 teacher's teaching, and the L2 teacher can deepen and extend this framework. Indeed, it would make complete sense for the two groups to belong to the same department in a school: the Language Department; but this arrangement seems to be vanishingly rare in the UK.

Use textbooks and inquiry-based teaching.

Textbooks and pedagogy are closely related in obvious ways, but textbooks have an oddly ambiguous status in UK schools: for some reason, our teachers seem to avoid using textbooks (Oates, 2014). But at the same time, the exam boards for GCSE each publish their own textbooks, and these serve to define the syllabus for that board. This uncertainty about textbooks seems very strange, given the support that a good textbook provides both for teachers and students.

But leaving the general case aside, it is surely beyond doubt that textbooks are helpful when a subject is in transition, as I claim that language education should be. If teachers are being asked to change their teaching, this is much easier if they use a textbook which enshrines the new teaching. A textbook author devotes a year or more to producing it – researching everything from general principles to examples for practice; and better still, a textbook author is chosen for their expertise in the area. Even if the teacher adopts the textbook grudgingly just as a crutch to lean on during the transition, it is likely to produce better teaching than the teacher could produce unaided.

Turning to the inquiry-based teaching described above, this can easily be combined with a textbook. The book can be like a cookbook, full of recipes for active and exciting lessons; and if the teacher has better ideas, they can replace the ones in the book.

Phase in implementation across generations

My last point is that change comes slowly in schools. It's true that some countries manage to transform their schools rapidly, but this doesn't seem to be the general case. Several countries in my survey reported teachers who went on teaching as they themselves had been taught – and very understandably so, because they had learned to be experts, and they felt more comfortable in their area of expertise than out of it.

This raises a fundamental issue about the relation between official documents and pedagogical practice. Writing a curriculum takes very little time, even if the job is done thoroughly – say, a couple of years. But implementing that curriculum can take very much longer, because ultimately it has to be implemented in classrooms by teachers doing things which they aren't accustomed to doing. The process can be accelerated

by pressure from exams, but this produces 'teaching to the test', which wastes everyone's time. In the long run, an educational change follows the pace of the teachers and may take decades, or even generations, to implement. Some teachers may resist a change because they simply believe it to be bad education; others resist out of inertia; but others may see the point of the change and start to implement it quite soon. Putting all these different teachers together gives a long lead time for any change.

If this is so, then it matters for educational planning. For one thing, planning needs time, so it can't be fitted into the five years of a single parliament, and if every new government tears up what the previous government planned, change will never happen. But for another, teachers need help in bringing the changes in. One important kind of help would be a phased introduction spread across several years or even decades. Each year would require a new element to be added, while the elements already added were consolidating; and these elements would be carefully graded and interconnected so that the introduction went smoothly and successfully.

Conclusion

This review identifies a consistent pattern across successful education systems in six different countries: linguistic understanding, explicit instruction, and teacher expertise underpin both literacy and multilingual competence. England's underachievement in these areas stems not from conceptual weakness but from policy neglect. Re-engaging with its own linguistic heritage — through systematic, cumulative language education — offers a sustainable route to higher achievement and greater equity.

References

Akker, J. van den. (2003). Curriculum perspectives: An introduction. In J. van den Akker, W. Kuiper & U. Hameyer (eds.), *Curriculum landscapes and trends* (pp. 1-10). Dordrecht: Kluwer Academic Publishers.

Alexander, R. (2001). *Culture and Pedagogy. International comparisons in primary education*. Oxford: Blackwell.

Alexander, R. (2022). Moral Panic and Miracle Cures. In *Education in Spite of Policy*, 320-341. Routledge.

Andrews, R. (2005). Knowledge about the teaching of [sentence] grammar: The state of play. *English Teaching: Practice and Critique 4*(3), 69-76. http://education.waikato.ac.nz/research/files/etpc/2005v4n3art4.pdf.

Andrews, R. (2010). Teaching sentence-level grammar for writing. The evidence so far. In Terry Locke (ed.), *Beyond the Grammar Wars. A resource for teachers and students on developing language knowledge in the English/Literacy classroom* (pp. 91-108). Routledge.

Andrews, R., Beverton, S., Locke, T., Low, G., Robinson, A., Torgerson, C., Zhu, D. (2004). *The effect of grammar teaching (syntax) in English on 5 to 16 year olds' accuracy and quality in written composition*. London: EPPI-Centre, Social Science Research Unit, Institute of Education. http://eppi.ioe.ac.uk/EPPIWebContent/reel/review_groups/english/eng_rv6/eng_rv6.pdf.

Anon. (2018). *Education Equity in the Russian Federation. World Bank Education Global Practice*. Washington, DC: World Bank. https://documents1.worldbank.org/curated/en/139291530189329351/pdf/127743-REVISED-WP-PUBLIC.pdf.

Anon. (2025a). *Curriculum and Assessment Review. Building a world-class curriculum for all. Final Report*. London: Department for Education.

Anon. (2025b). *Definitieve conceptkerndoelen Nederlands Herziene versie 2025 Inclusief toelichtingsdocument* (Final draft core objectives Dutch revised version 2025 including explanatory document). SLO (Institute for Curriculum Development.

Arseneau, R., Foucambert, D., Lefrançois, P. (2018). Improving the mastery of relative clause in French L1 secondary classes: the effects of an intervention based on verbal interactions on written syntactic structures. *L1-Educational Studies in Language and Literature, 18*, 1-29. https://doi.org/10.17239/L1ESLL-2018.18.01.08.

Bakhtin, M. (2004). Dialogic Origin and Dialogic Pedagogy of Grammar: Stylistics in Teaching Russian Language in Secondary School. *Journal of Russian and East European Psychology, 42*, 12-49. https://doi.org/10.1080/10610405.2004.11059233.

Barton, G. (1999). *Grammar in Context*. Oxford University Press.

Belard, A., Bompard, C., Canat, C., Demougin, F., Martin, A. (2008). *Enseigner la grammaire a l'école primaire. Groupe départemental Maitrise de la langue*. https://fichiers.ac-montpellier.fr/sections/ia30/maitrise-langue/ressources/documents/enseigner-grammaire/downloadFile/file/Enseigner_la_grammaire_a_l_ecole_primaire.pdf?nocache=1341325478.92.

Bentolila, A. (2006). *Rapport de mission sur l'enseignement de la grammaire. France*. Ministère de L'éducation Nationale, de L'Enseignement Supérieur et de la Recherche.

Boivin, M.-C. (2018). A review of the current empirical research on grammar instruction in the francophone regions. *L1-Educational Studies in Language and Literature*, 1-48. https://doi.org/10.17239/L1ESLL-2018.18.04.03.

Bulea Bronckart, E. (2020). Reflections on teaching devices articulating grammar and text. L1- Educational *Studies in Language and Literature, 20*, 1-27. https://doi.org/10.17239/L1ESLL-%202020.20.03.06.

Bullock, Sir A. (1975). *Language for life*. London: Dept for Education and Science.

Corbett, P., Strong, J. (2016). *Jumpstart! Grammar. Games and activities for ages 6-14*. Second edition. London: Routledge.

Costa, A., Rodrigues, V. (2019). Grammar teaching in Portugal. *Bellaterra Journal of Teaching & Learning Language & Literature, 12,* 21-40. https://doi.org/10.5565/rev/jtl3.809

Döring, S. (2020). Shaking Students' Beliefs About Grammar: Some Thoughts on the Academic Education of Future Language Teachers. In Andreas Trotzke & Tanja Kupisch (eds.), *Formal Linguistics and Language Education: New Empirical Perspectives* (pp. 91-110). Springer.

Ehala, M., Kitsnik, M. (2011). *Praktiline Eesti Keel*. 10 Klass. 1. Vihik. Tallinn: Künnimees Oü.

Eisner, D. (2021). Knowledge about grammar and the role of epistemological beliefs. *Pedagogical Linguistics, 2*, 107-128. https://doi.org/10.1075/pl.21003.els.

Finnish National Board of Education (2016). *National core curriculum for basic education 2014*. Publications.

Funke, R. (2018). Working on grammar at school: Empirical research from German-speaking regions. *L1-Educational Studies in Language and Literature, 18*, 1-39. https://doi.org/10.17239/L1ESLL-2018.18.04.05.

Glinz, H. (1952). *Die innere Form des Deutschen. Eine neue deutsche Grammatik* [The inner Form of German. A new German grammar]. Bern: Francke.

Halliday, M. (1985). *An Introduction to Functional Grammar*. London: Arnold.

Halliday, M., McIntosh, A., Strevens, P. (1964). *The Linguistic Sciences and Language Teaching*. London: Longman.

Hawkins, E. (1981). *Modern Languages in the Curriculum* (1987 edition). Cambridge: Cambridge University Press.

Hawkins, E. (1984). *Awareness of Language: An introduction*. Revised edition 1987. Cambridge: Cambridge University Press.

Hlebec, H. (2017). *Grammar Instruction in Germany*. https://dickhudson.com/wp-content/uploads/2019/08/Grammar-Instruction-in-Germany_062717.pdf.

Honda, M. (1994). Linguistic inquiry in the science classroom: "It Is Science, but It's Not Like a Science Problem in a Book." *MIT Occasional Papers in Linguistics, 6*, 1-262.

Hudson, R., Walmsley, J. (2005). The English Patient: English grammar and teaching in the twentieth century. *Journal of Linguistics, 41*, 593-622.

Ingram, J., Stiff, S., Cadwallader, S., Lee, G., Kayton, H. (2023). *PISA 2022: National Report for England Research report*. Government Social Research.

Jerrim, J. (2021). PISA 2018 in England, Northern Ireland, Scotland and Wales. Is the data really representative of all four corners of the UK? *Review of Education, 9*.

Keith, G. (1999). Noticing grammar. In Anon (ed.), *Not whether but how: Teaching grammar in English at Key*

Stage 3 and 4 (pp. 22-32). London: Qualifications and Curriculum Authority.

Lewis, G., Jones, B., Baker, C. (2012). Translanguaging: Origins and Development from School to Street and Beyond. *Educational Research and Evaluation, 18*, 641-654. https://doi.org/10.1080/13803611.2012.718488.

Lury, J. (2017). *Understanding and teaching grammar in the primary classroom. Subject knowledge, ideas and activities*. Routledge.

Mitchell, R. (2011). *Still gardening in a gale: Policy, research and practice in foreign language education in England*. Fremdsprachen Lehren und Lernen.

Moulton, W. (1953). Review of: Die innere Form des Deutschen: Eine neue deutsche Grammatik by Hans Glinz. *Language, 29*, 175-180.

Mulder, J. (2007). Establishing Linguistics in Secondary Education in Victoria, Australia. *Language and Linguistics Compass, 1*(3), 133-154.

Myhill, D., Jones, S., Lines, H., Watson, A. (2012). Re-Thinking Grammar: the Impact of Embedded Grammar Teaching on Students' Writing and Students' Metalinguistic Understanding. *Research Papers in Education, 27*, 139-166. https://ore.exeter.ac.uk/repository/handle/10036/4479.

Nadeau, M., Fisher, C. (2006). *La grammaire nouvelle, la comprendre et l'enseigner*. Chenelière éducation.

Nupponen, A.-M., Jeskanen, S., Rättyä, K. (2019). Finnish student language teachers reflecting on linguistic concepts related to sentence structures: Students recognising linguistic concepts in L1 and L2 textbooks. Contribution to a special issue What is Grammar in L1 Education Today? (Ed.) Kaisu Rättyä, Elżbieta Awramiuk & Xavier Fontich. L1-*Educational Studies in Language and Literature, 19*, 1-25. https://doi.org/10.17239/L1ESLL-2019.19.02.04.

Oates, T. (2014). *Why textbooks count. A Policy Paper*. Cambridge: Cambridge Assessment.

Pearce, J. (1994). Schools Council (UK): English teaching program. In Ronald Asher (ed.), *Encyclopedia of Language and Linguistics* (pp. 3683-3684). Oxford: Pergamon.

Perera, K. (1984). *Children's writing and reading. Analysing classroom language* (Language Library). Oxford: B. Blackwell in association with A. Deutsch.

Rättyä, K. (2013). Languaging and Visualisation Method for Grammar Teaching: A Conceptual Change Theory Perspective. *English Teaching: Practice and Critique, 12*, 87-101.

Repo, E. (2023). Towards language-aware pedagogy? Experiences of students in multilingual Finnish schools. *Language and Education, 37*, 460-482. https://doi.org/10.1080/09500782.2022.2116985.

Rijlaarsdam, G. (2011). *The place of grammar in the L1 curriculum in the Netherlands*. London

Rijt, J.H.M. van (2024). Learning how to think like a linguist: Linguistic reasoning as a focal point in L1 grammar education. Language and Linguistics Compass. https://doi.org/10.1111/lnc3.12513.

Rijt, J.H.M. van, Wijnands, A., J.M. Coppen, P.A. (2019). How secondary school students may benefit from linguistic metaconcepts to reason about L1 grammatical problems. *Language and Education* 1-18. https://doi.org/10.1080/09500782.2019.1690503.

Rijt, J.H.M van, Wijnands, A., J.M Coppen, P.A. (2022). Investigating Dutch teachers' beliefs on working with linguistic metaconcepts to improve students' L1 grammatical understanding. *Research Papers in Education, 37*(1), 1-29. https://doi.org/10.1080/02671522.2020.1784258.

Rijt, J.H.M. van, Coppen, P.A. (2017). Bridging the gap between linguistic theory and L1 grammar education – experts' views on essential linguistic concepts. *Language Awareness, 26*(4), 360-380. https://doi.org/10.1080/09658416.2017.1410552.

Sawyer, W. Piet-Hein van de Ven (2007). Paradigms of Mother Tongue Education: Introduction. L1 – *Educational Studies in Language and Literature, 7*, 1-3.

Teramura, Y., M.-L. Svalberg, A. (2025). *Decline and Resistance of the Language Awareness Movement in the UK: Educators' narratives of their experiences in the 1980s-90s* [draft].

Uusen, A., Müürsepp, M. (2010). Orthographic Skills and Teaching Orthography in Light of the Renewed Estonian Language Syllabus. *Problems of Education in the 21st Century, 21*, 170-184.

Walt, C., Ruiters, J. (2012). Every teacher a language teacher? Developing awareness of multingualism in

teacher education. *Journal for Language Teaching, 45,* 84-98. https://doi.org/10.4314/jlt.v45i2.5.
Williams, C. (1994). *Arfarniad o Ddulliau Dysgu ac Addysgu yng Nghyd-destun Addysg Uwchradd Ddwyieithog*, [An evaluation of teaching and learning methods in the context of bilingual secondary education]. University of Wales, Bangor PhD.
Wilmet, M. (2015). *Il y a grammaire et grammaire*. Brussels: Académie Royale de Belgique.

Enhancing speaking fluency through collaborative learning: a case study of senior secondary school students of Victory Academy Isua, Ondo State, Nigeria

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Abstract
This study investigated the effectiveness of collaborative learning in enhancing speaking fluency among senior secondary school students at Victory Academy, Isua Akoko, Ondo State, Nigeria. A quasi-experimental research design involving pre-test and post-test control groups was adopted for the study. The population comprised senior secondary school students, out of which 120 students from SS1 and SS2 were selected using intact classes and assigned to experimental and control groups. A pilot study was conducted to validate the research instruments and establish their reliability before the main study. The main instrument for data collection was a Speaking Fluency Test (SFT), developed by the researcher and validated by language education experts. Data were collected through the administration of the pre-test and post-test after a six-week instructional period during which the experimental group was taught using collaborative learning strategies, while the control group was taught using the conventional teacher-centered method. The data collected were analyzed using mean, standard deviation, and inferential statistics (t-test) to test the formulated hypotheses at 0.05 level of significance. The results revealed that there was no significant difference in the pre-test speaking fluency scores of students in both groups, indicating equivalence at baseline. However, a significant difference was found in the post-test speaking fluency scores and fluency gains in favour of students exposed to collaborative learning. The findings therefore established that collaborative learning significantly enhances students' speaking fluency. Based on these findings, it was recommended that English language teachers adopt collaborative learning strategies in speaking instruction, and that curriculum planners integrate collaborative speaking activities into secondary school English language curricula.

Keywords*: collaborative learning, enhancement, speaking fluency, English language learners, victory academy*

Introduction

English language occupies a central position in the Nigerian educational system as the official language and the principal medium of instruction at all levels of education. Proficiency in English, particularly in speaking, is essential for academic success, social interaction, and future career advancement. Speaking fluency enables learners to express ideas clearly, interact confidently, and participate meaningfully in classroom and real-life communication situations (Olorunfemi et al., 2025). Despite its importance, many Nigerian secondary school students exhibit low levels of speaking fluency. This challenge is often attributed to ineffective teaching methods, large class sizes, fear of making mistakes, and limited opportunities for authentic oral practice. In many classrooms, English language teaching is still dominated by teacher-centered approaches where students remain passive listeners rather than active speakers.

Collaborative learning has emerged as an effective learner-centered instructional strategy that encourages interaction, cooperation, and shared responsibility among learners. It involves students working together in pairs or small groups to achieve common learning goals through discussion, negotiation, and problem-solving. In language learning contexts, collaborative learning provides learners with increased opportunities to practice speaking, receive peer feedback, and develop confidence in using the target language. Previous studies have shown that collaborative learning enhances language proficiency by increasing student talk time and reducing speaking anxiety. However, there is limited empirical evidence on its effectiveness in improving speaking fluency among senior secondary school students in rural or semi-urban Nigerian contexts such as Isua Akoko, Ondo State. This study therefore seeks to investigate the extent to which collaborative learning can enhance speaking fluency among senior secondary school students of Victory Academy.

Review of related literature and empirical studies

Theoretical foundations supporting collaborative learning and speaking fluency

The effectiveness of collaborative learning in enhancing speaking fluency among second language learners is strongly grounded in both classical and contemporary theories of second language acquisition (SLA). While early theories emphasized the social nature of learning, recent theoretical perspectives have further explained how interaction, output, emotional factors, and dynamic classroom environments contribute to the development of oral fluency. This study is therefore theoretically anchored on Sociocultural Theory, Interaction Hypothesis, Output Hypothesis, Complex Dynamic Systems Theory, and Affective Filter Hypothesis, all of which collectively justify the use of collaborative learning strategies for improving speaking fluency among senior secondary school students.

Vygotsky's Sociocultural Theory of Learning provides the foundational explanation for collaborative learning. (Vygotsky, 1978) posits that learning occurs first at the social level before being internalized by the individual. According to this theory, language development is mediated through interaction with others, particularly within the learner's Zone of Proximal Development (ZPD) the gap between what learners can achieve independently and what they can accomplish with guidance from more knowledgeable peers or teachers. Collaborative learning environments create opportunities for learners to operate within their ZPD through peer interaction, group discussions, and cooperative tasks. In such contexts, learners receive scaffolding, feedback, and modeling, which gradually lead to improved language performance. In relation to the present study, collaborative learning activities enabled students in the experimental group to interact meaningfully with peers, thereby promoting the internalization of fluent speaking patterns.

Building on the sociocultural view of learning, Long's Interaction Hypothesis, particularly in its revised form (Long, 2015), emphasizes that language acquisition is facilitated through interaction and negotiation of meaning. The theory argues that conversational interaction—especially when learners encounter communication breakdowns prompts clarification requests, confirmation checks, and reformulations that make input more comprehensible and salient. Contemporary SLA research highlights that interaction not only provides input but also draws learners' attention to gaps in their linguistic knowledge (Gass & Mackey, 2015). Collaborative learning classrooms are inherently interaction-rich, as students are required to exchange ideas, respond to peers, and sustain conversations. Through these interactional processes, learners improve speech continuity, responsiveness, and fluency. The significant gains in speaking fluency recorded among students exposed to collaborative learning in this study therefore align with the core assumptions of the Interaction Hypothesis.

Closely related to interaction is Swain's Output Hypothesis, which has gained renewed attention in modern SLA literature. Swain (2005) and later expansions of the theory (Swain, 2013) argue that producing language particularly spoken output plays a crucial role in language development. According to the Output Hypothesis, learners develop proficiency when they are "pushed" to express meaning clearly and accurately. Speaking forces learners to process language at a deeper cognitive level, notice linguistic gaps, and modify their output accordingly. Collaborative learning activities such as group discussions, role play, and problem-solving tasks require active participation from learners, thereby increasing opportunities for pushed output. In the context of this study, students in the experimental group were repeatedly required to contribute orally during collaborative tasks, which enhanced their automaticity, reduced hesitation, and improved overall speaking fluency.

