

## Massive Open Online Courses (MOOCs) in English as a Foreign Language Learning: A Systematic Review

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### Abstract

This study presents a systematic literature review on the integration of Massive Open Online Courses (MOOCs) into English as a Foreign Language (EFL) instruction, drawing on publications from 2022 to 2025. Guided by Duque et al.'s (2024) methodological framework, the review synthesizes empirical and theoretical insights from peer-reviewed studies retrieved from Google Scholar, Copernicus, and Scopus. Findings reveal that MOOCs, whether implemented independently or in conjunction with flipped instruction, Content and Language Integrated Learning (CLIL), or self-regulated learning (SRL) strategies, significantly enhance learners' reading comprehension, communicative competence, motivation, self-efficacy, and intercultural awareness. Moreover, discourse innovations such as engagement markers are shown to sustain learner agency in digital environments, while theoretical applications of Cognitive Load Theory (CLT) and Expectation Confirmation Theory (ECT) underscore the importance of managing cognitive demands and aligning learner expectations. Despite these promising outcomes, notable gaps remain, including the scarcity of longitudinal studies, limited participant diversity, and the absence of comprehensive instructional design models. The review concludes that MOOCs hold transformative potential for reshaping EFL pedagogy into more flexible, learner-centered, and globally relevant practices. However, their long-term efficacy will depend on sustained empirical inquiry, the integration of advanced technologies such as artificial intelligence, and the development of holistic frameworks that address cognitive, affective, and intercultural dimensions simultaneously.

### Keywords:

Massive Open Online Courses (MOOCs); English as a Foreign Language (EFL); Technology-Enhanced Language Learning; Learner Autonomy

## 1. Introduction

The rapid advancement of digital technologies has profoundly reshaped the global educational landscape, generating unprecedented opportunities for innovative teaching and learning across disciplines. Within this transformation, technology-enhanced approaches have become integral to modern pedagogical practices, particularly in higher education and language learning. Digital platforms have extended education beyond physical classrooms, thereby fostering accessibility, learner autonomy, and authentic communication across diverse contexts (Dinh, 2025). Among these innovations, Massive Open Online Courses (MOOCs) have emerged as one of the most influential developments, providing large-scale, open-access platforms that democratize knowledge and redefine the parameters of learning. Characterized by their scalability, flexibility, and interactive nature, MOOCs enable learners to access high-quality educational content irrespective of geographical or institutional constraints. They further support pedagogical diversity through multimedia resources, collaborative opportunities, and adaptive

designs aligned with the global demand for personalized, learner-centered, and inclusive education in the 21st century.

Within English as a Foreign Language (EFL) education, MOOCs have increasingly been recognized as effective complements and alternatives to traditional classroom-based methods. Conventional EFL instruction has frequently been associated with teacher-centered practices, memorization, and limited opportunities for authentic communication. These limitations often impede the development of communicative competence and critical engagement with language learning. MOOCs, by contrast, incorporate collaborative forums, peer feedback, multimedia-enhanced activities, and task-based learning, thus fostering active learner participation, autonomy, and inclusivity. Their integration into EFL instruction reflects broader global educational reforms emphasizing lifelong learning, digital literacy, and intercultural competence as essential attributes of language learners in contemporary society.

Empirical research has underscored the transformative potential of MOOCs in enhancing EFL learning outcomes. Studies have demonstrated that MOOC-based instruction can improve reading comprehension, communication skills, self-regulated learning, motivation, and intercultural awareness (Ahmed et al., 2022; Cao-Tuong Dinh & Phuong, 2024; Yamaoka, 2024). By providing exposure to authentic texts, interactive tasks, and globally connected learning environments, MOOCs foster autonomy and engagement while simultaneously cultivating global awareness and cross-cultural competence. These dimensions are particularly salient in an era where language learning is increasingly intertwined with international mobility, global citizenship, and professional adaptability.

Theoretical frameworks further substantiate the pedagogical promise of MOOCs in EFL contexts. Cognitive Load Theory (CLT) elucidates how effective MOOC design can reduce extraneous cognitive load while enhancing germane processing, thereby supporting deeper comprehension (Ma, 2025). Expectation Confirmation Theory (ECT) highlights the role of learner satisfaction, demonstrating that the perceived usefulness of MOOCs enhances both motivation and sustained engagement. Self-Regulated Learning (SRL) theory provides additional explanatory power, given that MOOCs inherently require learners to plan, monitor, and evaluate their progress independently of direct teacher supervision. Collectively, these frameworks reveal how MOOCs can address cognitive, affective, and behavioral aspects of language acquisition in an integrated manner, offering a holistic and sustainable model of instruction.

Nevertheless, the current body of literature on MOOCs in EFL remains fragmented and constrained in scope. Many studies have focused on short-term interventions with homogenous learner populations, thereby limiting the generalizability of findings to broader and more diverse contexts. Research has also tended to rely on predominantly quantitative methodologies, overlooking the social, cultural, and affective dimensions of MOOC-mediated learning. Furthermore, longitudinal investigations into the sustainability of learning outcomes and the long-term impact of MOOCs on learner autonomy, communicative competence, and professional trajectories remain scarce. These limitations highlight the need for more comprehensive, interdisciplinary, and contextually diverse approaches to understanding MOOCs in EFL.

Pedagogical challenges persist in the integration of MOOCs into EFL instruction. High attrition rates, insufficient real-time interaction, limited feedback mechanisms, and varying levels of digital literacy among learners present significant obstacles. In addition, the abundance of content, coupled with insufficient instructional scaffolding, can overwhelm learners and reduce engagement. Cultural differences in learning expectations and communication styles may further complicate learner interaction within MOOC environments, influencing both participation and effectiveness. Addressing these issues requires the development of robust instructional frameworks that balance learner autonomy with structured support, while also adapting content and design to the socio-cultural contexts of diverse learner populations.

Against this backdrop, a systematic exploration of recent literature is imperative for capturing the evolving role of MOOCs in EFL education. Such an investigation enables the synthesis of empirical findings, the identification of persistent challenges, and the articulation of theoretical and practical implications for future research and pedagogy. By concentrating on studies published between 2022 and 2025, this study situates its analysis within the most current scholarly debates, reflecting the latest adaptations, evaluations, and theoretical advancements in the field. Through a thematic synthesis, it

delineates the pedagogical applications of MOOCs, their demonstrated benefits, the obstacles that continue to shape their implementation, and the broader implications for EFL education in the digital era.

This study positions MOOCs not merely as technological innovations but as transformative pedagogical frameworks that embody the principles of learner-centered, sustainable, and globally relevant language education. By engaging critically with recent scholarship, it contributes to advancing academic discourse on technology-enhanced language learning while offering insights that inform policy, instructional design, and pedagogical practice. Ultimately, MOOCs are conceptualized as both opportunities and challenges, embodying the potential to reshape EFL education in ways that align with the demands of a rapidly globalizing and digitized world.

## 2. Method

This study employs a qualitative design grounded in a systematic literature review approach, drawing upon the methodological framework articulated by Duque et al. (2024). Its principal aim is to critically investigate and synthesize the utilization of Massive Open Online Courses (MOOCs) in English as a Foreign Language (EFL) education. The analytical process entailed an extensive review of peer-reviewed journal articles and scholarly publications accessed through reputable academic databases, including Google Scholar, Copernicus, and Scopus. Selection was guided by rigorous criteria emphasizing conceptual relevance, methodological robustness, and scholarly merit, with particular attention to research published between 2022 and 2025. The literature search was operationalized through targeted keywords such as “EFL MOOC,” “MOOC in English as a Foreign Language,” and “MOOC-based EFL instruction.”

The primary research instrument consisted of a structured document analysis protocol, which facilitated the systematic extraction and synthesis of relevant data from the selected corpus of literature. The research procedure was executed in a series of interrelated stages. Initially, studies explicitly addressing “Massive Open Online Courses (MOOCs) in English as a Foreign Language Learning” were identified in accordance with the predefined inclusion criteria. Subsequently, each article was subjected to a close analytical reading, and salient insights were meticulously documented. These insights were then organized into six overarching thematic domains: (1) *pedagogical applications*, encompassing the instructional integration of MOOCs and associated teaching methodologies; (2) *emerging developments*, which mapped contemporary innovations and trends in MOOC-based EFL learning; (3) *empirical findings*, highlighting evidence of the effectiveness of MOOCs in enhancing EFL outcomes; (4) *research gaps*, particularly the limited examination of longitudinal effects and the absence of robust instructional design frameworks; (5) *theoretical and practical implications*, reflecting on the broader contributions of MOOCs to EFL pedagogy; and (6) *future research directions*, including the call for classroom-based experimental studies and the construction of pedagogical frameworks to optimize MOOC integration in EFL education.