A more recent and influential theoretical perspective supporting this study is Complex Dynamic Systems Theory (CDST), as advanced by Larsen-Freeman (2018). CDST views language development as a non-linear, dynamic, and adaptive process influenced by multiple interacting factors such as motivation, confidence, interaction, feedback, and learning environment. From this perspective, speaking fluency is not acquired instantly but emerges gradually through continuous use and interaction over time. Small changes in classroom practices such as shifting from teacher-centered instruction to collaborative learning can lead to significant improvements in language performance. Collaborative learning provides a dynamic environment where

learners' confidence, participation, and fluency evolve through repeated social interaction. The gradual yet significant improvement in speaking fluency observed in this study reflects the dynamic nature of language development as explained by CDST.

In addition, Krashen's Affective Filter Hypothesis, particularly as interpreted in contemporary language education research, further supports the findings of this study. The hypothesis posits that emotional variables such as anxiety, fear of making mistakes, and low self-confidence can hinder language acquisition by raising learners' affective filter (Krashen, 1982; Dörnyei, 2014). Recent studies emphasize that learner-centered and collaborative classrooms help lower anxiety and increase willingness to communicate (MacIntyre et al., 2017). Collaborative learning reduces the pressure associated with speaking in front of the whole class and creates a supportive peer environment where learners feel more comfortable expressing themselves. In this study, students in the experimental group demonstrated increased participation and confidence, which contributed to improved speaking fluency.

In summary, the theories discussed provide strong theoretical justification for the use of collaborative learning in enhancing speaking fluency. Sociocultural Theory explains learning as a socially mediated process, the Interaction Hypothesis highlights the role of meaningful communication, the Output Hypothesis emphasizes the importance of spoken production, Complex Dynamic Systems Theory accounts for the gradual emergence of fluency, and the Affective Filter Hypothesis explains the emotional conditions necessary for effective speaking. Collectively, these theories support the conclusion that collaborative learning creates an interactive, supportive, and dynamic environment conducive to the development of speaking fluency among senior secondary school students, as evidenced in the present study conducted at Victory Academy, Isua Akoko, Ondo State.

Conceptual clarification

Collaborative learning

Collaborative learning is a pedagogical approach that involves learners working together to achieve a common goal (Johnson and Johnson, 2009). This approach has been shown to promote language learning, including speaking fluency (Long and Porter, 1985). Collaborative learning encourages learners to engage in meaningful interactions, share ideas, and provide feedback, which are essential for language development (Vygotsky, 1978).

Speaking fluency

Speaking fluency is a crucial aspect of language proficiency, enabling learners to communicate effectively in personal, academic, and professional settings (Canale and Swain, 1980). Speaking fluency involves the ability to produce speech that is coherent, cohesive, and contextually appropriate (Olorunfemi & Bayaro, 2025). Research has shown that speaking fluency can be enhanced through instruction that focuses on communication, interaction, and task-based learning (Ellis, 2003).

Enhancing speaking fluency through collaborative learning

Research has demonstrated that collaborative learning can enhance speaking fluency by providing learners with opportunities for authentic language practice, feedback, and self-assessment (Olorunfemi et al., 2025). Collaborative learning activities, such as group discussions, role-plays, and problem-solving tasks, can help learners develop their speaking fluency by promoting interaction, negotiation, and communication (Long and Porter, 1985). In the Nigerian context, research has shown that collaborative learning can be an effective approach for enhancing speaking fluency among secondary school students (Olorunfemi & Bayaro, 2025). However, there is a need for more research on the effectiveness of collaborative learning in enhancing speaking fluency among senior secondary school students in Nigeria.

Collaborative learning theory emphasizes social interaction and peer support in language acquisition (Long, 1996). Studies have demonstrated the effectiveness of collaborative learning strategies, such as jigsaw (Aronson & Patnoe, 1978) and think-pair-share (Lyman, 1981), in enhancing speaking fluency. Long and Porter

(1985) investigated the impact of group work on speaking fluency among language learners. The study found that group work facilitated language acquisition and improved speaking fluency. Johnson and Johnson (2009) examined the effects of cooperative learning on language learners' speaking fluency. The study revealed that cooperative learning enhanced speaking fluency and promoted language acquisition.

Again, Kiki and Ilmiah (2025) explored the impact of collaborative learning on speaking fluency among Nigerian secondary school students. The study found that collaborative learning improved speaking fluency and enhanced language acquisition. Vygotsky (1978) emphasized the role of social interaction in language acquisition. The study highlighted the importance of collaborative learning in facilitating language acquisition. Canale and Swain (1980) investigated the impact of communicative language teaching on language learners' speaking fluency. The study found that communicative language teaching enhanced speaking fluency and promoted language acquisition. Ellis (2008) examined the effects of task-based language teaching on language learners' speaking fluency. The study revealed that task-based language teaching improved speaking fluency and enhanced language acquisition. Levelt (1989) emphasized the importance of speaking fluency in language teaching. The study highlighted the need for language teachers to prioritize speaking fluency in their instructional practices.

Nation and Newton (1997) investigated the impact of vocabulary instruction on language learners' speaking fluency. The study found that vocabulary instruction enhanced speaking fluency and promoted language acquisition. Skehan (1998) examined the effects of task-based language teaching on language learners' speaking fluency. The study revealed that task-based language teaching improved speaking fluency and enhanced language acquisition. Chukwu and Rosuji (2025) explored the impact of collaborative learning on academic achievement among Nigerian secondary school students. The findings indicated that collaborative learning improved academic achievement and enhanced student engagement. Brown and Abeywickrama (2019) investigated the effects of collaborative learning on language learners' speaking fluency in a Nigerian context. The study revealed that collaborative learning improved speaking fluency and promoted language acquisition. Omolara et al. (2025) examined the impact of collaborative learning on student motivation and engagement among Nigerian secondary school students. The study found that collaborative learning improved student motivation and engagement. The study found that collaborative learning on language acquisition among Nigerian secondary school students. The study found that collaborative learning improved language acquisition and enhanced student motivation. Olorunfemi et al. (2025) investigated factors responsible for the decline in academic performance among high-achieving students of Landmark College. It was discovered that lack of collaborative learning does not only affect speaking fluency but also other language skills. The study revealed that collaborative learning improves speaking fluency and promoted language acquisition. Omolara et al. (2025) explored the impact of collaborative learning on language learners' vocabulary acquisition in a Nigerian context. Collaborative learning was found to have improved vocabulary acquisition and enhanced language acquisition. Odumuh (2007) investigated the effects of language teaching methods on language learners' speaking fluency in a Nigerian context. The study revealed that task-based language teaching methods improved speaking fluency and promoted language acquisition.

Statement of the problem

Speaking fluency remains one of the weakest language skills among senior secondary school students in Nigeria. At Victory Academy, Isua Akoko, many students struggle to communicate effectively in spoken English despite several years of formal instruction. Common problems observed include hesitation, poor pronunciation, limited vocabulary, lack of confidence, and fear of speaking in front of others. One major factor contributing to this problem is the continued reliance on traditional teacher-centered instructional methods that emphasize grammar rules, note-taking, and rote memorization rather than interactive speaking activities. These methods provide minimal opportunities for students to engage in meaningful oral communication.

Although collaborative learning has been identified as a promising approach to improving speaking skills, it is not widely adopted in many secondary school classrooms. There is therefore a need to empirically examine whether collaborative learning can significantly enhance speaking fluency compared to traditional

teaching methods. This study addresses this gap by investigating the effectiveness of collaborative learning strategies on the speaking fluency of senior secondary school students at Victory Academy.

Research objectives

The main objective of this study is to examine the effectiveness of collaborative learning strategies in enhancing speaking fluency among senior secondary school students of Victory Academy, Isua Akoko, Ondo State, Nigeria.

The specific objectives of the study are to:

1. determine the effect of collaborative learning strategies on the speaking fluency of senior secondary school students when compared with traditional teacher-centered instructional methods.
2. examine the difference in speaking fluency performance between students exposed to collaborative learning and those taught using conventional methods after the instructional intervention.
3. investigate the extent to which collaborative learning influences students' confidence, participation, and interaction during speaking activities in the English language classroom.

Research questions

The study seeks to provide answers to the following research questions:

1. What effect does collaborative learning have on the speaking fluency of senior secondary school students in Victory Academy?
2. Is there any significant difference in the speaking fluency performance of students taught using collaborative learning strategies and those taught using traditional teaching methods?
3. How does collaborative learning influence students' level of confidence and participation during speaking activities in the English language classroom?

Research hypotheses

The following null hypotheses were formulated and tested at the 0.05 level of significance:

H_{o1}: There is no significant effect of collaborative learning on the speaking fluency of senior secondary school students.

H_{o2}: There is no significant difference in the speaking fluency performance of students taught using collaborative learning strategies and those taught using traditional instructional methods.

H_{o3}: Collaborative learning does not significantly influence students' confidence and participation during English language speaking activities.

Significance of the study

The findings of this study will be beneficial to:

1. Students, as collaborative learning can improve their speaking fluency, confidence, and communicative competence.
2. English language teachers, by providing practical strategies for enhancing speaking instruction through interactive and learner-centered approaches.
3. Curriculum planners and policymakers, by offering empirical evidence to support the integration of collaborative learning strategies into the English language curriculum.
4. Researchers, as the study will contribute to existing literature on speaking fluency and collaborative learning in Nigerian secondary schools.

Scope of the study

The study is limited to senior secondary school students (SS1 and SS2) of Victory Academy, Isua Akoko, Ondo State, Nigeria. A total of 120 students were involved, divided into experimental and control groups. The study focused specifically on speaking fluency and the use of collaborative learning strategies within the English language classroom.

Research design

The study adopted a quasi-experimental research design involving a pre-test and post-test control group design. This design was considered appropriate because it allows the researcher to determine the effect of an independent variable (collaborative learning) on a dependent variable (speaking fluency) while controlling for extraneous variables. Two groups were involved in the study:

i. Experimental group, taught using collaborative learning strategies.
ii. Control group, taught using the traditional teacher-centered instructional method.

Both groups were pre-tested before treatment and post-tested after the instructional intervention.

Population of the study

The population of the study comprised all senior secondary school students of Victory Academy, Isua Akoko, Ondo State, Nigeria. At the time of the study, the total population of SS1 and SS2 students was approximately 240 students.

Sample and sampling technique

A total of 120 students were selected as the sample for the study. The sample consisted of 60 SS1 students and 60 SS2 students. A stratified random sampling technique was employed to ensure equal representation of students from SS1 and SS2. The selected students were further assigned randomly into: 60 students in the experimental group, and 60 students in the control group. This method ensured fairness and minimized selection bias.

Table 1: Sample size

Class	Population	Sample size
Senior Secondary 1	120	60
Senior Secondary 2	120	60
Total	**240**	**120**

(Field Survey, 2025)

Research instruments

The main instrument used for data collection was a Speaking Fluency Test (SFT) developed by the researcher. The SFT consisted of three oral tasks:

i. Picture description – students described a given picture in English.
ii. Story retelling – students listened to a short story and retold it.
iii. Role-play activity – students participated in a short conversational role play.

Students' performances were assessed using a speaking fluency rating scale focusing on: smoothness of speech, rate of speech, coherence of ideas, level of hesitation, and confidence in delivery. Scores were recorded for both pre-test and post-test.

Validity of the instrument

To ensure content and face validity, the Speaking Fluency Test and rating scale were submitted to three experts in English language education and measurement and evaluation. Their suggestions were incorporated to improve clarity, relevance, and appropriateness of the instrument to the students' level.

Reliability of the instrument

The reliability of the instrument was established through a pilot study conducted at Vision International

College outside the study area. The test-retest method was used, and the reliability coefficient was calculated using Cronbach's Alpha. A reliability coefficient of 0.82 was obtained, indicating that the instrument was reliable for the study.

Procedure for data collection

The study was conducted in three stages:

Stage One: Pre-test

Both the experimental and control groups were administered the Speaking Fluency Test before the commencement of the treatment to determine their initial speaking fluency levels.

Stage Two: Treatment

The treatment lasted for eight weeks.

The experimental group was taught using collaborative learning strategies such as: group discussions, role plays, think-pair-share activities, peer interaction and feedback. The control group was taught using the traditional teacher-centered method, which involved: teacher explanations, repetition drills, and limited student interaction. Both groups were taught the same speaking topics to ensure uniformity of content.

Stage Three: Post-test

After the treatment period, the Speaking Fluency Test was re-administered to both groups under the same conditions as the pre-test.

Method of data analysis

Data collected were analyzed using descriptive and inferential statistics. Descriptive statistics (mean and standard deviation) were used to answer the research questions. Inferential statistics (independent samples t-test) were used to test the hypotheses at 0.05 level of significance. Statistical analysis was carried out using appropriate statistical tools.

Results

Data obtained from the pre-test and post-test Speaking Fluency Test were analyzed in line with the research questions, hypotheses, and reviewed literature using descriptive and inferential statistics.

Data analysis and presentation

Research question one

What effect does collaborative learning have on the speaking fluency of senior secondary school students?

Table 2: Mean and standard deviation of pre-test and post-test speaking fluency scores of experimental groups

Test	N	Mean	SD
Pre-test	60	45.8	7.6
Post-test	60	68.3	8.4

(Source: Field Survey, 2025)

Table 2 shows that the mean score of students in the experimental group increased from 45.8 in the pre-test to 68.3 in the post-test. This indicates a substantial improvement in speaking fluency after exposure to collaborative learning strategies.

Research question two

Is there any difference in the speaking fluency performance of students taught using collaborative learning strategies and those taught using traditional teaching methods?

Table 3: Mean and standard deviation of post-test speaking fluency scores of experimental and control groups

Group	N	Mean	SD
Control	60	56.7	9.1
Experimental	60	68.	8.4

(Source: Field Survey, 2025)

Table 3 reveals that students in the experimental group had a higher mean score (68.3) than those in the control group (56.7). This suggests that collaborative learning is more effective than the traditional method in enhancing speaking fluency.

Research Question Three

How does collaborative learning influence students' confidence and participation during speaking activities?

Table 4: Perception of the effectiveness of collaborative learning in enhancing students' confidence and participation during speaking activities

Statement	S. Agree	Agree	Neutral	Dis	S. Dis
1. Collaborative learning helps me to improve my speaking	35(58.3%)	20(33.3%)	5(8.3%)	0(0%)	0(0%)
2. Collaborative learning provides opportunities for me to practice speaking with my peers	30 (50%)	25(41.7%)	5(8.3%)	0(0%)	0(0%)
3. Collaborative learning helps me to build confidence in speaking English	25(41.7%)	30(50%)	5(8.3%)	0(0%)	0(0%)
4. Collaborative learning is an effective way to learn English	20 (33.3%)	35 (58.3%)	5 (8.3%)	0 (0%)	0 (0%)

(Source: Field Survey, 2025)

Table 4 shows that the majority of students (58.3% - 50%) strongly agree or agree that collaborative learning is effective in enhancing their speaking fluency. The results also indicate that students perceive collaborative learning as providing opportunities for them to practice speaking with their peers (50% - 41.7%) and building confidence, actively engaged in discussions, volunteered responses, and demonstrated willingness to speak without fear of making mistakes (41.7% - 50%). Overall, the results suggest that students have a positive perception of the effectiveness of collaborative learning in enhancing their speaking fluency.

Testing of research hypotheses

Hypothesis one

H_{o1}: There is no significant effect of collaborative learning on the speaking fluency of senior secondary school students.

Table 5: T-test analysis of pre-test and post-test scores of experimental group

Test	Mean	SD	t-value	Df	Sig. (p)	Decision
Pre-test	45.8	7.6				$H0_1$
	12.46	59	0.000		Rejected	
Post-test		68.3		8.4		

(Source: Field Survey, 2025)

The post-test had a mean score of 68.3 against pre-test with a mean score of 45.8. Since $p < 0.05$, the null hypothesis which states there is no significant effect of collaborative learning on the speaking fluency of senior secondary school students is thereby rejected. This indicates that collaborative learning has a significant effect on students' speaking fluency.

Hypothesis two

H_{o2}: There is no significant difference in the speaking fluency performance of students taught using collaborative learning strategies and those taught using traditional instructional methods.

Table 6: Independent samples t-test of post-test scores of experimental and control groups

Group	N	Mean	SD	t-value	Df	Sig. (p)	Decision
Control	60	56.7	9.1				$H0_2$
		7.24	118	0.000	Rejected		
Experimental		60	68.3	8.4			

(Source: Field Survey, 2025)

Table 6 shows that participants in the experimental group recorded a higher mean score of 68.3 in speaking fluency than their counterparts in the control group, who had a mean score of 56.7. The calculated t-value of 7.24 at 118 degrees of freedom yielded a significance value ($p = 0.000$), which is less than the 0.05 level of significance. Since the p-value (0.000) is less than 0.05, the null hypothesis (H_{o3}) which states there is no significant difference in the speaking fluency performance of students taught using collaborative learning strategies and those taught using traditional instructional methods is thereby rejected.

Hypothesis three

H_{o3}: There is no significant difference in the level of speaking confidence and classroom participation of senior secondary school students taught using collaborative learning strategies and those taught using traditional instructional methods.

Table 7: Independent samples t-test analysis of speaking confidence and classroom participation scores of experimental and control groups

Group	N	Mean	SD	t-value	Df	Sig. (p)	Decision
Control	60	58.6	8.5				$H0_3$
				9.11	118	0.000	Rejected
Experimental	60	72.4	7.9				

(Source: Field Survey, 2025)

Table 7 shows that students in the experimental group recorded a higher mean score (72.4) in speaking confidence and classroom participation than their counterparts in the control group, who had a mean score of 58.6. The calculated t-value of 9.11 at 118 degrees of freedom yielded a significance value ($p = 0.000$), which is less than the 0.05 level of significance. Since the p-value (0.000) is less than 0.05, the null hypothesis (H_{o3}) is rejected. This implies that there is a significant difference in the level of speaking confidence and classroom participation of students taught using collaborative learning strategies and those taught using traditional instructional methods, in favor of the collaborative learning group.

Discussion of findings

Effect of collaborative learning on students' speaking fluency

The first major finding of this study revealed that collaborative learning had a significant positive effect on the speaking fluency of senior secondary school students. Students in the experimental group demonstrated a substantial improvement in their post-test speaking fluency scores compared to their pre-test scores. This

improvement indicates that exposure to collaborative learning strategies such as group discussions, role plays, and peer interaction significantly enhanced students' ability to speak English more smoothly, coherently, and confidently. This finding can be attributed to the increased opportunities for meaningful oral interaction provided by collaborative learning. Unlike traditional teacher-centered methods where students often remain passive listeners, collaborative learning actively engages learners in communicative tasks that require spontaneous language use. Through peer discussions and shared problem-solving, students practiced speaking in real-life contexts, which helped reduce hesitation and improve speech flow.

The result strongly supports Vygotsky's Sociocultural Theory, which posits that learning occurs through social interaction within the Zone of Proximal Development. In collaborative settings, more capable peers scaffold the learning of others, enabling students to internalize language structures and speaking strategies. The social nature of collaborative learning therefore creates conducive environment for speaking fluency development. The finding is consistent with studies carried out by Storch (2013) and Nunan (2015), who reported that collaborative learning significantly improves oral fluency by increasing student talk time and lowering anxiety. Within the Nigerian context, the result confirms that speaking fluency challenges among secondary school students can be effectively addressed through learner-centered instructional approaches.

Difference in speaking fluency performance between collaborative and traditional teaching methods

The second finding of the study showed a significant difference in the speaking fluency performance of students taught using collaborative learning strategies and those taught using traditional instructional methods, with the experimental group outperforming the control group. This result indicates that collaborative learning is more effective than the conventional teacher-centered approach in enhancing students' speaking fluency. This difference can be explained by the instructional structure of collaborative learning, which emphasizes interaction, negotiation of meaning, and peer feedback. Students in the experimental group were exposed to frequent speaking opportunities and communicative tasks that required active participation, while those in the control group were largely limited to listening and repetition exercises. Consequently, students taught through traditional methods had fewer chances to practice speaking in authentic contexts.

Furthermore, collaborative learning promotes learner autonomy and responsibility. Students are encouraged to express ideas, ask questions, and respond to peers, which strengthens fluency and communicative competence. In contrast, traditional methods often prioritize grammatical accuracy and examination preparation over communicative effectiveness. This finding aligns with studies conducted by (Johnson & Johnson, 2020) which emphasized that cooperative learning enhances language performance through positive interdependence and interaction. Asuai et al. (2014) and Omolara et al. (2025) also reported significant differences in oral performance between students taught using collaborative and traditional approaches. The present study therefore reinforces the argument that instructional method plays a critical role in determining students' speaking outcomes.

Effect of collaborative learning on students' speaking confidence and classroom participation

The third finding revealed a significant difference in the level of speaking confidence and classroom participation between students exposed to collaborative learning and those taught using traditional methods. Students in the experimental group recorded higher mean scores in confidence and participation, indicating that collaborative learning positively influenced their willingness to speak and engage actively during lessons. This improvement can be attributed to the supportive and non-threatening learning environment created through collaborative activities. Working in small groups reduced the fear of making mistakes, as students interacted with peers rather than speaking alone before the entire class. Peer encouragement and shared responsibility further motivated students to participate actively in speaking tasks.