## 3. Results and Discussion

### 3.1 Results

MOOCs in EFL instruction enhance comprehension, motivation, communication, autonomy, and intercultural competence (Ahmed et al., 2022; Pan et al., 2022; Yamaoka, 2024). Interactive features and self-regulated strategies sustain engagement, while CLIL integration promotes willingness to communicate and international posture (Xiaohua & Ibrahim, 2023; Cao-Tuong Dinh & Phuong, 2024). Effective design that manages cognitive load and expectation confirmation ensures satisfaction and supports sustainable, learner-centered instruction (Ma, 2025). Grounded in existing research, the following analysis highlights central findings and engages with relevant discussions.

Tabel 1

#### *Research Results*

Article Title (Author)	Research Focus
Comparing the Effectiveness of Massive Open Online Course (MOOC) and Flipped Instruction	This study aims to examine the effects of MOOC-based and flipped instruction on Iranian

on EFL Learners' Reading Comprehension (Ahmed, et al., 2022)	EFL learners' reading comprehension compared to traditional face-to-face instruction.
Massive Open Online Course Versus Flipped Instruction: Impacts on Foreign Language Speaking Anxiety, Foreign Language Learning Motivation, and Learning Attitude (Pan, et al., 2022)	This study aims to examine the effects of MOOC-based and flipped instruction on EFL learners' speaking anxiety, learning motivation, and attitudes toward English learning.
Engagement Markers in EFL MOOC Lectures in Chinese Universities (Xiaohua & Ibrahim, 2023)	This study aims to analyze the types, frequency, and functions of engagement markers used by lecturers in EFL MOOC lectures in Chinese universities, comparing nationally recognized MOOCs with those from ordinary universities.
MOOC learners' perspectives of the effects of self-regulated learning strategy intervention on their self-regulation and speaking performance (Cao-Tuong Dinh & Phuong, 2024)	This study aims to investigate the impact of a self-regulated learning (SRL) strategy intervention on students' SRL skills and to explore their perspectives on the effectiveness of the intervention during their learning in MOOCs.
Influence of CLIL with MOOCs on Japanese EFL students' L2 willingness to communicate and international posture (Yamaoka, 2024)	This study aims to investigate whether the application of CLIL practices using MOOC content can enhance Japanese university students' motivation to communicate in English, particularly in relation to their willingness to communicate, international posture, and learning autonomy.
Investigation of the impact of cognitive load on EFL learners' satisfaction with MOOCs: the mediating role of expectation confirmation and perceived usefulness (Ma, 2025)	This study aims to investigate the effects of cognitive load, confirmation, and perceived usefulness on EFL learners' satisfaction with MOOCs, grounded in Cognitive Load Theory and Expectation Confirmation Theory.

The article titled "Comparing the Effectiveness of Massive Open Online Course (MOOC) and Flipped Instruction on EFL Learners' Reading Comprehension" by Ahmed, et al., (2022) investigated the effects of MOOC-based and flipped instruction on Iranian EFL learners' reading comprehension compared to traditional face-to-face instruction. The findings of this study indicate that the use of MOOCs and flipped instruction significantly improved EFL learners' reading comprehension, communication skills, motivation, critical thinking, and self-efficacy compared to traditional instruction. This success can be attributed to greater opportunities for collaboration, interaction, discussion, and learner autonomy offered by technology-based instructional models. The results provide practical implications for teachers, students, and material developers to integrate technology-enhanced approaches into English language learning for more effective outcomes. However, the study has limitations, including its short duration, homogeneous sample, and reliance on quantitative tests; therefore, future research is recommended to extend the scope, employ qualitative instruments, and involve learners of diverse levels and cultural backgrounds to strengthen the findings.