Collaborative learning also shifted the classroom dynamics from teacher dominance to student-centered interaction. Students became co-constructors of knowledge, which increased their sense of ownership and confidence. As students repeatedly engaged in speaking tasks, their self-efficacy improved, leading to

increased participation and reduced anxiety. This finding is strongly supported by Vygotsky's Sociocultural Theory, which emphasizes the role of social interaction in cognitive and language development. Through collaborative engagement, students gradually gained confidence and internalized communicative skills. The result also aligns with the study by Derwing (2017), which reported that interactive learning environments enhance learners' confidence and communicative readiness. In the Nigerian secondary school context, where students often exhibit fear and reluctance to speak English, this finding is particularly significant. It suggests that collaborative learning not only improves speaking fluency but also addresses affective factors such as anxiety and low confidence that hinder effective communication.

Summary of findings

The major findings of the study are summarized as follows:

1. Collaborative learning had a significant positive effect on students' speaking fluency, as students exposed to collaborative learning showed marked improvement in their post-test scores compared to their pre-test scores.
2. There was a significant difference in the speaking fluency performance of students taught using collaborative learning strategies and those taught using traditional instructional methods, in favour of the collaborative learning group.
3. Collaborative learning significantly enhanced students' speaking confidence and classroom participation, as students in the experimental group demonstrated higher confidence levels and greater willingness to participate in speaking activities than those in the control group.

Conclusion

Based on the findings of this study, it can be concluded that collaborative learning is an effective instructional strategy for enhancing speaking fluency among senior secondary school students. The study established that when students are actively engaged in cooperative and interactive speaking tasks, their fluency, confidence, and participation significantly improve. The findings further revealed that traditional teacher-centered methods are insufficient for developing speaking fluency, as they limit students' opportunities for meaningful oral interaction. Collaborative learning, grounded in sociocultural learning principles, provides a supportive environment that encourages peer interaction, reduces anxiety, and promotes communicative competence. Therefore, collaborative learning should be considered a viable and essential approach for teaching speaking skills in Nigerian secondary schools.

Educational implications of the study

The findings of this study have important implications for English language teaching and learning:

1. English language teachers should adopt collaborative learning strategies to improve students' speaking fluency and communicative competence.
2. Schools should encourage learner-centered instructional practices that promote interaction and active participation.
3. Teacher training institutions should emphasize collaborative learning strategies in pre-service and in-service training programs.
4. Curriculum planners should incorporate interactive speaking activities into the English language curriculum.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. English language teachers should regularly integrate collaborative learning activities such as group discussions, role play, debates, and peer interaction into speaking lessons.
2. School administrators should provide supportive classroom environments and adequate instructional materials to facilitate collaborative learning.

3. Teachers should create a non-threatening atmosphere that encourages students to speak freely without fear of making mistakes.
4. Workshops and seminars should be organized to train teachers on the effective use of collaborative learning strategies in teaching speaking skills.

References

Aronson, E., Patnoe S. (1978). *The Jigsaw Classroom*. Beverly Hills, CA: Sage Publications.

Asuai, N. C., Azukaego, E., Nwankwo, U. T. (2014). Impact of Cooperative Learning on English Language Achievement among Senior Secondary School Students in Delta State, Nigeria: Implication for Counselling. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS) 5*(7), 70-76 © Scholarlink Research Institute Journals (ISSN: 2141-6990)

Brown, H. D., Abeywickrama, P. (2019). *Language assessment: Principles and classroom practices*. (3rd ed.). Pearson Education.

Canale, M., Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics, 1*(1), 1-47.

Chukwu, P. O., Rosuji, E. G. (2025). Effect of Collaborative Teaching on Academic Achievement of Secondary School Students in Economics in Agbani Education Zone, Enugu State. Global *Research Journal of Humanities and Public Administration (GRJHPA) 13*(2), 13-24

Derwing, T. M. (2017). L2 Fluency Development. In S. Loewen, & M. Sato (Eds.), *The Routledge Handbook of Instructed Second Language Acquisition* (pp. 246-259). Routledge. https://doi.org/10.4324/9781315676968-14

Dörnyei, Z. (2014). Motivation in second language learning. In M. Celce-Murcia, D. M. Brinton, & M. A. Snow (Eds.), *Teaching English as a second or foreign language* (4th ed., pp. 518-531). Boston, MA: National Geographic Learning.

Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.

Gass, S. M., Mackey, A. (2015). Input, interaction, and output in second language acquisition. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition: An introduction* (2nd ed., pp. 180-206). New York, NY: Routledge.

Johnson, D. W., Johnson, R. T. (2009). An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning. *Educational Researcher, 38*, 365-379. https://doi.org/10.3102/0013189X09339057

Johnson, D. W., Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher, 38*(5), 375-383. https://doi.org/10.3102/0013189X09339057

Johnson, D. W., Johnson, R. T., Smith, K. A. (2020). *Active learning: Cooperation in the college classroom*. (3rd ed.). Interaction Book Company.

Kiki, P., Ilmiah, J. (2025). The Effect of Collaborative Learning on Students' Speaking Performance in English Classroom at the Seventh Grade of SMP Negeri 2 Kelara. *Journal of Language Testing and Assessment, 5*(1) 1-10.

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon Press.

Larsen-Freeman, D. (2018). Complex dynamic systems theory and second language development. In L. Ortega & Z. Han (Eds.), *Complexity theory and language development* (pp. 11-29). Amsterdam: John Benjamins.

Levelt, W. J. M. (1989). *Speaking: From intention to articulation*. MIT Press.

Long, M. H. (2015). *Second language acquisition and task-based language teaching*. Malden, MA: Wiley Blackwell.

Long, M. H., Porter, P. A. (1985). Group work, interlanguage talk, and second language acquisition. *TESOL Quarterly, 19*(2), 207-228.

Lyman, F. (1981). The Responsive Classroom Discussion. In A. S. Anderson (Ed.), *Mainstreaming Digest* (pp.

109-113). College Park, MD: University of Maryland College of Education.

MacIntyre, P. D., Gregersen, T., Mercer, S. (2017). Positive psychology in SLA. Bristol: Multilingual Matters.

Nation, P., Newton, J. (1997). Teaching vocabulary. In J. C. Richards and W. A. Renandya (Eds.), *Methodology in language teaching* (pp. 100-114). Cambridge University Press.

Nunan, D. (2015). *Teaching English to speakers of other languages: An introduction*. Routledge.

Odumuh, A. (2007). Language teaching methods and language learners' speaking fluency in a Nigerian context. *Journal of Language and Literacy Education, 3*(2), 1-15.

Omolara, M., Nkopuruk, I., Eyinade, S., Mustapha, J. (2025). Implications of Task-Based Language Teaching for Second Language Acquisition in Nigerian Classrooms. *International Journal of Education and Evaluation, 14*(5), 11. 10.56201/ijee.v11.no.4.2025.pg330.342.

Olorunfemi, P. A., Onu, U. E., Akinloye, M. A. (2025). Determinants of the Decline in English Language Examination Performance among High-Achieving Students: A Case Study of Landmark College, Lagos. *SIAR-Global Journal of Literatures & Educational Review, 1*. https://doi.org/10.5281/zenodo.17616786

Olorunfemi, P.A., Bayaro, M. (2025). Mitigating Academic Decline in English Language Skills through Aspectual Diversification and Curriculum-Practice Convergence: A Multi-Theoretical Perspective Based on PTAPD, ADLL, and CPCT, *Iconic Research and Engineering Journals, 9*(6), 1952-1963 https://doi.org/10.64388/IREV9I6-1713032

Skehan, P. (1998). *A cognitive approach to language learning*. Oxford University Press.

Storch, N. (2013). *Collaborative writing in L2 classrooms*. Multilingual Matters.

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). Mahwah, NJ: Lawrence Erlbaum Associates.

Swain, M. (2013). The inseparability of cognition and emotion in second language learning. *Language Teaching, 46*(2), 195-207. https://doi.org/10.1017/S0261444811000486

Vygotsky, L. S. (1978). Interaction between learning and development. *Readings on the development of children*, 22-27.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

The future of EFL students' creativity in English writing: thinking, acting, and learning in higher education in the age of AI

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Abstract

Applying Artificial Intelligence (AI) writing tools in language classrooms in universities is becoming increasingly popular since they simplify instructional tasks for English as a Foreign Language (EFL) teachers and offer the ability to enhance writing accuracy and support quality writing for EFL students (Baron, 2023; Roe et al., 2023). However, teachers' concerns about using these sophisticated AI writing tools highlight a re-evaluation of integrating these technologies into teaching and learning of EFL writing, particularly with regard to ethical issues and cognitive-linguistic challenges. The former includes students' plagiarism and academic integrity in writing assignments, whereas the latter refers to discouraging their thinking and creativity in writing (Lund & Wang, 2023; Roe et al., 2023). In contrast, the process writing approach can minimise these concerns as it emphasises the importance of linguistic writing skills, and encourages students' cognitive functions, including creativity in writing (Bailey, 2015; Hyland, 2019; 2021; Johnson, 2024). This paper examines the transformative potential of language education, especially writing, in higher education settings by integrating insights from the human-driven writing approach with the neuroscience perspective. It also contributes to the discourse on innovative language education practices that are replicable across diverse learning contexts, coupled with the recognition that language education remains both influential and prepared for the future. Moreover, this article argues for adopting the process writing approach as a potential solution to support students' creativity and writing skills development over AI writing tools by promoting critical thinking, fostering effective communication, strengthening students' active engagement in English writing activities, and preserving the human dimensions that ultimately lead to meaningful learning within higher education contexts.

Keywords*: AI writing tools, cognitive-linguistic challenges, creativity, EFL students, ethical issues, neuroscience, the process writing approach, writing skills*

Introduction

English writing skills are crucial for English as a Foreign Language (EFL) students for several reasons. Firstly, proficiency in English writing facilitates effective communication in various academic and professional settings. As English is widely used as a global lingua franca, possessing strong writing skills enables EFL students to convey their thoughts, ideas, and research findings proficiently to a broader audience (Hyland, 2021; Johnson, 2024; Rianti, 2023; Young & Ferguson, 2020). Whether composing academic essays, reports, or emails, the ability to express one's self clearly and coherently in written English is indispensable. Moreover, mastering English writing enhances EFL students' academic performance. Many academic assessments, especially in higher education, heavily rely on written assignments. Students who excel in writing are better equipped to articulate their knowledge and understanding of course materials, leading to higher grades and academic success. Additionally, proficient writing skills empower EFL students to engage more actively in scholarly discussions, contribute to academic debates, and produce well-structured arguments supported by evidence (Hyland, 2021; Young & Ferguson, 2020). Furthermore, English writing proficiency opens opportunities for EFL students in the global job market. In today's interconnected world, employers value candidates who can communicate effectively in written English, regardless of their native language. Lee and Schmidgall (2020) declared that strong writing skills enable EFL students to create compelling resumes, cover letters, and professional documents, thereby increasing their employability and career prospects.

While mastering English writing skills is important, creativity in English writing is equally essential for EFL students as it fosters critical thinking, innovation, and self-expression. By encouraging creativity, students can break away from conventional language patterns and explore alternative ways of expressing themselves. This

not only enhances their linguistic fluency but also encourages them to develop their unique voice and style in writing (Godwin-Jones, 2018; Hyland, 2021; Johnson, 2024). Creative writing assignments allow them to unleash their imagination, experiment with language, and cultivate a deeper appreciation for English literature and culture.

Hence, acquiring English writing skills plays a pivotal role in the academic, professional, and personal development of EFL students as the proficiency in writing enables effective communication, enhances academic performance, expands career opportunities, and fosters creativity and critical thinking. Therefore, teachers should emphasise the development of English writing skills and provide ample opportunities for students to explore their creative potential in writing.

Although EFL teachers and students acknowledge the significance of attaining proficiency and nurturing creativity in English writing, the proliferation of AI writing tools within academic settings has increased noticeably following their introduction in 2022. This trend has significantly influenced EFL teaching and learning, particularly in the field of writing (The Stanford school, The Stanford Institute for Human-centred Artificial Intelligence [HAI], and The Stanford Accelerator for Learning, 2023). Students often turn to these tools to generate texts for their assignments when they encounter difficulties in getting started or organising their ideas. According to HAI et al. (2023) and Lund and Wang (2023), while this practice can help students overcome initial hurdles, it may lead to excessive reliance on AI writing tools, potentially hindering their creativity, since the writing process fosters originality, critical thinking, and expression of individual ideas while encouraging students to explore language nuances, experiment with different writing styles, and develop their unique voice.

Several researchers advocate an alternative approach to teaching writing, which is known as *process writing* (Hyland, 2019, 2021; Johnson, 2024; Rianti, 2023), which conveys numerous advantages in fostering students' creativity while enhancing their English writing skills. The author explored the discourse surrounding the utilisation of AI writing tools, juxtaposed with the human-driven approach of *process writing* in this article, which follows Hyland's (2019, 2021) five stages of process writing — pre-writing, drafting, editing, revising, and publishing. While Hyland's framework seems to be influenced by Graves' (1983) foundational research on writing, Graves (1983) originally viewed writing as a recursive process and notes common processes among all writers, highlighting the importance of planning, writing and revising stages without defining fixed stages. All in all, *the process writing approach* seems to be a promising solution, as it ensures students' active engagement in the writing process and develop essential critical thinking and composition skills in writing.

In the following sections, the author will present an exploration of writing as a cognitive and creative process, which is followed by an analysis of the challenges faced by EFL students today. The discussion continues with the emergence of AI writing tools and their implications as well as three approaches to teaching writing. Later, it delves into the cognitive and metacognitive benefits of *process writing*, supported by empirical evidence, and highlights the ethical and pedagogical risks associated with AI-generated writing in foreign language acquisition. Finally, key insights and implications of how AI writing tools and the process writing approach influences students' long-term creativity in English writing will be scrutinised.

Writing as a cognitive process

Second language (L2) writing denotes the process of articulating thoughts and ideas through written communication in a language distinct from one's native language. Within the realm of second language acquisition (SLA), mastering writing skills in a new language is widely acknowledged as a formidable challenge for EFL students due to the inherent complexity of the task (Godwin-Jones, 2018). Writing entails intricate cognitive procedures, encompassing the formulation of conceptual frameworks, the translation of mental constructs into tangible linguistic expressions, and the synthesis of personal experiences and acquired knowledge on diverse subjects. According to Hyland (2019, 2021) and Rianti (2023), writing entails a series of cognitive processes, such as pre-writing activities, drafting, editing, revising, and publishing, each constituting integral stages in the overarching writing process. Therefore, several researchers from various disciplines, including cognitive psychology, stylistics, rhetoric, text linguistics, critical library theory, hypertext theory,

second language acquisition, and writing pedagogy, have also extensively investigated the nuanced dynamics involved in the writing processes of both novice and proficient writers (József, 2001).

As mentioned above, writing is fundamentally a cognitive process that engages various mental faculties and cognitive mechanisms. At its core, writing involves the intricate interplay of cognitive functions, such as memory, attention, language processing, and executive functions (József, 2001). During the initial phase of writing, known as pre-writing, students generate ideas, organise thoughts, and plan the structure of their composition. Subsequently, the drafting stage entails translating these mental representations into written language, requiring the integration of linguistic rules, vocabulary, and syntactic structures. As the writing progresses, writers engage in processes of editing and revision, wherein they critically evaluate and refine their text to enhance clarity, coherence, and effectiveness (Hyland, 2021; Johnson, 2024; Rianti, 2023). Throughout this iterative process, second language students draw upon their metacognitive skills to monitor and regulate their cognitive activities, ensuring alignment with their communicative goals. Ultimately, writing serves as a dynamic means through which individuals express, refine, and communicate their thoughts, contributing to the development of complex cognitive abilities.

Writing as a creative process

Botella et al. (2018) claim that writing is inherently a creative process, requiring students to tap into their imaginative faculties and draw upon their reservoir of prior knowledge and experiences. As students engage in writing tasks, they are tasked with the challenge of articulating their unique perspectives, insights, and interpretations through the written medium. This necessitates the synthesis and integration of their existing knowledge with newfound ideas, fostering intellectual growth and deeper understanding. By expressing their ideas in writing, students not only demonstrate comprehension of subject matter but also exercise autonomy and self-expression, thereby cultivating their individual voice and identity as writers (Godwin-Jones, 2018; Hyland, 2019, 2021; Johnson, 2024; Yeung, 2015). Through this dynamic interplay between personal reflection and scholarly inquiry, students imbue their writing with authenticity and originality (Botella et al., 2018; Roe et al., 2023), thereby enriching the discourse and contributing to the broader landscape of knowledge acquisition and dissemination.

On the other hand, according to Archer (2017), writing is a creative endeavour that involves several stages requiring effort, artistry, technique, imagination, knowledge, and skill to ensure effectiveness. Thus, to produce quality writing, it is essential for students to not only follow these stages but also to value their uniqueness by employing their imagination and creative abilities. For them, an understanding of the writing processes can assist in translating their creative ideas into written form. Besides, a creative mindset enables students to develop imaginative writing based on their knowledge and creativity. According to Botella et al. (2018), creativity involves the ability to generate novel experiences characterised by originality, uniqueness, and extraordinariness, thus introducing fresh ideas and perspectives into a work. This implies that to produce high-quality writing, writers must integrate these various elements. As asserted by Smith (2013), embracing risk is inherent in creativity, prompting individuals to venture beyond established boundaries into uncharted territory. Consequently, writers must boldly express their ideas and thoughts in their writing, employing captivating language to underscore the inherent creativity of their work. By doing so, students enhance their understanding and appreciation of their creative writing. Moreover, fostering creativity in English writing empowers students to engage more deeply with the language, leading to richer and more nuanced written communication.

Why writing is a difficult skill to master for EFL students

While it is acknowledged that mastering English writing serves as a means for EFL students to unleash their creativity, broaden their knowledge, and enhance their language proficiency, many students encounter difficulties in achieving proficiency due to various reasons. These challenges include a lack of confidence in their writing abilities (Hyland, 2021; Johnson, 2024; Rianti, 2023; Young & Ferguson, 2020), struggles with initiating a text, organising the following paragraphs, concluding the final text, and a deficiency in technical

writing skills such as pre-writing, drafting, editing, and revising (Godwin-Jones, 2018; Hyland, 2021; Johnson, 2024). Furthermore, many encounter inadequate instructional support from teachers and a pervasive lack of motivation among them, which, unfortunately, leads to their poor writing performance. It is essential for EFL teachers to develop effective strategies that not only address these challenges but also foster a more motivating learning environment to facilitate students' improvement in English writing skills by encouraging their creativity in writing (Hyland, 2021; Wallace & Ruegg, 2020).

The emergence of AI writing tools: its effectiveness and limitations in the acquisition of EFL writing

Since late 2022, an unprecedented technological explosion in the field of artificial intelligence (AI) has been observed across various sectors. One significant outcome of this technological advancement has been the emergence of AI writing tools such as Chat Generative Pre-Trained Transformer (ChatGPT), QuillBot, Copy.ai, Writesonic, SurferSEO, and DeepSeek. These tools leverage cutting-edge natural language processing algorithms to generate human-like text autonomously, offering a wide array of applications across industries, including education (Gustilo et al., 2024; Lund & Wang, 2023; Roe et al., 2023).

In the realm of second language acquisition (SLA), AI writing tools have garnered considerable attention for their potential to enhance the writing skills of language students to some extent. By providing students with immediate feedback on grammar, spelling, punctuation, and style, these tools offer invaluable support in the writing process (HAI et al., 2023; Roe et al., 2023). Moreover, AI writing tools can assist students in generating coherent and grammatically correct sentences, thereby alleviating some of the challenges associated with expressing themselves in a new language. Through consistent practice and interaction with AI writing tools, students can refine their writing abilities and gain confidence in expressing their ideas effectively in a second language.

Furthermore, the effectiveness of AI writing tools in second language writing acquisition extends beyond mere grammar correction. These tools often provide language students with access to vast repositories of writing prompts, vocabulary suggestions, and model texts, facilitating independent learning and promoting language fluency (HAI et al., 2023; Lund & Wang, 2023). Overall, the emergence of AI writing tools represents a promising development in language education, offering innovative solutions to the challenges faced by second language students in developing their writing skills.

Despite their numerous benefits, AI writing tools also pose several disadvantages to students' acquisition of writing skills. Firstly, overreliance on AI tools may hinder the development of students' critical thinking and creativity (Lund & Wang, 2023; Roe et al., 2023; Zhai et al., 2024). By providing instant corrections and suggestions, these tools may discourage students from engaging in the cognitive processes (Escorcia, 2024; Wen et al., 2023) necessary for independent writing, such as brainstorming, problem-solving, and self-editing. Consequently, students may become dependent on AI assistance, resulting in a passive approach to writing rather than active engagement with the content.

Secondly, AI writing tools may perpetuate a one-size-fits-all approach to writing, overlooking the individualised needs and learning styles of students. These tools often prioritise standardised grammar and style conventions, neglecting the nuances of language and expression. As a result, students may feel constrained by rigid writing norms imposed by AI algorithms, stifling their ability to develop a unique voice and writing style (HAI et al., 2023; Lund & Wang, 2023; Roe et al., 2023). According to the researchers, AI writing tools may inadvertently reinforce errors or biases present in their training data. While these tools are designed to improve writing accuracy, they are not immune to errors or biases inherent in their programming or dataset. Students may unknowingly adopt incorrect grammar or biased language patterns suggested by AI tools, thereby perpetuating inaccuracies or reinforcing stereotypes in their writing.

Furthermore, the use of AI writing tools may contribute to ethical concerns, particularly regarding plagiarism and academic integrity (Gustilo et al., 2024; Roe et al., 2023). Students may misuse AI-generated content, either intentionally or unintentionally, leading to instances of plagiarism. Additionally, the automated nature of AI writing tools may make it challenging for educators to detect instances of academic dishonesty, undermining the integrity of assessment processes.

While AI writing tools offer valuable support in the writing process, their use in educational settings must be approached with caution. Educators should encourage students to balance the benefits of AI assistance with the development of essential writing skills, critical thinking, and ethical awareness. Moreover, ongoing research and interviews are needed to address the limitations and challenges associated with the integration of AI writing tools in students' acquisition of writing skills.

Approaches to teaching writing

According to Bailey (2015), Caplan and Johns (2022), and Hyland (2019, 2021), teaching writing in academic contexts encompasses three approaches, each with distinct focuses and methodologies. These approaches are *the product approach, the process approach, and the genre approach*.

The product approach in writing instruction emphasises the final written output as the primary objective, prioritising the result over the process itself (Bailey, 2015; Caplan and Johns, 2022; Hyland, 2021). Under this approach, students are typically guided through a structured process focusing on discrete components such as grammar, syntax, and organisation. Teachers often model well-written pieces and deconstruct their structure and language to aid students in producing similar work, providing detailed feedback and revision guidance (Bailey, 2015; Caplan and Johns, 2022; Hyland, 2021). However, *the product approach* tends to neglect pre-writing activities essential for idea development and effective organisation, potentially limiting students' creativity and inducing pressure to produce flawless final products (Bailey, 2015; Caplan and Johns, 2022; Hyland, 2021).

Conversely, *the process writing approach* centres on the writing process itself rather than the finished product, advocating for a student-centred methodology (Bailey, 2015; Caplan and Johns, 2022; Hyland, 2021; Johnson, 2024; Young & Ferguson, 2020). This approach guides students through cognitive stages such as brainstorming, drafting, editing, revising, and publishing, following Hyland's five-stage framework, and viewing writing as a recursive process that involves multiple revisions (Bailey, 2015; Caplan and Johns, 2022; Graves, 1983; Hyland, 2019, 2021; Johnson, 2024; Young & Ferguson, 2020). In this approach, students are encouraged to write freely, receive peer feedback, and make revisions, promoting skill development and ownership of their writing (Hyland, 2021; Young & Ferguson, 2020).

Additionally, *the genre approach* builds upon *the product approach* by instructing students in specific writing genres such as narratives, persuasive essays, and research papers, aiming to develop versatile writing skills applicable across various contexts (Caplan & Johns, 2022; Hyland, 2021). However, this approach primarily emphasises the final product and may not adequately address the writing process, potentially hindering students' skill development (Caplan & Johns, 2022; Hyland, 2021).

In comparison, while *the product approach* prioritises the final product meeting predefined criteria, *the process approach* focuses on students' skill development and creativity, making it more suitable for novice writers who are still developing their writing proficiency, regardless of their age or educational level (Bailey, 2015; Caplan & Johns, 2022; Hyland, 2021; Johnson, 2024; Young & Ferguson, 2020). Thus, higher education students may be considered novice writers in this sense. Since AI writing tools are increasingly utilised in higher education contexts, this theoretical study focuses on higher education students as the process writing approach is likely to play a stronger role in enhancing their creativity in writing compared to AI writing tools. Moreover, plagiarism and ethical concerns in writing assignments as essential considerations in higher education further justify the focus on them.

However, *the process writing approach* is not without its limitations. One significant drawback is its time-consuming nature. Implementing this approach in classroom settings may require a considerable investment of time, particularly if students are unfamiliar with its principles. Research suggests that while *the process writing approach* may be more suitable for higher education students compared to young learners, its complexity can pose challenges for the latter group. Young learners may encounter difficulties with tasks such as editing their texts and engaging in pre-writing activities. Additionally, while some teachers may already incorporate elements of *process writing* in their teaching practices, they may not explicitly recognise it as such due to its technical and academic terminology (Bailey, 2015; Caplan and Johns, 2022; Hyland, 2021).

Moreover, successful implementation of *the process writing approach* necessitates adequate teacher training to ensure proper application in the classroom, as teacher expertise plays a crucial role in enhancing students' writing performance through this approach (Bailey, 2015; Caplan and Johns, 2022; Hyland, 2021; Rianti, 2023; Young & Ferguson, 2020).

The cognitive and metacognitive benefits of process writing over AI-assisted writing

Writing is fundamentally regarded as a cognitive and metacognitive process that involves several mental faculties such as memory, problem-solving, linguistic processing, and creativity of language learners (Escorcia, 2024; Hyland, 2021; Johnson, 2024; Li, 2023). As discussed above, *the process writing approach* strengthens these abilities through its structured stages of pre-writing, drafting, revising, editing, and publishing, which allow learners to establish logical thinking, refine ideas, and explore linguistic creativity through iterative engagement with their texts. The essence of *the process writing*, more importantly, is that it supports students to develop deeper cognitive pathways by letting them actively generate, evaluate, and reformulate their ideas rather than passively absorbing pre-defined structures or patterns (Hyland, 2021; Johnson, 2024; Wen et al., 2023; Xu et al., 2021).

On the other hand, AI-assisted writing significantly discourages those essential cognitive processes of students. When students rely on AI-writing tools such as ChatGPT, QuillBot, or Grammarly to generate sentences for their essays, they unintentionally skip the fundamental engagement necessary for their writing skills development. Applied linguistics and cognitive psychology research throughout history claim that students' deep engagement is essential for promoting their writing performance (Hyland, 2021; Johnson, 2024; Reschly & Christenson, 2022; Rianti, 2023; Wen et al., 2023), whilst a ready-made output is produced by AI-writing tools in which students do not engage in problem solving and linguistic practices which are needed to acquire effective writing skills. Consequently, the opportunity to remain in correspondence with enhancing grammatical precision, lexical diversity, and overall linguistic creativity becomes less, ultimately leading to superficial language development, especially in writing (Hyland, 2021; Rianti, 2023).

Furthermore, *the process writing approach* encourages students to elicit a higher degree of cognitive investment in the composition process in written texts since writing involves brainstorming, decision-making, planning, and conceptual organisation, rather than simply producing grammatically correct sentences (Bailey, 2015; Hyland, 2021; Teng, 2022; Wallace & Ruegg, 2020). While AI tools provide syntactical corrections, the above integral aspects of writing development are not guaranteed. In other words, relying on AI-generated texts represents a cognitive shortcut that significantly diminishes the pedagogical value of writing as an intellectual exercise, which may result in weakened critical thinking skills and linguistic autonomy, lessening students' ability to articulate complex ideas independently in creating texts in the long term (Johnson, 2024; Kemmerer, 2023; Li, 2023; Wen et al., 2023; Zhai et al., 2024).

Metacognition and self-regulation in writing

Several researchers have acknowledged that metacognitive skills, including self-monitoring, planning, and evaluating one's writing, are indispensable in promoting students' writing proficiency (Escorcia, 2024; Teng, 2022; Wen et al., 2023). *The process writing approach* inherently fosters these skills by encouraging students to reflect on their own decisions, make structural and lexical choices in their writing, and revise their work based on their critical self-assessment (Bailey, 2015; Caplan and Johns, 2022; Hyland, 2021; Johnson, 2024; Young & Ferguson, 2020). By doing so, students may receive an opportunity to enhance their ability to regulate writing strategies, while the teacher is fostering an autonomous learning environment. This may allow students to strengthen their self-regulated learning strategies, increase their willingness to write well, and enable them to identify and correct errors, refine arguments, and develop unique writing styles by themselves.

Conversely, relying on AI-generated written texts weakens these metacognitive processes because students transfer decision-making responsibilities to the algorithm when they apply AI tools to generate ready-made texts, resulting in diminishing the ability to express original ideas in writing and critically assess

their writing (Baron, 2023; Escorcia, 2024; Wang, 2024; Zhai et al., 2024). This may lessen their reflective practice, critical thinking, and questioning skills due to the fact that they cannot simply deny AI-generated ideas, failing to question the relevancy of those ideas in autogenerated text. As a result, the ability to develop metacognition and transfer skills to a new and unfamiliar context becomes weakened, decreasing their ability to write academically.

In addition, the process of writing allows students to experience the iterative nature of writing in a self-directed manner since the practice of revising and editing drafts fosters a deeper engagement with the target language (Escorcia, 2024; Hyland, 2021; Teng, 2022) while relying on AI-generated texts provides limited opportunities to refine their texts when needed. Over-reliance on AI written products may discourage students' confidence in creating their own texts and promote their dependence on ready-made texts rather than implementing real linguistic competence.

The role of cognitive load in AI-generated writing

Cognitive load theory claims that students ensure meaningful learning when they are provided an opportunity to actively process and disseminate information to others rather than passively absorb it (Garnett, 2020; Lovell, 2020; Sweller, 2019). Various researchers viewed that writing is a form of cognitively demanding task as it requires students to handle diverse forms of cognitive load, include intrinsic load (understanding grammar and syntax), extraneous load (navigating formatting and structure of a written task), and germane load (integrating ideas to produce a coherent text) (Kormos, 2023; Li, 2023; Xu et al., 2021). When students incorporate these cognitive demands in the writing process, they will be able to gradually develop the necessary skills, which are required to improve their writing quality by repeatedly practicing and actively engaging with the second language.

AI-generated texts decrease demands of those cognitive loads, since the use of AI tools reduces germane cognitive load by pre-emptively producing full sentences and paragraphs (Kormos, 2023; Wang, 2024; Zhai et al., 2024). As a result, students become unmotivated to engage in the language learning process in-depth, which may lead to shallow linguistic retention and weaker overall writing proficiency. Recent empirical studies indicate that students who frequently rely on AI-generated texts struggle with applying the cognitive loads in writing, such as internalising syntactic and lexical structures, which weakens their ability to independently produce unique and better writing (Baron, 2023; Wang, 2024, Zhai et al., 2024). Ultimately, when students engage less in creativity, critical thinking, and problem-solving, cognitive engagement in their learning writing is reduced (Baron, 2023). This reduced engagement could negatively affect multiple areas of their life, like their academic performance, effectiveness at work when they start their career in future, and their communication in real-world scenarios (Kormos, 2023; Xu et al., 2021). In the long run, reduction in cognitive load brings several undesirable consequences that extend beyond second language learning, potentially dimming overall academic and intellectual development.

The neuroscientific perspective: brain engagement in writing vs. AI-assisted writing

Recent neuroscientific research announced that cognitive engagement is essential in learning writing (Clark, 2023; Kemmerer, 2023; Sweller, 2019). According to the studies on brain activity, the writing process encourages complex cognitive functions including creativity, brainstorming, problem-solving, semantic retrieval, and syntactic structuring, as well as engaging the prefrontal cortex (PFC), which means the front part of the frontal lobe of the brain, located just behind the forehead, which is responsible for higher-order cognitive functions mentioned earlier (Costa, 2021; Gkintoni et al., 2025). When students produce text, their brain starts working. In medical terms, they activate their neural pathways, which are associated with executive function, working memory, and linguistic creativity (Kormos, 2023; Li, 2023). By repeatedly practicing the brain functions, they will develop the writing skills needed to achieve proficiency in academic writing (Costa, 2021; Sweller, 2019).

In contrast, AI-assisted writing neglects the importance of those cognitive responsibilities by focusing only on the algorithm, and reducing the engagement of the prefrontal cortex, which may significantly lead to a

negative impact on students' long-term writing development (Gkintoni et al., 2025; Gustilo et al., 2024; Li, 2023; Zhai et al., 2024). From this phenomenon, it can be observed that AI writing tools have limitations such as not being able to contribute to the deep cognitive processing necessary for sustainable writing skills acquisition, including creativity, while they may provide immediate, fluent and grammatically accurate texts.

Empirical evidence: the effect of process writing on students' creativity

Case studies in EFL contexts

According to diverse second language acquisition studies with a special focus on writing, *the process writing* has significant benefits in developing students' writing performance, particularly in implementing students' creativity and engagement. Hyland (2019, 2021) and Young and Ferguson's (2020) empirical studies explored the impact of *process writing* on students' creativity, narrative, and argumentative writing skills. Their findings showed that applying *the process writing approach* enhanced the participants' ability to create intricate and compelling narratives, use greater lexical diversity in their texts, and construct stronger argumentative sentences. Moreover, students were able to refine their ideas and develop more cohesive and logical texts by using drafts and self-reflecting while writing. The findings also claim that the participants exhibited higher levels of engagement since they were intrinsically motivated by a true enjoyment of writing as opposed to perceiving writing as a task to be accomplished assigned by the teacher.

Similarly, research by Yeung (2015) noted that the participants, who were EFL students, acknowledged a sense of autonomy during writing, which is particularly important for students who write better when allowed to express their ideas freely and independently. As a cognitively demanding process, the participants enjoyed conceptualising ideas, organising arguments, and refining linguistic concepts, which strengthened their creativity in writing. These findings suggest that the *process writing* should be implemented in writing classes where students can actively engage with their writings in order to promote creativity in second language acquisition.

The ethical and pedagogical risks of ai-generated writing in second language acquisition

Plagiarism and the loss of student agency

Second language teachers, especially in higher education, demonstrate concerns about students using AI writing tools as a heightened risk of plagiarism and the erosion of academic integrity (Baron, 2023; Gustilo et al., 2024; Pecorari, 2024; Roe et al., 2023). They are concerned that these AI tools may even make it easier for students to accidentally copy someone else's work without providing proper citations, leading them to believe they can use the information as their own. This can lead to plagiarism and, consequently, academic integrity is obviously questionable, which results in violating ethical writing standards and students' creativity in writing. According to Gustilo et al. (2024) and Pecorari (2024), consequently, their ability to think critically, develop original ideas, express those ideas freely and independently, construct well-supported arguments, and ultimately, the role of academic and intellectual development will be neglected.

Moreover, AI-assisted writing can lead to a loss of student agency since they become passive learners rather than engaging themselves in developing writing (Baron, 2023; Cardon et al., 2023). On the one hand, *process writing* improves students' voices and critical thinking skills, elevate unique opinions, and engage with the subject matter in-depth, but on the other hand, AI tools allow students to depend on ready-made and immediate sentences or paragraphs, neglecting the role of cognitive loads which are essential for academic success and lifelong learning.

The role of universities in regulating AI use in teaching writing

Since AI tools have become increasingly integrated into academic settings, several researchers recommend that universities develop clear policies to regulate their use in teaching writing (Baron, 2023; Cardon et al., 2023). Numerous universities across worldwide have already implemented strict guidelines, banning AI generated writing in students' assignments, due to ethical concerns discussed above such as originality, academic integrity and plagiarism issues (Baron, 2023; Lund & Wang, 2023). Although it may not be possible

to eliminate the use of AI in education settings, especially in higher education, EFL teachers and policymakers should mainly emphasise the fundamental cognitive processes engaged in writing. For instance, they can identify students' grammatical errors, sentence patterns, and organisation of paragraphs in their assignments, as well as providing constructive feedback to support student creativity in writing (Clark, 2023; Kormos, 2023).

Simultaneously, recent studies pointed out that it is important to maintain a balance between encouraging students' creativity in writing and addressing ethical concerns in teaching writing as the creativity and ethics seem to be two ends of the same continuum in this AI age for the reason that the former allows students to think freely and explore new ideas, while the latter can enhance creativity by generating ideas especially when students feel exhausted in brainstorming or thought-blocked (Baron, 2023; Zhai et al., 2024). The researchers also added that universities should develop their present curricula by integrating AI literacy programmes to educate students on how to ethically and effectively use AI while encouraging their own creative and intellectual development on the other hand. It is recommended that teachers focus on guiding students in using AI as a learning tool for reviewing and giving feedback on their written products rather than relying on it to think critically and generate ideas (Cardon et al., 2023; Gustilo et al., 2024; Wang, 2024). By doing so, universities may be able to help students cultivate responsible writing practices while ensuring the integrity of their academic writing. While teachers may not be able to prevent students' use of AI tools outside of class, they can guide students to use the tools correctly and ethically in classrooms.

Conclusion

Several questions remain regarding the advancement of AI writing tools in academic contexts. What further improvements can be made to these technical tools? To what extent can the AI explosion continue? Should the focus be on writing texts quickly or devoting the time needed to write texts created by students? What impact will the increasing use of AI- writing tools have on students' learning and growth? How will universities measure ethical considerations regarding students' written texts, such as originality, plagiarism, and proper source attribution given that certain AI detection tools, such as QuillBot and Turnitin, exhibit several disadvantages, such as being costly and having limited accuracy identifying more advanced or nuanced forms of AI-generated content. Finally, would it be best practice for EFL students and teachers to eliminate the use of AI writing tools in the future?

These questions persist as formidable challenges within the realm of teaching L2 writing, but the adoption of *the process writing approach* emerges as a potential solution to ease some of the problems related to the complex issue of AI-generated texts in higher education. By emphasising the iterative nature of writing and fostering students' creativity throughout the writing process, regardless of the presence of AI writing tools, *the process writing approach* seems to be a promising option for enhancing students' writing proficiency. Furthermore, this approach prioritises student engagement and ownership of their writing, aligning with the broader goals of education in promoting critical thinking and independent learning (Hyland, 2021). In proposing the implementation of *the process writing approach*, teachers aim to cultivate students' ability to generate and articulate ideas effectively while navigating ethical considerations and technological advancements in writing instruction.

By positioning language education as a catalyst for interdisciplinary learning in increasingly digital and diverse educational contexts, this paper bridges theory and practice to strengthen students' engagement and cognitive development as well as to improve their writing skills development, while maintaining ethical guidelines, focusing on an innovative writing approach grounded in neuroscience perspective, regardless of linguistic and cultural boundaries. Implementing *the process writing* approach in EFL writing classes within higher education is universally beneficial because writing remains a fundamental skill that surpasses different linguistic and cultural contexts. Teachers can foster students' creativity and active engagement through *process writing* by equipping them to think critically and independently and be given the opportunity to develop their unique voices by refining their ideas over multiple drafts. By prioritising student-centred writing instruction through this human-driven writing approach, second and foreign language teachers worldwide can support students to become independent and confident writers who can creatively express their ideas in

their writings, and who can communicate effectively through writing in both academic and professional contexts, without concerns over ethical issues coupled with AI writing tools. Ultimately, this may lead the students to desired outcomes and success in their educational and career pursuits in the long term.

References

Archer, A. (2017). Using multimodal pedagogies in writing centres to improve student writing. *Stellenbosch Papers in Linguistics Plus*, *53*(1). https://doi.org/10.5842/53-0-730. Accessed on 1 September 2020.

Bailey, S. (2015). *Academic writing: A handbook for international students* (4th ed.). Routledge.

Baron, N. S. (2023). *Who wrote this?: How AI and the lure of efficiency threaten human writing*. Standford University Press.

Botella, M., Zenasni, F., Lubart, T. (2018). What are the stages of the creative process? What visual art students are saying. *Frontiers in Psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.02266. Accessed on 1 September 2020.

Caplan, N. A., Johns, A. (2022). *Essential actions for academic writing: A genre-based approach*. University of Michigan Press.

Cardon, P., Fleischmann, C., Aritz, J., Logemann, M., Heidewald, J. (2023). The challenges and opportunities of AI-assisted writing: Developing AI literacy for the AI age. *Business and Professional Communication Quarterly*, *86*(3), 257-295. https://doi.org/10.1177/23294906231176517. Accessed on 14 February 2024.

Clark, I. L. (2023). *Writing, imitation, and performance: Insights from neuroscience research*. Taylor & Francis.

Costa, A. (2021). *The bilingual brain: And what it tells us about the science of language* (J. W. Schweiter, Trans.). Penguin Books.