The study entitled "Massive Open Online Course Versus Flipped Instruction: Impacts on Foreign Language Speaking Anxiety, Foreign Language Learning Motivation, and Learning Attitude" by Pan, et al., (2022) scrutinized the effects of MOOC-based and flipped instruction on EFL learners' speaking anxiety, learning motivation, and attitudes toward English learning. The findings of this research reveal that the integration of MOOCs and flipped instruction offers a transformative impact on EFL learning by fostering significant gains in reading comprehension, communication skills, critical thinking, learner motivation, and self-efficacy compared to conventional instruction. Such advancements can be attributed to the pedagogical shift from teacher-centered delivery to student-centered engagement, where learners are empowered to assume greater responsibility for their learning through collaborative tasks, peer interactions, and autonomous exploration of materials prior to in-class sessions. The positive

attitudes displayed by learners toward MOOCs and flipped classrooms further underscore the perceived value of these approaches, with flexibility, accessibility, and enhanced opportunities for interaction cited as central benefits. Taken together, these outcomes not only validate the effectiveness of technology-mediated pedagogies in reshaping EFL instruction but also underscore their potential to cultivate more dynamic, interactive, and sustainable learning environments that align with the demands of 21st-century education.

Research conducted by Xiaohua and Ibrahim (2023) discusses “Engagement Markers in EFL MOOC Lectures in Chinese Universities”. The findings of this study demonstrate that engagement markers, particularly reader/audience pronouns such as *you* and *we*, serve as the dominant linguistic strategy for sustaining learner involvement in EFL MOOC lectures, with nationally recognized MOOCs from top Chinese universities employing them at markedly higher frequencies and with greater functional diversity than those delivered by ordinary institutions. This pronounced reliance on second-person pronouns highlights their critical role in compensating for the absence of immediate learner presence, fostering a sense of interpersonal connection, and positioning students as active participants within the virtual learning community. Furthermore, the comparative analysis reveals that engagement markers in nationally recognized MOOCs not only surpass those in ordinary MOOCs but also significantly exceed their occurrence in genres such as thesis presentations and academic talks, thereby underscoring the genre-specific necessity of heightened engagement in online environments. Collectively, these results indicate that lecturers in top-ranked universities strategically deploy engagement markers as pedagogical tools to enhance clarity, personalize instruction, and reinforce learner agency, offering an exemplary model for optimizing communicative effectiveness and student-centeredness in technologically mediated EFL education.

Research conducted by Cao-Tuong Dinh and Phuong (2024) discussed “MOOC Learners’ Perspectives of the Effects of Self-Regulated Learning Strategy Intervention on their Self-Regulation and Speaking Performance”. This study provides compelling evidence that the explicit integration of self-regulated learning (SRL) strategies within a MOOC environment can meaningfully enhance learners’ perceptions and utilization of key regulatory practices, particularly goal-setting, environmental structuring, and time management, which are essential for sustaining autonomous engagement in digital learning contexts. While initial findings suggested that both experimental and control groups entered the program with comparable orientations toward SRL, the intervention facilitated a transformative shift, enabling students to develop a deeper appreciation of the strategic behaviors necessary for navigating the complexities of online learning. These outcomes underscore the importance of designing pedagogical models that move beyond content delivery to intentionally cultivate the metacognitive and behavioral dimensions of learning, thereby positioning learners to exercise greater agency, persistence, and adaptability. More broadly, the study affirms that embedding SRL instruction into MOOCs not only strengthens individual learner outcomes but also contributes to the ongoing discourse on how positive psychological and pedagogical interventions can bridge the gap between technological access and meaningful academic achievement in EFL education.