Escorcia, D. (2024). *Metacognition, self-regulation and writing: Theoretical perspectives and leads for sustaining students' writing*. John Wiley & Sons.

Garnett, S. (2020). *Cognitive load theory: A handbook for teachers*. Crown House Publishing.

Gkintoni, E., Antonopoulou, H., Sortwell, A., Halkiopoulos, C. (2025). Challenging cognitive load theory: The role of educational neuroscience and artificial intelligence in redefining learning efficacy. *Brain Sciences*, *15*(2), 203. https://doi.org/10.3390/brainsci15020203. Accessed on 20 February 2025.

Godwin-Jones, R. (2018). Second language writing online: An update. *Language Learning & Technology*, *22*(1), 1-15. https://dx.doi.org/10125/44574. Accessed on 19 May 2019.

Graves, D. H. (1983). *Writing: Teachers and children at work*. Heinemann.

Gustilo, L., Ong, E., Lapinid, M. R. (2024). Algorithmically driven writing and academic integrity: Exploring educators' practices, perceptions, and policies in AI era. *International Journal for Educational Integrity*, *20*(1). https://doi.org/10.1007/s40979-024-00153-8. Accessed on 3 April 2024.

Hyland, K. (2019). *Second language writing* (2nd ed.). Cambridge University Press.

Hyland, K. (2021). *Teaching and researching writing*. Routledge.

Johnson, A. P. (2024). Pre-pre-Writing strategies. *Being and Becoming Teachers of Writing*, 26-35. https://doi.org/10.4324/9781003334798-8. Accessed on 15 May 2024.

József, H. (2001). *Advanced writing in English as a foreign language*. Lingua Franca Csoport.

Kemmerer, D. (2023). *Cognitive neuroscience of language* (2nd ed.). Taylor & Francis.

Kormos, J. (2023). The role of cognitive factors in second language writing and writing to learn a second language. *Studies in Second Language Acquisition*, *45*(3), 622-646. https://doi.org/10.1017/s0272263122000481. Accessed on 27 October 2023.

Lee, S., Schmidgall, J. (2020). *The importance of English writing skills in the international workplace* (Research Memorandum No. RM-20-07). Educational Testing Service.

Li, S. (2023). Working memory and second language writing: A systematic review. *Studies in Second Language Acquisition*, *45*(3), 647-679. https://doi.org/10.1017/s0272263123000189. Accessed on 26 April 2023.

Lovell, O. (2020). *Sweller's cognitive load theory in action*. T. Sherrington (Ed.). Hachette UK.

Lund, B. D., Wang, T. (2023). Chatting about ChatGPT: How may AI and GPT impact academia and libraries?

Library Hi Tech News. https://doi.org/10.1108/lhtn-01-2023-0009. Accessed on 26 April 2023.

Pecorari, D. (2024). Plagiarism, international students, and the second-language writer. In S. E. Eaton (Ed.), *Second handbook of academic integrity* (2nd ed., pp. 451-465). Springer Nature. https://doi.org/10.1007/978-3-031-54144-5_69. Accessed on 15 May 2024.

Reschly, A. L., Christenson, S. L. (2022). *Handbook of research on student engagement*. Springer Nature.

Rianti, W. (2023). *An analysis on student's writing motivation*. Penerbit NEM.

Roe, J., Renandya, W. A., Jacobs, G. M. (2023). A review of AI-powered writing tools and their implications for academic integrity in the language classroom. *Journal of English and Applied Linguistics*, *2*(1). https://doi.org/10.59588/2961-3094.1035. Accessed on 20 November 2024.

Smith, C. (2013). Creative writing as an important tool in second language acquisition and practice. *The Journal of Literature in Language Teaching*, *2*(1), 11-18.

Sweller, J. (2019). Cognitive load theory. In S. Tindall-Ford, S. Agostinho, & J. Sweller (Eds.), *Advances in cognitive load theory: Rethinking teaching* (pp. 1-11). Routledge.

Teng, L. S. (2022). *Self-regulated learning and second language writing: Fostering strategic language learners*. Springer Nature.

The Stanford school, The Stanford Institute for Human-centred Artificial Intelligence, and The Stanford Accelerator for Learning. (2023). *Exploring generative AI tools in classrooms*. Stanford. https://acceleratelearning.stanford.edu/app/uploads/2023/02/AI-and-Education.pdf. Accessed on 18 June 2024.

Wallace, D., Ruegg, R. (2020). *WRIT 101 Workbook: Becoming an Effective Writer and Researcher*. Victoria University of Wellington.

Wang, C. (2024). Exploring students' generative AI-assisted writing processes: Perceptions and experiences from native and Nonnative English speakers. *Technology, Knowledge and Learning*. https://doi.org/10.1007/s10758-024-09744-3. Accessed on 17 June 2024.

Wen, Z., Sparks, R. L., Biedroń, A., Teng, M. F. (2023). *Cognitive individual differences in second language acquisition: Theories, assessment and pedagogy*. Walter de Gruyter GmbH & Co KG.

Xu, T. S., Zhang, L. J., Gaffney, J. S. (2021). Examining the relative effects of task complexity and cognitive demands on students' writing in a second language. *Studies in Second Language Acquisition*, *44*(2), 483-506. https://doi.org/10.1017/s0272263121000310. Accessed on 2 January 2022.

Yeung, M. (2015). *Fostering learner autonomy using the process writing approach: Exploring the real strength of the process writing approach*. LAP Lambert Academic Pub.

Young, R., Ferguson, F. (2020). *Writing for pleasure: Theory, research and practice*. Routledge.

Zhai, C., Wibowo, S., Li, L. D. (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: A systematic review. *Smart Learning Environments*, *11*(1). https://doi.org/10.1186/s40561-024-00316-7. Accessed on 20 February 2025

Active and affective dimensions of pronunciation learning in EFL education

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Abstract
This theoretical paper examines the role of pronunciation within the action-oriented conceptualization of language learning promoted by the Common European Framework of Reference for Languages (CEFR). While contemporary approaches increasingly define language competence as the capacity to act through language, the position of pronunciation within this framework remains underexamined, particularly in relation to learners' affective engagement. The paper, therefore, seeks to explore how pronunciation may be understood as an active dimension of EFL education and how its development is intertwined with motivation as an affective dimension. The paper indicates that pronunciation functions as a mediating resource between linguistic knowledge and communicative action and that its development is strongly influenced by motivation. Pronunciation thus emerges as a domain in which the active and affective dimensions of language learning closely interact. The paper concludes that viewing pronunciation as encompassing both active and affective dimensions offer a more integrated understanding of communicative competence.

Keywords*: CEFR, action-oriented approach, communicative competence, pronunciation, motivation, active and affective dimensions*

Introduction

In recent decades, foreign language education has undergone a profound reconceptualization, moving away from a view of language as a system of forms to be learned towards perspectives that emphasize language as a means of social action (Council of Europe, 2020a; Piccardo & North, 2019). Within this shift, increasing attention has been paid to the ways in which learners participate in communicative practices and develop the capacity to act through language in meaningful contexts (Engeström, 1995; Germain-Rutherford, 2021). This orientation is particularly salient in EFL settings, where opportunities for authentic language use are often limited (Kirkpatrick, 2007) and where the classroom becomes the primary place for developing communicative agency (Council of Europe, 2001).

At the same time, this reconceptualization raises questions concerning the status of individual components of language competence. If language learning is understood primarily as an action, it becomes necessary to reconsider how specific skills and systems contribute to learners' ability to participate in interaction and to construct themselves as competent language users. Among these components, pronunciation occupies a distinctive position. It directly mediates between linguistic knowledge and communicative performance (Cai et al., 2025), yet it has often been treated as not significant in both theory and practice (Harmer, 2007; Scrivener, 2005).

Equally significant is the role of affect in this process. Language learning does not take place in a neutral cognitive space, but it is shaped by learners' motivation (Wigzell & Al-Ansari, 1993). In the present paper, the affective dimension becomes inseparable from the development of phonological competence.

Against this background, the present paper offers a reflection on pronunciation learning within the framework of the CEFR and its action-oriented approach (Council of Europe, 2020a). It seeks to articulate how pronunciation may be understood as an active dimension of EFL education and how its development is intertwined with motivation as an affective dimension. By bringing together these perspectives, the paper aims to contribute to a more integrated understanding of how language, action, and affect cooperate in the formation of communicative competence.

Language learning as action in EFL education

English as a foreign language (EFL) can be recognized in nations where the language is not widely spoken or utilized in everyday life. Learners in these nations usually have fewer opportunities to use the language outside the classroom than learners for whom English is their second language (Kirkpatrick, 2007). Considering this, EFL learners may have to be more proactive in seeking opportunities to learn and use the target language. Subsequently, teachers should enable them to do so to the same extent.

In response to these educational demands, language learning in EFL education is increasingly conceptualized as an active process that involves learners' engagement in meaningful language use rather than the passive acquisition of linguistic knowledge (Council of Europe, 2020a). This shift in conceptualization is strongly reflected in the revised version of the Common European Framework for Languages (CEFR), which is regarded as a binding framework for countries in the European Union when discussing teaching and learning EFL.

The CEFR builds upon the developments made with the Communicative Language Teaching (CLT) and formally proposes the implementation of an action-oriented approach, which was introduced in the 2001 edition of the framework. This approach understands the learners to be "social agents" (Council of Europe, 2001: 9) who are capable of exercising agency when using language, "thus seeing language as a vehicle for communication rather than as a subject to study" (Council of Europe, 2020a: 29). In other words, language competence is therefore not defined primarily as the possession of linguistic knowledge, but as the capacity to act through language in a specific communicative context.

This reconceptualization reflects a broader theoretical shift to a more complex perspective, instead of a linear one, foregrounding the contextual and situated character of language and its use, thereby emphasizing the importance of the notion of action in both general and theoretical frameworks (Engeström, 1995). Accordingly, the action-oriented approach aims to establish action as a central principle in language education and to exploit its full potential for learning and teaching (Piccardo & North, 2019).

From a didactic perspective, this orientation entails a fundamental redefinition of the roles of learners and teachers, "transforming the roles of learners into social agents and teachers into facilitators" (Germain-Rutherford, 2021: 95). In the traditional approaches, learners were closely guided by the teacher, whereas in the action-oriented approach, they assume an active role and make informed decisions about their learning process (Ismail & Kumar, 2023). In this context, the teacher's role is to support this process and foster the development of learner autonomy (Piccardo & North, 2019). The teacher is responsible for implementing the curriculum by creating an environment that facilitates learners' successful participation in a society and for providing support for their personal and educational development (Ismail & Kumar, 2023).

This conceptualization also has important implications for the treatment of individual language skills and systems within EFL education. If language competence is defined in terms of action, then the development of a specific component of competence should, in return, be understood in relation to learners' ability to participate in communicative activity. Among these components, pronunciation occupies a particularly significant position, as it directly conditions learners' capacity to communicate successfully (Cai et al., 2025), hence, to produce intelligible speech (Council of Europe, 2020a). As such, pronunciation is an important resource that helps learners to act through spoken language.

This perspective provides the conceptual foundation for examining pronunciation as an active dimension of language.

Pronunciation as an active dimension of EFL education

In language pedagogy, the four skills are commonly classified into receptive skills, namely listening and reading, and productive skills, namely speaking and writing (Harmer, 2007; Hinkel, 2006; Scrivener, 2005). From this perspective, speaking, as a productive skill, requires learners to actively produce language, and pronunciation constitutes an essential component of this productive process (Prodanovska-Poposka, 2017). As such, pronunciation is conceptualized as the production of speech sounds through which language is realized in acts of speech (Monika et al., 2019). It therefore follows that pronunciation belongs to the active

dimension of EFL education, as it directly participates in the productive use of spoken language. Despite its central role in this dimension, pronunciation frequently receives limited attention in language teaching (Harmer, 2007; Scrivener, 2005). This situation appears problematic, as it contrasts with the long-established position of pronunciation within communicative competence.

Indeed, pronunciation has traditionally been regarded as a core element of communicative competence in the teaching and learning of the English language. Beyond its role in ensuring comprehensibility, it also contributes significantly to learners' construction of linguistic identity and to their confidence as language users (Kholid & Hidayat, 2025).

For a considerable period, EFL pronunciation pedagogy was strongly oriented toward native-speaker standards, most notably Received Pronunciation (RP), which functioned as the dominant norm of accuracy and prestige in the European Union context, where it was predominantly British English that was taught (Roach, 2009). With the expansion of English into a global lingua franca used by speakers from a wide range of linguo-cultural backgrounds (El Garras, 2025; Hülmbauer et al., 2008; Melitz, 2016), the long-standing emphasis placed on approximation to native-like pronunciation has been frequently challenged (Jenkins, 2000; Hülmbauer et al., 2008; Walker et al., 2021).

This development has prompted a redefinition of what constitutes success in pronunciation learning. Contemporary approaches no longer view the imitation of native accents as the primary objective. Instead, they emphasize intelligibility as the key criterion for effective communication (Kráľová et al., 2021; Hinkel, 2006). Consequently, current pedagogical perspectives increasingly favor communicative functionality over conformity to native standards (Savignon, 2005).

This emphasis on intelligibility has also been incorporated into the revised version of the CEFR and its action-oriented approach (Council of Europe, 2020a), as the intelligibility perspective supports the development of communicative competence (Henderson, 2021), which is central to the framework as a whole.

The communicative competence itself consists of three interrelated components: linguistic competence, sociolinguistic competence, and pragmatic competence (Hymes, 1972). This classification is also reflected in the revised version of the CEFR and further enriched by additional subcategories. One such subcategory under linguistic competence is phonological control, encompassing pronunciation. This subcategory is further elaborated through three subcomponents: overall phonological control, sound articulation, and prosodic features (Council of Europe, 2020a), reflecting the multidimensional nature of pronunciation.

Within each subcomponent of the CEFR, "can do" descriptors can be found (Council of Europe, 2020a: 27). These descriptors strengthen the central position of the action-oriented approach, as they define language competences in terms of what learners at a given proficiency level are able to do with the language (North, 2022). However, some of the descriptors related specifically to pronunciation (see CEFR, pp. 134-135) are formulated as definitions rather than can do descriptors concerned with actions. Even with that, the remaining descriptors align with the stance of the action-oriented approach, where the learners are no longer passive recipients of knowledge, nor are they perceived as objects limited to acquiring a predetermined range of task-specific abilities (Piccardo & North, 2019).

About instructional content, evidence suggests that pronunciation instruction is most effective when it incorporates both segmental and suprasegmental features rather than addressing either one in isolation (Lee et al., 2015), which is also reflected in the CEFR's action-oriented approach.

At the same time, pronunciation learning cannot be fully understood without consideration of the affective factors that influence learners' engagement with the spoken language, which invites a closer examination of the role of motivation in shaping learners' development in pronunciation learning.

Motivation as the affective dimension of pronunciation learning

While affect in language encompasses a range of variables, the present paper focuses specifically on motivation as a central affective construct. This focus is intentional, as motivation directly drives learners' engagement with the language learning process (Wigzell & Al-Ansari, 1993), making it particularly relevant

within the action-oriented approach.

According to the Pedagogical Dictionary (2009), motivation consists of internal and external factors that initiate and maintain human behavior, directing it towards specific goals. These factors influence the intensity and duration of actions, determine whether goals are reached or avoided, and prompt individuals to reflect on their behavior, assess their successes and failures, and consider their interaction with the surrounding environment. When discussing motivation in the context of pronunciation learning, attention is directed to motivation for doing something, defined by the *Oxford Advanced Learner's Dictionary* (2020: 1018) as "the feeling of wanting to do something, especially something that involves hard work." As such, it is argued that "motivation is the key to all learning" (Lile, 2002, Introduction section).

From an affective perspective, motivation plays a crucial role in shaping the extent to which learners engage effectively with the language learning process (Wigzell & Al-Ansari, 1993), as it is frequently driven by an internal desire to succeed (Crystal, 2003). In this sense, motivation introduces an affective dimension into the cognitive process through which learners determine the experiences or aims they will pursue or avoid, as well as the degree of effort they are willing to invest in them (Nguyen, 2019).

As such, motivation to acquire a certain English pronunciation would be seen as a kind of achievement motivation. This concept was first introduced by Atkinson and further developed in collaboration with Raynor in *Motivation and Achievement* (1974). Achievement motivation is therefore typically situated within those theories of motivation that are centered around expectancy-value theories, which propose that learners' behavior is shaped by their expectation of success in a particular activity and the perceived value of success in the given activity (Williams et al., 2015). Within this framework, some learners may strive for more accurate pronunciation because success is the predominant source of motivation as opposed to recurrent failure (Harmer, 2007).

The degree of motivation will thus vary depending on how much importance learners attach to the result they wish to attain (Williams & Burden, 1997). This may indicate that learners with higher levels of motivation are more likely to develop more advanced pronunciation skills. This idea is reinforced by the concept of two cycles that illustrate the dynamic relationship between motivation and achievement. The first cycle flows from high motivation to high achievement and back to high motivation. Hence, this is the positive cycle. The second cycle, on the other hand, moves from low motivation to low achievement and back to low motivation. Therefore, this is the negative cycle (Dörnyei & Ushioda, 2011).

Nevertheless, it is important to make a distinction between extrinsic motivation and intrinsic motivation to better explain why the affective dimension plays such a crucial role in pronunciation learning. "Extrinsic motivation is the result of any number of outside factors" (Harmer, 2007: 98). These factors include mainly society, significant others, teachers, and methods (Harmer, 2001). With intrinsic motivation, the factors come from within a person. Defined, intrinsic motivation is "the generalized desire to invest effort in the learning for its own sake" (Ur, 2000: 280). This distinction heightens the importance of internal factors in the process of learning pronunciation, because "most researchers and methodologists have come to the view that intrinsic motivation produces better results than its extrinsic counterpart" (Harmer, 2007: 98) and the probability that a learner will successfully learn to pronounce intelligibly is increased if they are intrinsically driven to do so and enjoy the learning experience (Harmer, 2001). Even if intrinsic motivation holds considerably greater significance within education (Lile, 2002), extrinsic motivation cannot be neglected since the learner, as the aforementioned social agent, engages in certain activities for particular reasons and under particular circumstances (Piccardo, 2014), which in itself entails a certain level of extrinsic motivation. Moreover, a sociolinguistic aspect to the process of pronunciation learning is added. Consequently, through the use of linguistic and sociocultural repertoires, learners actively participate in important real-world scenarios, learning to respond in both cognitive and emotional senses (Germain-Rutherford, 2021). This gives their learning a purpose, as language use is directly linked to meaningful action. Recognizing this reason for learning pronunciation is inherently motivating for language learners (Puchta, 2021).

Furthermore, the action-oriented approach is characterized by learner-centeredness (Council of Europe, 2020b), which is motivational for language learners as it fosters a sense of cooperation and mutual respect

(Puchta, 2021), with a strong emphasis on the authenticity of materials and tasks, with learners determining how to complete scenario-based assignments in groups, which helps them to develop soft skills and maintain motivation as learners "prefer cooperative tasks – including pair work and teamwork" (Kamenická, 2022: 42). Additionally, mediation is integrated into language learning, and self-assessment is commonly employed as part of the evaluative process, which is motivating for learners as they prefer other forms of assessment (Kidd & Czerniawski, 2011). Therefore, the action-oriented approach should be taken into account as it can be motivating because of its specific aspects.

Although motivation has been foregrounded as the central affective factor in this discussion, it is not the only factor influencing pronunciation learning. Among these, foreign language anxiety (FLA) and foreign language enjoyment (FLE) have received considerable attention in research.

FLA refers to a situation-specific form of anxiety associated with language learning (Horwitz et al., 1986; MacIntyre & Gardner, 1989). It encompasses a variety of negative emotions, such as anxiety, fear, worry, stage fright, nervousness, stress, frustration, and self-doubt (Lojová, 2021). Importantly, higher levels of anxiety have been associated with lower motivation and reduced language achievement (MacIntyre, 2007).

In contrast, FLE reflects positive emotional engagement in language learning (Dewaele & MacIntyre, 2014). It is linked not only to feelings of pleasure but also to cognitive involvement, curiosity, and a sense of challenge (Boudreau et al., 2018). Enjoyment may arise from social interaction, personal satisfaction, or supportive teaching practices (Botes et al., 2021) and has been shown to positively relate to both motivation and language proficiency (Zhang et al., 2020).

Implications for EFL education and research

The preceding discussion of language learning as action, pronunciation as an active dimension, and motivation as an affective dimension in EFL education provides several implications for both EFL education and research. If language competence is conceptualized primarily as the capacity to act through language in meaningful communicative contexts (Council of Europe, 2020a; Piccardo & North, 2019), then the treatment of pronunciation can no longer be purely technical. Instead, pronunciation should be understood as an essential resource that enables learners to participate in social interaction and to exercise agency as social agents (Council of Europe, 2001). From this perspective, the development of phonological competence is not merely a matter of accuracy, but a condition for successful action through spoken language.

This implies that pronunciation instruction should be systematically integrated into communicative and action-oriented teaching. Given that pronunciation belongs to the active dimension of EFL education and directly participates in productive use of language (Prodanovska-Poposka, 2017; Monika et al., 2019), it should be embedded in tasks that reflect authentic communicative purposes. The action-oriented approach, with its emphasis on the performance of meaningful actions (Council of Europe, 2020a; Piccardo & North, 2019), provides an appropriate framework for such integration.

Furthermore, the shift from native-speaker norms towards intelligibility as the primary criterion of success (Kráľová et al., 2021; Hinkel, 2006; Yazan, 2015) has directed pedagogical consequences. Teachers are encouraged to prioritize communicative functionality and comprehensibility over conformity to idealized models of pronunciation, especially in international contexts (Jenkins, 2000; Walker et al., 2021). This orientation aligns with CEFR's focus on phonological control as part of linguistic competence and with its use of "can do" descriptors that define proficiency in terms of learners' ability to perform actions with language (Council of Europe 2020a; North, 2022).

At the same time, instructional content should address both segmental and suprasegmental features in an integrated way, as evidence suggests that such an approach is more effective for the development of pronunciation competence (Lee et al., 2015).

Equally important are the implications concerning the affective dimension of pronunciation learning. The discussion of motivation here indicates that learners' engagement with pronunciation is strongly influenced by both intrinsic and extrinsic factors (Harmer, 2007; Ur, 2000), as well as by their expectations of success and the perceived value of achievement (Williams et al., 2015). In this respect, pronunciation learning can be

viewed as a dynamic process in which motivation and achievement reinforce each other (Dörnyei & Ushioda, 2011).

For educational practice, this suggests that teachers should create learning environments that foster intrinsic motivation by providing meaningful tasks, supportive feedback, and opportunities for successful communicative action (Piccardo, 2014; Germain-Rutherford, 2021; Burcl, 2023). By linking pronunciation to authentic purposes and to learners' participation in socially relevant activities, the action-oriented approach may contribute to strengthening learners' motivation (Puchta, 2021).

From a pedagogical perspective, these principles may be operationalized through specific classroom practices. For example, teachers may incorporate pronunciation into task-based activities such as role-plays, simulations, or collaborative problem-solving tasks, where learners use spoken language for meaningful purposes. Techniques such as guided repetition (e.g., shadowing), peer interaction, and self-recording may further support pronunciation development while fostering learners' motivation (Harmer, 2007; Puchta, 2021). In this way, pronunciation practice becomes both action-oriented and affectively engaging.

From a research perspective, the present text highlights the need to examine pronunciation not only as a phonetic or phonological phenomenon, but as a multidimensional construct situated at the intersection of the active and affective dimensions of EFL education. Further research may therefore benefit from investigating how learners' phonological development interacts with motivational processes, learner autonomy, and participation in communicative action within an action-oriented approach (Council of Europe, 2020b; Piccardo & North, 2019), as well as prompt further development of the can-do descriptors for phonological control to better suit the position of pronunciation. In addition, while motivation has been foregrounded in this discussion, further research may explore the role of additional affective variables in shaping pronunciation learning within action-oriented frameworks. Furthermore, such research may contribute to the development of empirically grounded pedagogical activities that effectively connect action-oriented pronunciation teaching with motivation as a driving force of learners' learning process.

Taken together, these implications underscore the role of pronunciation within an action-oriented conception of EFL education. When pronunciation is treated as an active resource for communication and when its development is supported by motivationally rich learning environments, it can contribute not only to learners' intelligibility but also to their ability to act through language.

Conclusion

The present paper has sought to articulate a perspective on pronunciation learning that situates it at the intersection of action and affect in EFL education. By drawing on the action-oriented approach of the CEFR and on theories of motivation, it has argued that pronunciation emerges as a mediating dimension through which learners transform linguistic knowledge into communicative action.

Viewed from this perspective, pronunciation appears as a particularly suitable system for examining the cooperation between the active and affective dimensions of EFL education. The ability to produce intelligible speech conditions learners' participation in interaction, while their willingness to invest effort and to persist in pronunciation learning is shaped by motivational processes that are embedded in social experience. The action-oriented approach provides a coherent framework for capturing this interdependence, as it foregrounds agency, authenticity, and meaningful participation as central principles of language learning.

Moreover, the paper suggests that the relationship between language and action cannot be reduced to observable performance alone. It is sustained by affective forces such as motivation, which orient learners toward or away from communicative engagement and shape their development over time. Recognizing pronunciation as encompassing both an active and affective dimension thus invites a more comprehensive understanding of communicative competence.

In this sense, pronunciation learning goes beyond a domain-specific concern. It constitutes a conceptual bridge between action and affection, illuminating the complexity of EFL education.

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References

Atkinson, J. W., Raynor, J. O. (1974). *Motivation and Achievement*. New York: Winston.

Botes, E., Dewaele, J. M., Greiff, S. (2021). The development and validation of the short form of the foreign language enjoyment scale. *The Modern Language Journal*, *105*(4), 858-876. https://doi.org/10.1111/modl.12741

Boudreau, C., MacIntyre, P. D., Dewaele, J.-M. (2018). Enjoyment and anxiety in second language communication: An idiodynamic approach. *Studies in Second Language Learning and Teaching*, 8(1), 149-170. https://files.eric.ed.gov/fulltext/EJ1175387.pdf

Burcl, P. (2023). *Reformatting and redesigning the role of a teacher in the shadow of the millennial challenges*. *World Journal of Advanced Research and Reviews, 19*(2), 500–504. https://doi.org/10.30574/wjarr.2023.19.2.1563

Cai, D., Naismith, B., Kostromitina, M., Teng, Z., Yancey, K. P., LaFlair, G. T. (2025). Developing an Automatic Pronunciation Scorer: Aligning Speech Evaluation Models and Applied Linguistics Constructs. *Language Learning*, *75*(S1), 170-203. https://doi.org/10.1111/lang.70000. Accessed on 26 November 2025.

Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, teaching, assessment*. https://rm.coe.int/1680459f97. Accessed on 10 December 2025.

Council of Europe. (2020a). *Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume.* https://www.coe.int/lang-cefr. Accessed on 10 December 2025.

Council of Europe. (2020b). The action-oriented approach. In the *Common European Framework of Reference for Languages (CEFR*). https://www.coe.int/en/web/common-european-framework-reference-languages/the-action-oriented-approach. Accessed on 11 December 2025.

Crystal, D. (2003). *English as a Global Language* (2nd ed.). Cambridge: Cambridge University Press.

Dewaele, J. M., MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, *4*(2), 237-274. https://doi.org/10.14746/ssllt.2014.4.2.5

Dörnyei, Z., Ushioda, E. (2011). *Teaching and Researching Motivation* (2nd ed.). London: Pearson Education Limited.

El Garras, H. (2025). English, the Global Language: Its strength, status, and future. *International Journal of Linguistics*, *Literature & Translation, 8*(4), 122-130. https://doi.org/10.32996/ijllt.2025.8.4.15.

Engeström, R. (1995). Voice as communicative action. *Mind, Culture, and Activity 2*(3), 192-215.

Germain-Rutherford, Aline. (2021). Action-oriented approaches: being at the heart of the action. In T. Beaven, F. Rosell-Aguilar (Eds.), *Innovative language pedagogy report* (pp. 91-96). https://research-publishing.net/publication/chapters/978-2-490057-86-3/1241.pdf. Accessed on 21 November 2025.

Harmer, J. (2001). *How to teach English*. Harlow: Pearson Education Limited.

Harmer, J. (2007). *The Practice of English Language Teaching* (4th ed.). Harlow: Pearson Longman ELT.

Henderson, A. (2021). *Intelligibility and Identity: From Teaching Pronunciation to Training for Spoken Language Variation*. https://shs.hal.science/tel-03295473/. Accessed on 20 November 2025.

Hinkel, E. (2006). Current Perspectives on Teaching the Four Skills. *TESOL Quarterly*, *40*(1), 109-131.

Hornby, A. S. (2020). *Oxford Advanced Learner's Dictionary* (10th ed). Oxford: Oxford University Press.

Horwitz, E. K., Horwitz, M. B., Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, *70*(2), 125-132. https://doi.org/10.2307/327317

Hülmbauer, C., Böhringer, H., Seidlhofer, B. (2008). Introducing English as a lingua franca (ELF): Precursor and partner in intercultural communication. *Synergies Europe*, 3, 25-36.

Hymes, D. (1972). On Communicative Competence. In J.B. Pride and J. Holmes (Eds.) *Sociolinguistics. Selected Readings* (pp. 269-293). Harmondsworth: Penguin.

Ismail, M. R., Kumar, N. S. P. (2023). Exploring the Effectiveness of Implementing the Action Oriented Approach in Improving English Language Skills Among ESL Learners: Teachers' Perception. *World Journal of English Language*, *13* (8), 546-557. https://www.sciedu.ca/journal/index.php/wjel/article/viewFile/24160/15324. Accessed on 21 November 2025.

Jenkins, J. (2000). *The Phonology of English as an International Language*. Oxford: Oxford University Press.

Kamenická, J. (2022). *Brain-Based TEFL*. https://www.researchgate.net/publication/367117190_Brain-Based_TEFL. Accessed on 24 November 2025.

Kidd, W., Czerniawski, G. (2011). *Teaching Teenagers: A Toolbox for Engaging and Motivating Learners*. London: SAGE Publications.

Kirkpatrick, A. (2007). *World Englishes: Implications for international communication and English language teaching*. Cambridge: Cambridge University Press.

Kholid, M., Hidayat, A. (2025). EFL learners' attitudes toward native-like English pronunciation versus intelligibility: A study of undergraduate students. *Journal La Edusci,* *6*(4), 616-637. https://doi.org/10.37899/journallaedusci.v6i4.2565. Accessed on 13 April 2026.

Kráľová, Z., Nemčoková, K., Datko, J. (2021). *Foreign language pronunciation: From theory to practice*. Newcastle upon Tyne: Cambridge Scholars Publishing.

Lee, J., Jang, J., Plonsky, L. (2015). The Effectiveness of Second Language Pronunciation Instruction: A meta-analysis. *Applied Linguistics*, *36*(3), 345-366. https://doi.org/10.1093/applin/amu040. Accessed on 27 November 2025.

Lile, W. T. (2002). Motivation in the ESL classroom. *The Internet TESL Journal*, 8(1). http://iteslj.org/Techniques/Lile-Motivation.html. Accessed on 14 November 2025.

Lojová, G. (2021). Neuropsychological aspects of foreign language learning and teaching. *Philologia*, *31*(2), 19-34.

MacIntyre, P. D. (2007). Willingness to communicate in the second language: Understanding the decision to speak as a volitional process. *The Modern Language Journal*, *91*(4), 564-576. http://www.jstor.org/stable/4626086

MacIntyre, P. D., Gardner, R. C. (1989). Anxiety and second-language learning: Toward a theoretical clarification. *Language Learning*, *39*(2), 251-275.

Melitz, J. (2016). English as a lingua franca: Facts, benefits and costs. In V. Ginsburgh & S. Weber (Eds.), *The Palgrave Handbook of Economics and Language* (pp. 583-615). London: Palgrave Macmillan.

Monika, M., Winarti, N., Yundayani, A. (2019). English Pronunciation Learning in EFL Context: Students' Voice. *Journal of English Language and Literature*, *4*(2), 68-73. https://doi.org/10.37110/jell.v4i02.82. Accessed on 28 November 2025.

Nguyen, H. C. (2019). Motivation in Learning English Language: a case study at Vietnam National University, Hanoi. *European Journal of Educational Sciences*, *6*(1), 49-65. https://doi.org/10.19044/ejes.v6no1a4. Accessed on 13 November 2025.

North, B. (2022). The CEFR Companion Volume and the Action-Oriented Approach. *Italiano LinguaDue*, *14*(2), 1-23. https://doi.org/10.54103/2037-3597/19566. https://riviste.unimi.it/index.php/promoitals/article/view/19566/17435. Accessed on 20 November 2025.

Piccardo, E. (2014). From communicative to action-oriented: A research pathway. *Curriculum Services Canada*, 19. https://www.researchgate.net/publication/338177979_Piccardo_E2014From_Communicative_to_Action-oriented_a_Research_Pathways. Accessed on 10 December 2025.

Piccardo, E., North, B. (2019). The Action-oriented Approach: A Dynamic Vision of Language Education. Bristol:

Short Run Press Ltd.
Prodanovska-Poposka, V. (2017). A Study of Proper Pronunciation as a Factor of Successful Communication. In *CBU International Conference Proceedings* (Vol. 5, pp. 778-783). https://doi.org/10.12955/cbup.v5.1024. Accessed on 30 November 2025.
Průcha, J., Walterová, E., Mareš, J. (2009). Pedagogický slovník (6th updated ed.). Praha: Portál.
Puchta, H. (2021). *Herbert Puchta's 101 Tips for Teaching Teenagers*. Cambridge: Cambridge University Press.
Roach, P. (2009). *English Phonetics and Phonology: A Practical Course* (4th ed.). Cambridge: Cambridge University Press.
Savignon, S. J. (2005). Communicative language teaching: Strategies and goals. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning* (pp. 635-651). Mahwah: Lawrence Erlbaum.
Scrivener, J. (2005). *Learning Teaching: A guidebook for English language teachers* (2nd ed.). London: Macmillan.
Ur, P. (2000). *A Course in Language Teaching: Practice and Theory*. Cambridge: Cambridge University Press.
Walker, R., Low, E.-L., Setter, J. (2021). *English Pronunciation for a Global World*. Oxford: Oxford University Press.
Wigzell, R., Al-Ansari, S. (1993). The pedagogical needs of low achievers. *Canadian Modern Language Review*, *49*(2), 302-315. https://recycling-english.com/wp-content/uploads/2022/05/17-The-Pedagogical-Needs-of-Low-Achievers.pdf. Accessed on 13 November 2025.
Williams, M., Burden, R. L. (1997). *Psychology for Language Teachers: A social constructivist approach*. Cambridge: Cambridge University Press.
Williams, M., Mercer, S., Ryan, S. (2015). *Exploring Psychology in Language Learning and Teaching*. Oxford: Oxford University Press.
Yazan, B. (2015). Intelligibility, *ELT Journal*, *69*(2), 202-204. https://academic.oup.com/eltj/article-abstract/69/2/202/408492?redirectedFrom=PDF. Accessed on 29 November 2025.
Zhang, H., Dai, Y., Wang, Y. (2020). Motivation and second foreign language proficiency: The mediating role of foreign language enjoyment. *Sustainability, 12*(4), 1-13. https://doi.org/10.3390/su12041302

Harnessing dramatic videos to enhance English language performance among learners with ADHD: a case study of Landmark College, Ikorodu, Lagos state, Nigeria

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Abstract
This study examined the effectiveness of harnessing dramatic videos to enhance English language performance among learners with Attention-Deficit/Hyperactivity Disorder (ADHD) at Landmark College, Ikorodu, Lagos State, Nigeria. A quasi-experimental mixed-methods research design was adopted to allow for both quantitative measurement of academic performance and qualitative exploration of learners' engagement and perceptions. The population comprised all students formally identified with ADHD at Landmark College, from which 90 students were purposively selected based on prior clinical identification, consistent school attendance, and active enrollment in English language classes. This sample size was considered adequate to ensure statistical reliability, represent varied ADHD presentations, and allow for meaningful comparison between pre and post-intervention outcomes. Data were collected using English Language Achievement Tests (ELAT) administered before and after the intervention, structured classroom observation checklists, and semi-structured interview guides. The intervention involved the systematic integration of curriculum-aligned dramatic videos into English language lessons over an eight-week period. Quantitative data were analyzed using descriptive statistics (mean and standard deviation) and inferential statistics (paired-sample t-test), while qualitative data were analyzed thematically to complement the quantitative findings. The results revealed a significant improvement in students' English language performance, particularly in listening comprehension, vocabulary acquisition, and speaking skills, following exposure to dramatic video-based instruction. Classroom observations and interview responses further indicated increased learner attention, motivation, and sustained engagement during lessons. The study concludes that dramatic videos constitute an effective instructional strategy for supporting English language learning among students with ADHD. The study recommends the integration of dramatic video-based instruction into the English language curriculum, targeted teacher training on multimedia-assisted pedagogy, and the development of inclusive instructional policies that address the learning needs of students with attention-related challenges.

Keywords: *dramatic videos, enhancement, ADHD, English language, performance, learners, Landmark College*

Introduction

English language plays a central role in Nigeria's educational system as the official language of instruction and communication across all levels of education. Proficiency in English is therefore essential for learners' academic success, social interaction, and future career prospects, (Olorunfemi et al., 2025). However, many learners face persistent challenges in acquiring English language skills, particularly those with Attention-Deficit/Hyperactivity Disorder (ADHD). ADHD is a neurodevelopmental condition characterized by inattention, impulsivity, and hyperactivity, which often interfere with learners' ability to concentrate, process information, and retain language input during classroom instruction. Traditional teaching methods commonly used in English language classrooms such as lecture-based instruction and textbook-centered learning often fail to sustain the attention of learners with ADHD. As a result, such learners frequently exhibit poor listening comprehension, limited vocabulary development, weak speaking skills, and reduced academic performance. In recent years, educational researchers have emphasized the need for inclusive and learner-centered instructional strategies that accommodate diverse learning needs.

One of such innovative approaches is the use of dramatic videos in language instruction. Dramatic videos combine visual imagery, dialogue, action, and contextualized language use, making learning more engaging and meaningful. For learners with ADHD, dramatic videos have the potential to sustain attention, reduce cognitive overload, and enhance comprehension through multimodal input. Despite growing global interest

in multimedia-assisted learning, empirical studies focusing on the use of dramatic videos for English language learning among students with ADHD in Nigerian secondary schools remain limited. This study therefore seeks to examine the effectiveness of dramatic videos in enhancing English language performance among learners with ADHD at Landmark College, Ikorodu, Lagos State.

Literature review

Concept and pedagogical value of dramatic videos in English language instruction

Dramatic videos refer to audio-visual instructional materials that present language through scripted or semi-scripted narratives, role-plays, dialogues, and story-based interactions. Unlike purely instructional or explanatory videos, dramatic videos intentionally incorporate plot, character development, emotional expression, and situational context to simulate authentic communicative environments. In language education, dramatic videos are widely recognized for their capacity to present English as it is naturally used in social and academic contexts, thereby supporting communicative competence rather than rote memorization of linguistic forms, (Olorunfemi & Bayaro, 2025).

Recent studies emphasize that dramatic videos function as context-rich input systems that integrate linguistic, paralinguistic, and non-verbal cues such as facial expressions, gestures, tone, and pragmatic intent. According to Polat and Erişti (2019), learners exposed to narrative and dramatized video content demonstrate higher comprehension levels because meaning is constructed through both visual and auditory channels rather than text alone. Similarly, Sydorenko and Daurio (2020) argue that video-based narratives enhance learners' ability to interpret meaning beyond lexical items, promoting discourse-level understanding and pragmatic awareness. In English language classrooms, dramatic videos have increasingly been adopted to address learner diversity, particularly for students who struggle with attention, motivation, and sustained cognitive engagement. This makes dramatic videos especially relevant for learners with Attention-Deficit/Hyperactivity Disorder, whose learning profiles often demand instructional approaches that are stimulating, structured, and multimodal.

Dramatic videos as multimodal and inclusive learning tools

The effectiveness of dramatic videos in language learning is rooted in their multimodal nature, which combines spoken language, moving images, sound effects, and contextual visuals. Multimodal learning has gained prominence in recent educational research due to its alignment with how the brain processes information. Kress (2021) explains that meaning-making in modern learning environments extends beyond written text to include visual, auditory, and gestural modes, all of which are activated during video-based instruction.

Empirical evidence suggests that multimodal input supports deeper comprehension and retention, particularly among learners with attentional difficulties. Ouyang (2024) found that students exposed to multimodal video instruction demonstrated significantly higher listening comprehension and vocabulary retention than those taught using text-based methods. The study further noted that visual cues reduced cognitive effort by helping learners infer meaning without excessive reliance on working memory. For learners with ADHD, dramatic videos serve as inclusive instructional tools by sustaining attention and minimizing off-task behavior. DuPaul and Stoner (2020) emphasize that instructional materials which are visually engaging and emotionally stimulating help learners with ADHD regulate attention more effectively. Dramatic videos, through storytelling and character interaction, naturally sustain interest and reduce the monotony often associated with conventional classroom instruction.