Research conducted by Yamaoka (2024) explored “Influence of CLIL with MOOCs on Japanese EFL Students’ L2 Willingness to Communicate and International Posture”. This research seeks to explore the extent to which implementing CLIL practices through MOOC content can foster Japanese university students’ motivation to use English, with a particular focus on their willingness to communicate, international outlook, and autonomy in learning. The findings of this study suggest that the integration of CLIL practices with MOOC content fostered notable gains in Japanese university students’ willingness to communicate in English and their international posture, primarily through enhancing their sense of “having things to communicate.” This development appeared to stem from increased exposure to authentic, interest-driven content, vocabulary growth, and meaningful communicative tasks such as presentations, which provided both linguistic practice and affective reinforcement. While the quantitative results revealed only limited shifts in L2 WTC, the qualitative insights captured subtle yet meaningful changes, indicating that extended longitudinal engagement may more fully reveal such growth. Moreover, the sustained high levels of intercultural approach-avoidance tendency and international orientation underscore the potential of CLIL-MOOC integration to prepare learners for authentic global communication contexts, equipping them not only with linguistic resources

but also with the confidence and disposition necessary to engage with international communities in their academic and professional futures.

Research conducted by Ma (2025) discusses “Investigation of the Impact of Cognitive Load on EFL Learners’ Satisfaction with MOOCs: the Mediating Role of Expectation Confirmation and Perceived Usefulness”. The findings of this study underscore the critical role of cognitive load management in shaping EFL learners’ satisfaction (SAT) with MOOCs, revealing that excessive cognitive demands significantly undermine learners’ experiences, while confirmation (CON) and perceived usefulness (PU) serve as important mediating mechanisms that partially buffer this effect. By integrating Cognitive Load Theory (CLT) and Expectation Confirmation Theory (ECT), the study demonstrates that when MOOCs impose high task complexity and language processing burdens, learners’ ability to process content diminishes, thereby reducing both their perception of usefulness and their confirmation of expectations, ultimately lowering their overall satisfaction. Conversely, when learners’ expectations are met or exceeded, their perception of MOOCs’ effectiveness improves, strengthening both PU and SAT, despite the challenges imposed by cognitive load. These findings not only extend the theoretical applicability of CLT and ECT to online language learning but also highlight the intricate interplay between cognitive demands, expectation confirmation, and perceived value in determining learner satisfaction. Taken together, the results emphasize that optimizing instructional design to minimize extraneous cognitive load, while simultaneously enhancing expectation alignment and perceived usefulness, is essential for creating sustainable and satisfying MOOC-based learning experiences for EFL learners.

## **3.2 Discussion**

### **3.2.1 Pedagogical Applications**

The pedagogical applications of MOOCs in English as a Foreign Language (EFL) learning reveal a paradigm shift from traditional teacher-centered models toward more dynamic, learner-centered approaches that emphasize autonomy, collaboration, and authentic engagement. Across the reviewed studies, MOOCs are consistently shown to foster enhanced reading comprehension, communication skills, critical thinking, and self-efficacy (Ahmed et al., 2022; Pan et al., 2022), largely by integrating flipped and technology-mediated instructional designs that extend learning beyond the confines of the classroom. Moreover, their capacity to embed self-regulated learning strategies (Cao-Tuong Dinh & Phuong, 2024) and task-based practices such as CLIL-oriented activities (Yamaoka, 2024) underscores their versatility in cultivating both linguistic proficiency and intercultural competence. Pedagogically, MOOCs not only expand accessibility and flexibility but also offer novel avenues for scaffolding metacognitive, cognitive, and affective dimensions of learning through features such as engagement markers (Xiaohua & Ibrahim, 2023), which compensate for the absence of physical immediacy while sustaining learner agency. Collectively, these applications affirm MOOCs’ transformative potential in reshaping EFL pedagogy by merging technology with communicative, constructivist, and learner-driven practices that align with the demands of globalized, 21st-century education.

### **3.2.2 Emerging Developments**

Emerging developments in MOOC-based EFL learning reveal a decisive movement toward pedagogical innovations that transcend mere content delivery, reflecting contemporary trends in learner engagement, instructional design, and technology integration. Recent studies highlight the convergence of MOOCs with flipped learning models (Ahmed et al., 2022; Pan et al., 2022), CLIL-oriented instruction (Yamaoka, 2024), and self-regulated learning interventions (Cao-Tuong Dinh & Phuong, 2024), underscoring the field’s shift toward fostering autonomy, intercultural competence, and communicative readiness rather than rote skill acquisition. At the same time, innovations in linguistic and discourse strategies, such as the use of engagement markers to simulate interpersonal interaction in online lectures (Xiaohua & Ibrahim, 2023), reflect attempts to humanize digital instruction and sustain motivation in the absence of physical presence. Parallel to these pedagogical advances, theoretical integrations of Cognitive Load Theory and Expectation Confirmation Theory (Ma, 2025) point to a growing recognition of the cognitive and affective dimensions of learning satisfaction, shaping the way MOOCs are designed to optimize learner experience. Collectively, these contemporary innovations indicate that MOOC-based EFL learning is increasingly characterized by hybridized instructional