Features of dramatic videos that enhance English language performance

Authentic language exposure

One of the most significant strengths of dramatic videos is their ability to provide authentic language input. Authenticity in language learning refers to exposure to real-world language use, including natural pronunciation, idiomatic expressions, conversational rhythms, and pragmatic conventions, (Olorunfemi &

Bayaro, 2025). According to Gilmore (2019), learners who are regularly exposed to authentic audio-visual materials develop better listening skills and pragmatic competence than those relying solely on scripted textbook dialogues. Dramatic videos simulate real communication by presenting English within meaningful social interactions. This exposure enables learners to observe how language functions in different contexts such as greetings, requests, disagreements, and storytelling thus supporting communicative competence. Herron et al. (2021) report that students taught with dramatized video content show improved oral fluency and comprehension due to repeated exposure to natural speech patterns.

Visual-auditory reinforcement and dual processing

Dramatic videos enhance learning through visual–auditory reinforcement, allowing learners to process information through multiple sensory channels. This dual input strengthens memory formation and recall. Clark and Paivio's Dual-Coding Theory, reinforced by recent empirical validations, suggests that information encoded both visually and verbally has a higher likelihood of being retained and retrieved. Recent studies confirm that video-based language instruction significantly improves vocabulary acquisition because learners associate new words with images, actions, and contexts. Montero Perez et al. (2013) found that learners exposed to subtitled dramatic videos demonstrated superior vocabulary gains compared to learners exposed to audio-only input. The findings thus stress the importance of visual reinforcement in supporting lexical development.

Motivation, emotional engagement, and sustained attention

Motivation plays a crucial role in second language acquisition, particularly for learners with learning or attention difficulties. Dramatic videos naturally evoke emotional responses such as curiosity, empathy, and suspense, which increase learner motivation. Dörnyei and Ryan (2020) emphasize that emotionally engaging content significantly enhances learner persistence and willingness to communicate in a second language. Narrative-based videos have been shown to sustain attention longer than static instructional materials. Ouyang (2024) reports that students exposed to story-based video instruction exhibited longer attention spans and higher task completion rates than those taught through traditional methods. For learners with ADHD, these motivational effects are particularly beneficial, as sustained attention is a core challenge in their learning process.

Support for speaking and pronunciation skills

Dramatic videos also support speaking development by providing learners with pronunciation models, intonation patterns, and conversational structures. Learners imitate speech patterns observed in videos, which helps improve fluency and accuracy. Lee and Liang (2021) found that repeated exposure to dramatized dialogues significantly improved learners' pronunciation accuracy and speaking confidence. Ismaili (2020) demonstrated that secondary school students taught with video-assisted instruction outperformed their peers in listening and vocabulary tests. Similarly, Kayaoglu et al. (2022) found that students exposed to narrative videos showed significant improvement in speaking fluency and comprehension

Although most studies focus on general learner populations, emerging research highlights the relevance of video-based instruction for learners with ADHD. Schmidt and Vandewater (2021) argue that multimedia instruction aligns with neurodiverse learning needs by reducing attentional fatigue and enhancing engagement. However, researchers caution that the effectiveness of dramatic videos depends on instructional design. Videos that are too long or overloaded with irrelevant details may increase cognitive load. Mayer (2021) stresses the importance of segmentation, coherence, and signaling principles when designing educational videos to maximize learning outcomes.

Theoretical framework

The primary theoretical framework guiding this study is Mayer's Cognitive Theory of Multimedia Learning (CTML), 2021. CTML posits that learners learn more effectively from words and pictures than from words

alone, provided that instructional materials are designed in line with cognitive principles. According to Mayer (2021), learning occurs through two separate channels: visual and auditory, each with limited capacity and meaningful learning requires active cognitive processing. In the context of dramatic videos, CTML explains how learners with ADHD benefit from multimodal input that distributes cognitive load across channels, thereby reducing overload and sustaining attention. Dramatic videos align with CTML principles by combining spoken dialogue with visual action, enabling deeper comprehension and retention of English language content. In addition, Dual-Coding Theory complements CTML by explaining how verbal and non-verbal representations work together to enhance memory. Dramatic videos activate both representational systems simultaneously, creating multiple retrieval paths for language input, (Kanellopoulou et al., 2019). This is particularly relevant for vocabulary acquisition and listening comprehension, which are central components of English language performance. This study is also based on the Multiliteracy and Inclusive Learning Theory which emphasizes the need for learners to interpret and produce meaning across multiple modes, including visual, linguistic, and cultural forms. Mayer (2021) argues that modern language education must integrate multimedia to reflect real-world communication practices. Dramatic videos support multiliteracy development by exposing learners to authentic language use, cultural norms, and pragmatic meanings embedded in narratives.

Statement of the problem

Learners with Attention-Deficit/Hyperactivity Disorder often struggle to achieve satisfactory performance in English language due to difficulties with attention control, memory, and sustained engagement during lessons. At the junior secondary school level, where foundational language skills are developed, these challenges can have long-term consequences on learners' academic achievement. In many Nigerian schools, English language instruction largely relies on conventional teaching methods that do not adequately address the cognitive and attentional needs of students with ADHD, (Olorunfemi et al., 2025).

As a result, students with ADHD frequently demonstrate low participation in class activities, poor comprehension of spoken and written texts, limited vocabulary acquisition, and weak oral expression. These difficulties contribute to declining academic performance and reduced self-confidence. Although dramatic videos have been identified as an engaging instructional tool capable of enhancing attention and comprehension, their effectiveness in improving English language performance among learners with ADHD in the Nigerian context has not been sufficiently investigated. This gap in research necessitates a systematic study to determine whether the integration of dramatic videos can serve as an effective instructional strategy for improving English language outcomes among junior secondary school students with ADHD.

Scope of the study

This study is limited to Junior Secondary School (JSS) students at Landmark College, Ikorodu, Lagos State. Specifically, the study focuses on JSS students who have been identified with Attention-Deficit/Hyperactivity Disorder. The content scope of the study covers selected English language skills, including listening comprehension, vocabulary development, speaking skills, and general classroom engagement. The instructional strategy examined is the use of dramatic videos integrated into English language lessons. The study does not cover senior secondary school students or other learning disorders beyond ADHD.

Research objectives

The main objective of this study is to examine the effectiveness of dramatic videos in enhancing English language performance among learners with ADHD. The specific objectives are to:

1. determine the effect of dramatic videos on the English language performance of Junior Secondary School students with ADHD;
2. examine the influence of dramatic videos on the attention and classroom engagement of learners with ADHD during English language lessons;
3. investigate students' perceptions of the use of dramatic videos in learning English language.

Research questions

The study seeks to provide answers to the following research questions:

1. What effect does the use of dramatic videos have on the English language performance of Junior Secondary School students with ADHD?
2. How does the use of dramatic videos influence the attention and classroom engagement of learners with ADHD during English language lessons?
3. What are the perceptions of learners with ADHD regarding the use of dramatic videos in learning English language?

Research hypotheses

The following null hypotheses were formulated and tested at the 0.05 level of significance:

1. There is no significant difference in the English language performance of Junior Secondary School students with ADHD before and after exposure to dramatic videos.
2. There is no significant effect of dramatic videos on the attention and classroom engagement of learners with ADHD in English language lessons.
3. There is no significant relationship between the use of dramatic videos and students' attitudes toward learning English language.

Significance of the study

The findings of this study are expected to be beneficial to various stakeholders in the education sector. English language teachers will gain practical insights into the use of dramatic videos as an effective instructional strategy for supporting learners with ADHD. Students with ADHD will benefit from improved engagement, comprehension, and performance in English language learning. School administrators and curriculum planners may use the findings to promote inclusive teaching practices and integrate multimedia-based instruction into the curriculum. Educational policymakers may find the study useful in formulating policies that support the use of technology-enhanced and learner-centered approaches in inclusive classrooms. Finally, the study will contribute to the existing body of knowledge and serve as a reference for future researchers interested in multimedia learning, ADHD, and English language education.

Research design

This study adopted a quasi-experimental mixed-methods research design, combining quantitative and qualitative approaches. The quantitative component involved a pre-test and post-test design, while the qualitative component consisted of classroom observations and student interviews. The quasi-experimental design was adopted because random assignment of students to experimental and control groups was not feasible within the natural school setting of Landmark College. According to educational research standards, quasi-experimental designs are appropriate when researchers work with intact classes or pre-existing groups and still seek to determine the effect of an instructional intervention. This design enabled the researcher to examine changes in English language performance attributable to the use of dramatic videos while maintaining the normal classroom structure. The mixed-methods approach was chosen to provide a more comprehensive understanding of the phenomenon under study. While quantitative data measured changes in students' English language performance, qualitative data provided deeper insights into learners' attention, engagement, and perceptions of dramatic video-based instruction. The integration of both methods enhanced the validity and depth of the findings.

Population of the study

The population of the study comprised all Junior Secondary School (JSS) students diagnosed with Attention-Deficit/Hyperactivity Disorder (ADHD) at Landmark College, Ikorodu, Lagos State, Nigeria. Landmark College was selected because it practices inclusive education and has a documented population of

learners with attention-related learning challenges, making it a suitable context for investigating instructional strategies targeted at learners with ADHD.

Sample size and sampling technique

The sample consisted of 90 Junior Secondary School students with ADHD, drawn from JSS 1 to JSS 3. A purposive sampling technique was used to select the participants. Purposive sampling was adopted because the study focused specifically on learners with ADHD, a distinct subgroup within the student population. Participants were selected based on the following criteria:

1. formal identification or school-based documentation indicating ADHD;
2. regular attendance in English language classes;
3. willingness to participate in the study.

The choice of 90 participants was considered appropriate for achieving statistical reliability while allowing for meaningful pre-test and post-test comparison. In addition, the sample size was large enough to reflect variability in learners' attention levels and language abilities, thereby improving the generalizability of the findings within the school context.

Research instruments

Three major instruments were used for data collection:

i. English Language Achievement Test (ELAT)

The English Language Achievement Test (ELAT) was designed by the researcher to assess students' performance in listening comprehension, vocabulary, speaking, and basic grammar usage. The ELAT was administered as both a pre-test and a post-test. The ELAT was adopted because it provided a standardized means of measuring students' English language performance before and after exposure to dramatic video-based instruction, thereby enabling objective comparison of learning outcomes.

ii. Classroom Observation Checklist

A structured classroom observation checklist was used to record students' attention span, participation, responsiveness, and on-task behavior during English language lessons. This instrument was adopted to capture behavioral and engagement-related data that could not be adequately measured through achievement tests alone. Observational data were particularly important given the focus on learners with ADHD, whose attentional behaviors are central to the study.

iii. Semi-Structured Interview Guide

A semi-structured interview guide was used to collect qualitative data from selected students and English language teachers. The interviews focused on learners' experiences, motivation, and perceptions of using dramatic videos in English lessons. This instrument was chosen to allow participants to express their views freely while still ensuring that responses addressed the research objectives.

Validity and reliability of instruments

To ensure content and face validity, the research instruments were reviewed by experts in English language education and educational psychology of Usmanu Danfodiyo University Sokoto. Their feedback was used to refine test items and observation indicators. The reliability of the ELAT was established using the test–retest method, yielding a reliability coefficient of 0.82 considered adequate for educational research. The observation checklist was pilot-tested to ensure consistency in recording students' behaviors.

Procedure for data collection

The study was conducted in three main phases:

i. Pre-intervention phase: The ELAT was administered to participants to determine their baseline English language performance. ii. Intervention phase: Dramatic videos aligned with the English language curriculum were integrated into lessons over an eight-week period. Lessons involved video viewing, guided discussions, role-play activities, and follow-up exercises. iii. Post-

intervention phase: The ELAT was re-administered to measure changes in students' English language performance. Classroom observations and interviews were also conducted during and after the intervention.

The structured procedure ensured consistency in instructional delivery and data collection across all participating classes.

Method of data analysis

Quantitative data obtained from the ELAT were analyzed using descriptive statistics (mean and standard deviation) to summarize students' performance and inferential statistics (paired-sample t-test) to determine whether observed differences between pre-test and post-test scores were statistically significant. Qualitative data from observations and interviews were analyzed using thematic analysis, involving coding, categorization, and interpretation of emerging patterns related to attention, engagement, and learning experiences. The combination of statistical and thematic analysis allowed for triangulation of findings, thereby strengthening the credibility of the study.

Results

Answering research questions

In order to answer the research questions, the difference in the mean scores of pre-test and post-test of English language performance would be used. If there is a significance difference in the performance of the test type, it shows that dramatic videos have positive effect on learners with ADHD and that would answer the research question.

Research question one

What effect does the use of dramatic videos have on the English language performance of Junior Secondary School students with ADHD?

Table 1: Pre-test and post-test English language performance of students (N = 90)

Test type	mean score	standard deviation	mean difference
Pre-test	42.36	8.41	
			23.42
Post-test	65.78	7.92	

(Source: Field Survey, 2025)

Table 1 shows a noticeable improvement in students' English language performance after exposure to dramatic video-based instruction. The mean score increased from 42.36 in the pre-test to 65.78 in the post-test, indicating that dramatic videos positively influenced learners' English language achievement.

Research question two

How does the use of dramatic videos influence the attention and classroom engagement of learners with ADHD during English language lessons?

Table 2: Classroom observation scores on attention and engagement

Engagement indicator	mean score (before)	mean score (after)	improvement
Sustained attention	2.10	3.58	+1.75
Active participation	2.35	4.02	+1.62
Responsiveness to tasks	2.48	4.10	+1.62
On-task behavior	2.22	3.98	+1.76

(Source: Field Survey, 2025) (Scale: 1 = Very Low, 5 = Very High)

The results indicate marked improvement in all engagement indicators after the introduction of dramatic videos. Sustained attention and on-task behavior showed the highest gains, suggesting that dramatic videos helped learners remain focused during lessons.

Research question three

What are the perceptions of learners with ADHD regarding the use of dramatic videos in learning English language?

Table 3: Students' perceptions of dramatic video-based instruction

Statement	Agree (%)	Disagree (%)
Dramatic videos make English lessons interesting	88.9	11.1
Videos help me understand English better	85.6	14.4
I concentrate more when videos are used	90.0	10.0
I prefer video-supported lessons to normal lessons	83.3	16.7

(Source: Field Survey, 2025)

A large majority of the students expressed positive perceptions toward the use of dramatic videos. 90% reported improved concentration, 88.9% acknowledged that dramatic videos make lessons interesting, 83.3% preferred video-supported lessons to normal lessons while 85.6% agreed that dramtic videos help them to understand English better; indicating strong acceptance of video-based instruction among learners with ADHD.

Testing of research hypotheses

Hypothesis one

There is no significant difference in the English language performance of students with ADHD before and after exposure to dramatic videos.

Table 4: Paired sample t-test of pre-test and post-test scores

Test	Mean	SD	T-Val	Diff	Sig. (p)	Decision
Pre-test	42.36	8.41				
			18.62	89	0.000	Rejected
Post-test	65.78	7.92				

(Source: Field Survey, 2025), Level of significance = 0.05

There is a statistically significant improvement in English language performance after the use of dramatic videos with a mean difference of 23.42. Since the p-value (0.000) is less than the 0.05 level of significance, the null hypothesis which states that there is no significant difference in the English language performance of students with ADHD before and after exposure to dramatic videos is thereby rejected.

Hypothesis two

There is no significant effect of dramatic videos on learners' attention and classroom engagement.

Table 5: T-test analysis of attention and engagement scores

Variable	Mean difference	T-Val	Sig. (p)	Decision
Attention & engagement	1.7	15.48	0.00	Rejected

(Source: Field Survey, 2025), Level of significance = 0.05

Dramatic videos had a significant positive effect on learners' attention and engagement during English

language lessons.

Hypothesis three

There is no significant relationship between the use of dramatic videos and students' attitudes toward learning English language.

Table 6: Correlation between use of dramatic videos and students' attitude

Variable	r-value	Sig.(p)	Decision
Dramatic videos & attitude	0.76	0.000	Rejected

(Source: Field Survey, 2025), Level of significance = 0.05

There is a strong positive relationship between the use of dramatic videos and students' attitudes toward learning English language with a p-value of 0.000. The null hypothesis is rejected.

Summary of findings

Dramatic videos significantly improved English language performance among Junior Secondary School students with ADHD. Learners demonstrated increased attention, participation, and on-task behavior during video-supported lessons. Students expressed positive attitudes toward the use of dramatic videos, preferring it to traditional teaching methods.

Discussion of findings

Effect of dramatic videos on English language performance of learners with ADHD

The findings of the study revealed a statistically significant improvement in the English language performance of Junior Secondary School students with ADHD after exposure to dramatic video-based instruction. The post-test mean score was considerably higher than the pre-test mean score, indicating that dramatic videos enhanced learners' comprehension, vocabulary acquisition, and overall language proficiency. This improvement can be attributed to the multimodal nature of dramatic videos, which combine visual, auditory, and contextual cues. Learners with ADHD often struggle with abstract explanations and prolonged verbal instruction; dramatic videos present language concepts within meaningful, real-life contexts that promote understanding and retention. This finding aligns with the Cognitive Theory of Multimedia Learning, which posits that learners understand better when information is presented through both verbal and visual channels (Mayer, 2021).

The result corroborates the findings of Ouyang (2024) who reported that video-based storytelling significantly improved language achievement among learners with attention difficulties. Similarly, Kucker, et al. (2025) found that dramatized video content enhanced ESL learners' grammar and vocabulary performance by providing authentic linguistic input. Akinbadewa (2020) observed that multimedia-assisted instruction improved Biology outcomes among secondary school students more effectively than conventional teaching methods. Therefore, the significant improvement in students' performance in this study confirms that dramatic videos are an effective instructional strategy for learners with ADHD, particularly in language learning environments that require sustained attention and comprehension.

Influence of dramatic videos on attention span and classroom engagement

Another key finding of the study was the significant positive effect of dramatic videos on learners' attention span and classroom engagement. Observation data indicated marked improvements in sustained attention, active participation, responsiveness to tasks, and on-task behavior during English language lessons supported with dramatic videos, (Boboye & Sofowora, 2014). This finding is particularly important given that inattention and impulsivity are core characteristics of ADHD. Dramatic videos, by nature, are engaging and emotionally stimulating, which helps capture learners' interest and reduce off-task behavior. The narrative structure, facial expressions, gestures, and dialogue in dramatic videos help learners focus on the lesson

content for longer periods. This result supports Bandura's Social Learning Theory, which emphasizes learning through observation and modeling. Learners with ADHD were able to observe characters using language in context, imitate expressions, and internalize language patterns, thereby increasing engagement (Bandura, 2021). It also aligns with Universal Design for Learning (UDL) principles, which advocate for multiple means of representation and engagement to accommodate diverse learners (CAST, 2022).

Empirically, the finding is consistent with Barkley et al. (2020), who reported that audiovisual instructional materials significantly improved attention control among students with ADHD. Sung et al. (2021) also found that video-enhanced lessons increased learners' engagement and reduced classroom distractions. Ojo and Alabi (2024) demonstrated that dramatized instructional videos improved attention and task persistence among Nigerian secondary school students with learning difficulties. Thus, the findings of this study reinforce the view that dramatic videos serve not only as instructional tools but also as behavioral supports for learners with ADHD.

Learners' perceptions and attitudes toward dramatic video-based instruction

The study further revealed that learners with ADHD held positive perceptions toward the use of dramatic videos in learning English language. A majority of the students agreed that dramatic videos made lessons interesting, enhanced understanding, improved concentration, and were preferable to traditional teaching methods. Positive learner perception is a crucial determinant of academic success, particularly for learners with ADHD who often experience frustration and low motivation in conventional classrooms. The engaging and relatable nature of dramatic videos appears to reduce learning anxiety and increase intrinsic motivation. This finding is consistent with Self-Determination Theory, which emphasizes autonomy, competence, and relatedness as key drivers of motivation (Ryan & Deci, 2020). Dramatic videos allow learners to feel competent by understanding lessons more easily and connected by relating to characters and real-life scenarios. Previous studies corroborate this outcome. Dagnino et al. (2021) found that learners exposed to video drama in language classes reported higher motivation and positive attitudes toward learning. Kacetl and Klímová (2023) also observed that students preferred video-supported language instruction due to its clarity, realism, and entertainment value. Boboye and Sofowora (2014) reported that Nigerian students showed greater enthusiasm and confidence when English lessons were delivered using dramatized media.

Conclusion

Based on the findings of the study, it can be concluded that dramatic videos constitute an effective and inclusive instructional tool for enhancing English language learning among students with ADHD. The integration of dramatized audiovisual content into English language lessons provided learners with meaningful linguistic contexts that facilitated comprehension, sustained attention, and active participation. The significant improvement observed in students' academic performance underscores the pedagogical value of dramatic videos in addressing the cognitive and behavioral challenges commonly associated with ADHD. Furthermore, the positive attitudes expressed by learners suggest that dramatic videos not only support academic achievement but also promote motivation and reduce learning-related anxiety. Consequently, dramatic video-based instruction represents a viable alternative to conventional teaching approaches and holds considerable potential for improving learning outcomes in inclusive English language classrooms.

Recommendations

In light of the findings and conclusions of this study, the following recommendations are proposed:

1. Educational authorities should incorporate dramatic video-based instruction into the English language curriculum, particularly at the Junior Secondary School level, to support inclusive learning for students with ADHD.
2. Regular professional development programs should be organized to equip English language teachers with the skills needed to effectively select, design, and utilize dramatic videos as instructional tools

and teachers should complement dramatic videos with interactive teaching strategies such as guided discussions, role-play, and storytelling to reinforce language learning and sustain learners' attention.

3. School administrators should ensure the availability of adequate audiovisual facilities, including projectors, screens, and sound systems, to facilitate the effective implementation of video-based instruction and policymakers should promote the use of multimedia instructional strategies as part of inclusive education policies aimed at improving learning outcomes for students with special educational needs.

References

Akinbadewa, B. O. (2020). The effect of multimedia instructional packages on students' academic achievement in Biology. *International Online Journal of Education and Teaching (IOJET), 7*(4), 1266-1281. http://iojet.org/index.php/IOJET/article/view/880

Bandura, A. (2021). *Social learning theory* (Reprint ed.). Routledge.

Barkley, R. A., Murphy, K. R., Fischer, M. (2020). *ADHD in adults: What the science says* (2nd ed.). Guilford Press.

Boboye, F.T., Sofowora, O.A. (2014). Multi-Media Instructional Package as a Motivating and Innovative Tool foAr Improving the Teaching and Learning of Yoruba Language and Culture among Osun State Junior Secondary School Students. Academic Journal of Interdisciplinary Studies MCSER Publishing, Rome-Italy. Doi:10.5901/ajis.2014.v3n4p179

CAST. (2022). Universal Design for Learning guidelines version 3.0. https://udlguidelines.cast.org

Clark, J., Paivio, A. (1991). Dual Coding Theory and Education. Educational Psychology Review 3(3), 149-210, DOI: 10.1007/BF01320076

Dagnino, F. M., Dimitriadis, Y., Asensio-Pérez, J. I., Hernández-Leo, D. (2021). The role of video-based learning in fostering student engagement and motivation. *Educational Technology Research and Development, 69*(2), 1015-1037. https://doi.org/10.1007/s11423-020-09857-2

Dörnyei, Z., Ryan, S. (2020). *The psychology of the language learner revisited*. Routledge. https://doi.org/10.4324/9780429455666

DuPaul, G. J., Stoner, G. (2020). *ADHD in the schools: Assessment and intervention strategies* (3rd ed.). Guilford Press.

Gilmore, A. (2019). Materials and authenticity in language teaching. In S. Walsh & S. Mann (eds.) *Routledge Handbook of English Language Teacher Education* (pp. 299-318). Abingdon, Oxon: Routledge.

Herron, C., Dubreil, S., Corrie, C., Cole, S. P. (2021). A classroom investigation: Can video improve intermediate-level French language students' listening comprehension? *Modern Language Journal, 105*(1), 187-204. https://doi.org/10.1111/modl.12695

Ismaili, M. (2020). The effectiveness of using videos in the EFL classroom. *Procedia – Social and Behavioral Sciences, 232*, 456-463. https://doi.org/10.1016/j.sbspro.2020.05.021

Kacetl, J., Klímová, B. (2023). Use of video materials in foreign language teaching: A systematic review. *Education and Information Technologies, 28*, 3567-3589. https://doi.org/10.1007/s10639-022-11318-5

Kanellopoulou, C., Kermanidis, K.L., Giannakoulopoulos, A. (2019) The Dual-Coding and Multimedia Learning Theories: Film Subtitles as a Vocabulary Teaching Tool. *Education Sciences*, *9*, Article 210. https://doi.org/10.3390/educsci9030210

Kayaoglu, M. N., Dag Akbas, R., Ozturk, Z. (2022). Effects of video-based instruction on EFL learners' speaking performance. *Journal of Language and Linguistic Studies, 18*(1), 295-312. https://doi.org/10.52462/jlls.184

Kress, G. (2021). *Multimodality: A social semiotic approach to contemporary communication* (2nd ed.). Routledge. https://doi.org/10.4324/9781003095718

Kucker, S.C., Barr, R.F., Perry, L.K. (2025). Videos and Vocabulary: How Digital Media Use Impacts the Types of Words Children Know. https://pmc.ncbi.nlm.nih.gov/articles/PMC12602769/. doi: 10.1111/desc.70091.

Lee, J., Liang, H. Y. (2021). Using video-based instruction to improve EFL learners' pronunciation and speaking confidence. *Computer Assisted Language Learning, 34*(7), 1025-1048. https://doi.org/10.1080/09588221.2019.1704788

Mayer, R. E. (2021). *Multimedia learning* (3rd ed.). Cambridge University Press. https://doi.org/10.1017/9781316941355

Montero Perez, M., Van Den Noortgate, W., Desmet, P. (2013). Captioned video for L2 listening and vocabulary learning: a meta-analysis. *SYSTEM*, *41*(3), 720-739. https://doi.org/10.1016/j.system.2013.07.013

Ojo, O. A., Alabi, T. O. (2024). Video-driven instruction and attention regulation among learners with learning difficulties in Nigerian secondary schools. *Journal of Special Education and Rehabilitation, 25*(1), 66-81.

Olorunfemi, P.A., Bayaro, M. (2025). Mitigating Academic Decline in English Language Skills through Aspectual Diversification and Curriculum-Practice Convergence: A Multi-Theoretical Perspective Based on PTAPD, ADLL, and CPCT, *Iconic Research and Engineering Journals, 9*(6), 1952-1963. https://doi.org/10.64388/IREV9I6-1713032

Olorunfemi, P. A., Onu, U. E., Akinloye, M. A. (2025). Determinants of the Decline in English Language Examination Performance among High-Achieving Students: A Case Study of Landmark College, Lagos. SIAR-*Global Journal of Literatures & Educational Review, 1*(1). https://doi.org/10.5281/zenodo.17616786

Ouyang, C. F. (2024). Video-Based Instruction: Effects on EFL Learners' Spoken Learning. *Creative Education, 15*, 2609-2618. https://doi.org/10.4236/ce.2024.1512159

Polat, M., Erişti, B. (2019). The effects of authentic video materials on foreign language listening skill development and listening anxiety at different levels of English proficiency. *International Journal of Contemporary Educational Research, 6*(1), 135-154. https://doi.org/10.33200/ijcer.567863

Ryan, R. M., Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective. *International Journal of Contemporary Educational Research, 6*(1), 135-154. https://doi.org/10.33200/ijcer.567863

Schmidt, M. E., Vandewater, E. A. (2021). Media use and attention difficulties in children and adolescents. *Pediatrics, 148*(3), e2021051476. https://doi.org/10.1542/peds.2021-051476

Sung, Y. T., Chang, K. E., Liu, T. C. (2021). The effects of integrating multimedia learning materials on students' learning outcomes and engagement. Computers & Education, 163, 104096. https://doi.org/10.1016/j.compedu.2020.104096

Sydorenko, T., Daurio, P. (2020). Using video to develop pragmatic competence in the L2 classroom. *Language Learning & Technology, 24*(1), 1-24. https://doi.org/10125/44706

English for University: a selection of exercises for intermediate students – a book review

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English for University: a selection of exercises for intermediate students is directed to Polish adult learners of English as a foreign language (EFL) who attend English courses at the intermediate level (B1/B2). Andrzej Fretschel-Hojarski, the author of the publication, is an experienced FL teacher working in the Institute of English Studies at the Jagiellonian University in Kraków, Poland. As the author states in the Forward section, the book ''offers short grammatical explanations as well as activities … intended as an ancillary resource for students and teachers studying or working externally" (Fretschel-Hojarski, 2022: 7). Taking into account the popularity of external forms of learning in Polish tertiary education and the limited number of classes devoted to teaching foreign languages, the textbook is a welcome contribution to the poor selection of teaching materials addressed to this group of learners available on the Polish book market. In relation to the ERL framework, the book addresses the topics discussed in the *Language and Schooling* strand. Additionally, this article aims to enhance our understanding of the active dimension of linguistic education, and more specifically various factors that implicitly and explicitly influence grammar instruction.

The structure of the book is very clear. The book consists of 22 chapters, each focusing on a different grammatical item. The following are discussed: Present Simple vs. Present Continuous, Future Forms, Present Perfect and Past Simple, Asking Questions, *For*, *Since*, Comparatives and Superlatives, Articles, Modals, Past Perfect, Passive Voice, Modals of Deduction, Reflexive Pronouns, First Conditional, Time Clauses, Second Conditional, Indirect and Direct Speech, Gerunds, Infinitives, Third Conditional, Quantifiers, Relative Pronouns. The last chapter offers review exercises covering all the grammar structures discussed in the previous sections.

Each chapter begins with a short presentation divided into *What*, *How* and *Why* sections. The *What* section names the grammar in focus, the *How* part is devoted to the form, i.e. morphology of the grammar item and the *Why* component discusses the rule of use, i.e. provides the most crucial information concerning how the grammar item functions in a wider communicative context. To make the material more motivating, each presentation section is accompanied by a quotation; e.g. the chapter devoted to modals of deduction starts with Hercule Poirot's words: "The impossible could not have happened, therefore the impossible must be possible in spite of appearances." Explanations are supported by sentences, time lines, tables and graphs, which act as clear illustrations of rules regarding the form and use of the grammar item in focus. Each explanation section is followed by a set of practice activities, logically sequenced from accuracy-oriented drills to more open-ended fluency activities.

To obtain a more insightful picture of the book, I suggest exploring the approach to teaching grammar adopted by the textbook. Thornbury, a well-respected teacher and teacher educator, claims that "[t]he role of grammar in the curriculum is hotly debated. How it should be taught is equally contentious" (2019: 8). In fact, the status of grammar in a FL syllabus has changed over the last decades along with the understanding of what grammar teaching should involve. Thornbury (2019) distinguishes two approaches to grammar teaching – the *scholastic approach* and the *natural approach*, which can act as extremes on the continuum of various perspectives on grammar instruction. The *scholastic approach* has the following characteristics:

- It is **academic** as it adheres to how classical languages, such as Latin and Greek, were taught. It favours a traditional structure of instruction, starting from explanation of rules conducted in learners' L1 and followed by practice which involved translation out of and into the target language[25].

[25] These principles are implemented in the Grammar Translation Method, popular in the 40s and 50s of the 20th c.

- It applies **explicit instruction**[26], which entails direct explanation of grammar rules with the use of terminology and encouraging learners to develop metalinguistic awareness of the rules.
- It is **bilingual** - both presentation and practice require the teacher to use students' L1.
- It promotes **rule-learning**[27] , which means advocating to the principles of a deductive approach. Teaching starts with the presentation of a rule and is followed by examples in which the rule is applied.
- It focuses on **written language**. Language in examples and practice activities reflects the grammar of written language.
- It focuses on **accuracy**. Teachers expect learners to produce error-free sentences; correctness is reinforced through drills and students' errors are corrected.

The other extreme, the *natural approach*, carries the following features:

- Grammar instruction is **experiential**; learners experience grammar by participating in meaningful communicative contexts.
- It promotes **implicit learning**[28]**.** It requires the teacher to provide students with practice opportunities so that learners can develop the feel of the grammar without engaging conscious attention to the grammar items. In practical terms, this can involve "dealing with grammar items as they arise in the course of communicative activities" (Thornbury 2002: 23).
- It is **monolingual**; only the target language is used in grammar teaching and translation is rejected.
- It encourages **rule-discovery.** At the stage of presentation, the teacher adopts the principles of inductive teaching, which involves starting with some examples and guiding students to discover the rule.
- It focuses on **spoken language**. Communicative activities reflect real life situations and enhance learners' interaction skills. With the advent of language corpora, both teachers and learners gain access to examples of authentic spoken language, which can function as models in practicing communicative skills.
- It focuses on **fluency**. The main aim of instruction is to practice communication by means of communicating. Teacher feedback concentrates on learners' abilities to understand and pass messages. It may happen that learners become more fluent at the expense of accuracy.

Thornbury (2019) notes that nowadays the two perspectives can be blended, depending on a number of factors such as the age of learners, the intensity of instruction and the aims of the course. Which type of approach is adopted in *English for University*? Below a checklist to evaluate the publication is presented.

Table 1: Checklist to identify the approach to teaching grammar adopted by *English for University*.

Features of instruction	**Yes / no (the presence or absence of the feature)**
academic	yes/no
explicit instruction	yes
bilingual	yes
rule-learning	yes
written language	yes
accuracy	yes
experiential learning	yes
implicit learning	no
monolingual	no

[26] Another term for *explicit instruction* is *overt grammar teaching*. The two terms are often used interchangeably.

[27] *Rule-learning*, *rule-driven instruction* and the *didactive approach* are the terms often used interchangeably.

[28] Another term for *implicit instruction* is *covert grammar teaching*.

rule-discovery	no
spoken language	yes
fluency	yes

The findings of the analysis indicate that the publication is an example of a synergy of the two philosophies of teaching grammar, with more features typical for the scholastic approach.

As regards the **academic criterion**, *English for University* adopted a traditional sequence, i.e. explanation followed by practice activities. However, unlike in the classical approach (and the Grammar Translation method) rules are explained in a foreign language (English) with certain words translated into students' native language (Polish). For example, in the chapter devoted to Past Perfect (p.34) two terms occur: ''past participle'' and "III forma czasownika", in the lesson concerning Passive Voice (p.38) "subject" and "podmiot" ; in the rule of use of Reflexive Pronouns (p. 44) "reciprocity" and "wzajemność". Translation is also a technique used in practice activities. In Activity 6 p. 24 the learner is asked to translate a text about Kornel Makuszyński from Polish into English, thereby practicing the use of Past Simple and Present Perfect. Whereas Activity 4 p. 70 requires the student to transform English sentences from active into passive voice, and then translate them into Polish, which can facilitate learners' understanding of the use of passive voice as well as differences between the role of passive voice in Polish and English [29].

The textbook applies the principles of **explicit instruction**, which involves direct explanation of grammar rules with the use of terms, some of which translated in Polish. An undeniable advantage of this systematic way of exposing students to short texts about the grammar of English is creating an opportunity that can enhance learners' metalinguistic awareness of the English language and the rules that govern it.

The textbook encourages **rule-learning** (i.e. deductive learning); explanation sections present rules along with examples that illustrate the rules. There are no attempts to stimulate students to infer rules on the basis of given samples of the language.

As for the focus on **written/spoken language**, it seems that although written language is the dominant mode in both presentation sections and practice activities, spoken language is not totally neglected. Learners are exposed to the written form of spoken language, e.g. samples of everyday talk. Additionally, in practice activities students are instructed to produce or complete short dialogues, getting involved, thereby, in everyday conversations and understanding the communicative functions of the grammar structures explained earlier.

The textbook caters for both **accuracy** and **fluency**. Drill-like activities require students to attend to the form, e.g. in traditional exercises learners complete sentences with the correct forms. Open activities engage learners in real life communication, encouraging their creativity.

The exercises promote **experiential learning**. Despite its visible focus on the academic manner of teaching grammar, *English for University* provides learners with plenty of opportunities to experience learning grammar. In the explanation sections, students analyze grammar structures, practicing the use of metalanguage, i.e. terms used to describe grammar structures and explain grammar rules. Practice activities offer a variety of exercises, e.g. drills (focus on accuracy of form), interactive tasks (pairwork or groupwork), personalization (students relate particular grammar items to their personal life), games, quizzes, translation. Learners are exposed to a number of authentic examples of the use of grammar, such as songs (the one by Adele), e-mails, postcards, newspaper headlines, limericks.

There are some other advantages of this publication which make it worth recommending. An undeniable merit is the fact that the textbook seems to be well-suited to adult learners. It capitalizes on certain features adults possess, such as their ability to deal with the abstractness of rules and longer attention span, which allows them "to focus on isolated linguistic features, as required when grammar structures are introduced"

[29] Translation "can be used as an invaluable tool" (Tabakowska 2013: 174). See Tabakowska (2013) for a more detailed discussion of the merits of this technique in language instruction.

(Pawlak 2015: 46). Since adult learners value corrective feedback and self-evaluation (Pawlak 2015), the book would seem more complete if it contained the answer key in reference to drill-like activities. The author may like to consider adding this useful component to the next edition of the publication. There is one more aspect of the book that I would like to point out – the use of terminology in explanation sections. There might be some terms that learners are not familiar with due to insufficient metalanguage. This should be taken into consideration when recommending the book to students as a self-study resource.

In summary, *English for University* is a fairly successful textbook, providing interesting material for traditional classes as well as self-study. Its greatest merit is presenting grammar not as an isolated aspect of foreign language competence or a list of complicated rules but as a useful ability integrated with other language skills, indispensable in real life meaningful communication. I hope it will be welcomed by both students and teachers, and will make their EFL lessons more enjoyable and effective.

References

Pawlak, M. (2015). Teaching foreign languages to adult learners: Issues, options, and opportunities. *Theoria et historia scientiarum*, *12*, 45-65.

Tabakowska, E. (2013). The Grammar Translation Method: WHAT grammar? WHY translation? In E. Mańczak-Wohlfeld & M. Jodłowiec (Eds.), *Exploring the microcosom and macrocosm of language teaching and learning* (pp. 169-179). Kraków: Jagiellonian University Press.

Thornbury, S. (2002). *How to teach grammar*. Cambridge: Cambridge University Press.

Thornbury, S. (2019). *101 grammar questions*. Cambridge: Cambridge University Press.

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ERL Journal – Scope Major

Key premise. **The educational role of language, reaching far beyond school(ing), is determined by multiple aspects relating to culture, methodology and/or personality**. To be suitably comprehensive, studies blending educational with linguistic studies need to comprise all these aspects.

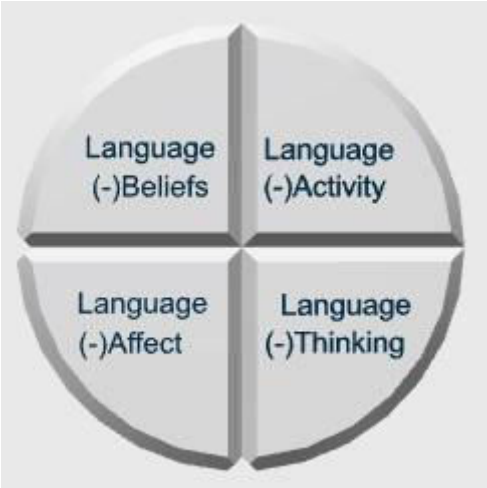
General rationale. Language lies at the heart of schooling, culture, (learning and teaching) methods, and personality – thus underlying education on the individual and on the social level. Its social existence determines its experiencing by an individual person and vice versa. Both these levels matter when it comes to learning and teaching methods as well as schooling as a whole. Socially determined and individually experienced, language shapes culture and education, and, from an individual perspective, it defines a person's place in the world and defines the world in which a person is placed.

Specific issues. Accordingly, ERL Journal welcomes papers addressing issues such as: language of schooling, bilingual education, language identity, intercultural competence, discourse analysis, children narratives, personal constructs, language in special education, transversal skills, language mediation, academic language, elicitation, plurilingual teaching, CLIL, functions of language, etc.

Expected outcome. Systematization of knowledge concerning the educational position of language; aggregation of empirical findings pertaining to social and cultural determinants of how language serves education; development of interdisciplinary educational and linguistic studies; recognition of problems calling for research and discussion of ways of putting language theories into practice.

ERL Journal – Scope Minor

Key premise. **A person's education is determined by how language operates on four levels – beliefs, activity, affect and thinking**. To be maximally educational, the experiencing of language by a person comprises these four dimensions, which implies a need for their comprehensive studies.



General rationale. How language affects a person's education depends on multiple axiological, psychomotor, affective, and cognitive factors. For instance, what a person thinks of language (e.g. on whether it is worth speaking or not) and how much a person speaks determines that person's mental faculties. Conversely, how a person understands a given issue (as well as how s/he feels about it) impacts on how interesting utterances s/he produces. Hence, there exist relationships between language and all the aforementioned educational domains.

Specific issues. Accordingly, ERL Journal welcomes papers concerning issues falling within one or more of the four domains, such as: status of language in school curricula, language of textbooks, language activity of children or grown-ups, stages of language fossilization, argumentative skills, language learning styles, verbalization of knowledge, approaches to oracy, personal experiencing of language skills, language image of the world, cognitive discourse functions, language reflectivity, etc.

Expected outcome. Collection of theoretical proposals and empirical data supporting learner-oriented educational practice; exploration of the relationship between language and four educational domains; detection of factors determining learners' language identity/personality; accumulation of data providing assistance in construction of language-grounded educational systems.