models, learner-centered scaffolding, and evidence-driven frameworks that not only expand access but also reconfigure the quality and sustainability of language education in digitally mediated environments.

### **3.2.3 Empirical Findings**

Empirical findings across recent scholarship consistently affirm the pedagogical efficacy of MOOCs in advancing EFL learning outcomes, demonstrating improvements that extend well beyond traditional face-to-face instruction. Studies on MOOC- and flipped-based models (Ahmed et al., 2022; Pan et al., 2022) reveal substantial gains in reading comprehension, communication skills, critical thinking, motivation, and self-efficacy, largely attributable to increased opportunities for collaboration, interaction, and autonomous learning. Complementing these results, research on engagement strategies (Xiaohua & Ibrahim, 2023) highlights how linguistic devices such as audience pronouns serve as powerful tools for fostering learner presence and agency in virtual settings, thereby reinforcing the interpersonal dimension of online instruction. Parallel investigations into self-regulated learning interventions (Cao-Tuong Dinh & Phuong, 2024) further demonstrate that explicit training in metacognitive strategies such as goal-setting and time management meaningfully enhances students' capacity to navigate the demands of MOOCs, underscoring their role in cultivating autonomy and persistence. Similarly, the integration of CLIL practices with MOOC content (Yamaoka, 2024) has been shown to strengthen learners' willingness to communicate, international posture, and intercultural orientation by exposing them to authentic, interest-driven materials that expand both linguistic and affective readiness for global communication. Finally, research informed by Cognitive Load Theory and Expectation Confirmation Theory (Ma, 2025) underscores the necessity of balancing cognitive demands with expectation alignment and perceived usefulness, as these factors mediate learners' satisfaction and long-term engagement. Collectively, these findings provide robust empirical evidence that MOOCs not only enhance linguistic competencies but also foster learner motivation, autonomy, and communicative confidence, thereby positioning MOOCs as transformative tools in digitally mediated EFL instruction.

### **3.2.4 Research Gaps**

Despite the growing body of evidence affirming the pedagogical value of MOOCs in EFL learning, several research gaps remain underexplored. First, most studies have focused on short-term interventions with limited participant diversity, raising questions about the sustainability and generalizability of their outcomes across broader cultural and proficiency contexts. Second, while existing research highlights cognitive, affective, and motivational benefits, there is comparatively little empirical investigation into the long-term impact of MOOCs on learners' linguistic proficiency, intercultural competence, and professional preparedness in authentic communicative settings. Third, the current literature tends to emphasize quantitative outcomes, with insufficient integration of qualitative perspectives that could capture nuanced learner experiences, identity formation, and interactional dynamics within MOOC environments. Moreover, although theoretical frameworks such as Cognitive Load Theory and Expectation Confirmation Theory have been applied, there remains a lack of comprehensive instructional design models that systematically integrate self-regulated learning, CLIL practices, and engagement strategies to optimize MOOCs for EFL contexts. Addressing these gaps would not only deepen the theoretical understanding of technology-mediated language learning but also provide actionable insights for designing sustainable, inclusive, and pedagogically robust MOOC-based instruction in English as a Foreign Language.

### **3.2.5 Theoretical and Practical Implications**

The findings of this review yield significant theoretical and practical implications for the field of EFL instruction. Theoretically, the integration of MOOCs into EFL pedagogy substantiates and extends existing frameworks such as Cognitive Load Theory, Expectation Confirmation Theory, and Self-Regulated Learning theory by demonstrating their applicability in digitally mediated environments, while also underscoring the relevance of CLIL and communicative approaches in fostering intercultural competence and communicative readiness. These insights enrich the theoretical discourse on technology-enhanced language learning by illustrating how MOOCs function not merely as delivery platforms but as complex, interactive ecosystems that mediate cognitive, affective, and sociocultural dimensions of learning. Practically, the reviewed studies provide compelling evidence that MOOCs can serve as scalable and flexible pedagogical tools for enhancing learner autonomy, motivation, and communicative competence, thereby offering educators actionable strategies to design more interactive,

student-centered, and sustainable language learning environments. For policymakers and institutions, the evidence highlights the need to invest in infrastructure and professional development that supports the effective integration of MOOCs, ensuring equitable access, learner engagement, and alignment with globalized educational demands. Collectively, these implications affirm the transformative potential of MOOCs to reshape both the theory and practice of English as a Foreign Language education in the 21st century.

### **3.2.6 Future Research Directions**

Building upon the reviewed studies, several promising directions emerge for future research on MOOCs in English as a Foreign Language (EFL) contexts. First, longitudinal studies are needed to examine the sustained impact of MOOCs on learners' linguistic development, intercultural competence, and communicative readiness, as most existing research has been limited to short-term interventions. Extending the duration of studies will provide insights into how MOOCs contribute to long-term learning trajectories and professional preparedness.

Second, future research should expand participant diversity by incorporating learners from varied cultural, linguistic, and proficiency backgrounds. Current studies are often geographically concentrated or homogeneous in terms of participant profiles, which limits the generalizability of findings. Comparative cross-cultural studies would help determine how sociocultural factors mediate learners' engagement, motivation, and outcomes in MOOC-based EFL instruction.

Third, while much of the existing literature relies heavily on quantitative approaches, future investigations should integrate mixed-methods and qualitative designs to capture the nuanced dimensions of learner experiences, identity construction, and interactional dynamics within MOOC environments. Such perspectives would enrich the understanding of how learners negotiate autonomy, motivation, and agency in digitally mediated contexts.

Fourth, future research should focus on instructional design models that systematically integrate key pedagogical elements such as self-regulated learning (SRL) strategies, Content and Language Integrated Learning (CLIL) practices, and engagement markers. Experimental studies that compare the effectiveness of these integrated models against traditional MOOC delivery could yield actionable insights for optimizing learning outcomes.

Finally, technological innovations such as artificial intelligence (AI), adaptive learning systems, and multimodal resources offer fertile ground for exploration. Investigating how these tools can be embedded within MOOC platforms to personalize learning, reduce cognitive load, and enhance interaction will be essential for advancing both theory and practice in technology-mediated EFL education.

## **4. Conclusion**

This review has demonstrated that MOOCs play a transformative role in English as a Foreign Language (EFL) instruction by fostering reading comprehension, communicative competence, motivation, intercultural awareness, and learner autonomy. Drawing from studies published between 2022 and 2025, evidence shows that technology-mediated approaches such as flipped instruction, CLIL integration, self-regulated learning strategies, and discourse innovations like engagement markers significantly enhance both cognitive and affective dimensions of learning. These outcomes underscore MOOCs' potential to reshape EFL pedagogy into more flexible, learner-centered, and globally relevant practices.

However, the findings also highlight critical challenges that warrant further attention. Research to date has often been limited by short intervention durations, homogenous samples, and reliance on quantitative data, which restricts the generalizability of results. Moreover, persistent issues such as high dropout rates, cognitive overload, and insufficient instructional design frameworks point to the need for more systematic, holistic approaches to MOOC development in EFL contexts. Addressing these limitations will be essential for ensuring that MOOCs can provide sustainable, equitable, and meaningful learning experiences.

Theoretically, the reviewed studies extend frameworks such as Cognitive Load Theory, Expectation Confirmation Theory, Self-Regulated Learning, and CLIL into digital environments, reinforcing their relevance for online pedagogy. Practically, MOOCs provide educators and policymakers with scalable tools to foster autonomy, engagement, and intercultural competence while

expanding access to quality language education. Taken together, the evidence affirms MOOCs' potential to function as a transformative force in EFL learning, provided that future research and practice continue to refine their design, implementation, and long-term applicability.

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