International Journal of Education and Humanities (IJEH), 6(1) 2026:54-67
http://i-jeh.com/index.php/ijeh/index
E-ISSN: 2798-5768

From Presence to Performance: An Empirical Study of College English Online Learning Through the CoI Lens

Yu Liu[1]

Abstract

The rapid advancement of information technology and the widespread adoption of online education have intensified the need to improve the quality of College English e-learning. Despite the growing prevalence of digital instruction, challenges remain in maintaining students' engagement and achieving effective learning outcomes. To address this issue, the present study aims to examine how different aspects of teaching presence influence student engagement and, subsequently, learning performance in an online College English environment. Guided by the Community of Inquiry (CoI) framework, this research develops and validates a structural model that links teaching presence → student engagement → learning performance. Using data collected from a College English massive open online course (MOOC), the study employs partial least squares structural equation modeling (PLS-SEM) to test the hypothesized relationships among the variables. The results reveal that among the three dimensions of teaching presence—design and organization, facilitating discourse, and direct instruction—only facilitating discourse significantly enhances behavioral, emotional, and cognitive engagement. Furthermore, student engagement serves as a key predictor of learning performance, with cognitive engagement demonstrating the strongest effect, followed by emotional and behavioral engagement. These findings emphasize that fostering interactive and dialogue-rich learning environments is crucial for improving students' engagement and performance in online College English learning. Theoretically, this study extends the CoI framework to second-language acquisition by identifying the differential effects of teaching presence. Practically, it highlights the importance of instructors adopting the role of facilitators who cultivate meaningful online learning communities that promote both quality and equity in digital education.

Keywords: *Teaching Presence, Student Engagement; Learning Performance; College English; Online Education.*

A. Introduction

The rapid evolution of information technology is fundamentally reshaping the structure and ecology of higher education. The convergence of 5G, artificial intelligence, and virtual reality has liberated online learning from the temporal and spatial constraints of traditional classrooms, offering unprecedented flexibility and accessibility to learners worldwide. Since the outbreak of COVID-19 in 2020, approximately 1.5 billion students across more than 190 countries and regions have been compelled to shift to "cloud-based" learning, transforming online education from a supplementary option into the mainstream modality and sustaining this momentum in the post-pandemic era (UNESCO, 2021). This paradigm shift not only dissolves geographical boundaries but also fosters educational-resource sharing and enables the creation of personalized learning paths.

Massive Open Online Courses (MOOCs) and curricula disseminated via social platforms such as YouTube epitomize this new mode of learning. These courses are low-cost, highly scalable, and flexible, allowing learners to control their pace. As a result, online education has

[1]School of Foreign Languages, Wuhan Institute of Technology, Wuhan, China. 04009004@wit.edu.cn

become an indispensable component of higher education and demonstrates considerable potential for advancing equity and universal access.

Despite its rapid expansion, instructional quality remains a central concern for both scholars and practitioners. From an instructional-design perspective, teaching presence (TP)—a critical external mechanism—shapes the classroom climate primarily through course structure, instructor guidance, and the facilitation of interaction. However, research consistently indicates that students perceive lower levels of presence in virtual settings compared with face-to-face classrooms, resulting in diminished learning engagement and weaker interactivity (Martin & Bolliger, 2018). The lack of real-time feedback, affective cues, and multimodal perception not only erodes learners' sense of belonging and trust but also reduces motivation and cognitive investment. Teaching presence has thus emerged as a key bottleneck in improving online learning quality.

Although teaching presence and learning engagement have been studied independently, integrative research remains limited. In the context of college English, the mechanisms through which teaching presence influences engagement have not been systematically clarified, and the relative effects of its dimensions remain uncertain. Furthermore, the differential contributions of the three dimensions of engagement—behavioral, emotional, and cognitive—to learning outcomes have not been rigorously tested. In particular, the mediating role of learning engagement in the linkage between teaching presence and learning outcomes requires further empirical investigation.

College English holds a distinctive position in higher education: it is both a foundational course and a core component of liberal education. Its objectives extend beyond the mastery of linguistic knowledge and skills to include the cultivation of higher-order abilities such as intercultural communication, autonomous learning, and critical thinking. From a second-language-acquisition perspective, college English is a highly interactive socio-cognitive practice whose effectiveness depends on the external scaffolding provided by teaching presence, which creates authentic contexts, fosters interaction, and furnishes feedback (Ellis, 2015).

However, current online instructional models—such as MOOCs, micro-lectures, and live-streamed classes—often fall into technological determinism, overemphasizing resource transmission and technical presentation while neglecting presence and process-oriented support. This approach frequently results in fragmented content, superficial interaction, and "invisible" learning processes, thereby curtailing students' opportunities for authentic language practice and undermining motivation, ultimately impeding systematic language development (Sun et al., 2020). Moreover, studies reveal that completion rates in video-centric MOOCs and blended courses remain low, with insufficient engagement identified as a primary factor (Fang et al., 2019).

Learning engagement—comprising behavioral, emotional, and cognitive dimensions—is both multidimensional and interactive, exerting significant influence on learning processes and outcomes. Prior research has shown that each dimension substantially affects learners' continuance intentions and academic performance (Christenson et al., 2012). Against the backdrop of normalized online college-English instruction, it is essential to examine the chain of influence—teaching presence → learning engagement → learning outcomes—to uncover its underlying mechanisms. Such an inquiry will not only optimize online instructional models and enhance quality but also promote educational equity and improve learning effectiveness.

In summary, the rise of online education has provided college-English instruction with greater flexibility and resource accessibility but has also revealed deep contradictions in language-skill development. Specifically, does technological empowerment necessarily

translate into meaningful gains in language proficiency? This question remains insufficiently addressed in the literature. Accordingly, this study focuses on the following three research questions: How do the three dimensions of online teaching presence—instructional design and organization, facilitating discourse, and direct instruction—individually influence students' emotional, behavioral, and cognitive engagement? In college-English courses, how does learning engagement affect learning outcomes? What is the relative influence of behavioral, emotional, and cognitive engagement on different dimensions of learning outcomes—namely, knowledge acquisition, language-use competence, and learning satisfaction?

B. Literature Review

1. Teaching Presence

The construct of *teaching presence* (TP) was first introduced by Garrison et al. (2000) within the *Community of Inquiry* (CoI) model. This model posits that effective online learning emerges from the dynamic interplay of three presences: teaching presence (TP), social presence (SP), and cognitive presence (CP). TP is defined as the instructor's capacity to design, facilitate, and support both social and cognitive processes to create personally meaningful and educationally worthwhile learning outcomes in a virtual environment.

Anderson et al. (2001) extended the construct by emphasizing that TP encompasses not only course design and organization but also the direction and regulation of socio-cognitive processes. Thus, TP permeates the entire instructional cycle, manifesting in curriculum planning, discourse facilitation, and sustained academic support.

Within the CoI framework, SP highlights learners' sense of connection and belonging, whereas CP emphasizes critical thinking and inquiry. TP is regarded as the pivotal element because it integrates and modulates SP and CP, thereby cultivating authentic and meaningful learning experiences (Garrison et al., 2000).

Some scholars differentiate between instructor presence and teaching presence. Instructor presence refers to observable behaviors in class, while teaching presence is broader, encompassing design, organization, and evaluation (Richardson et al., 2016). The distinction carries both theoretical and practical implications, as instructors often teach courses they did not design. Glazier and Harris (2020) found that students prefer face-to-face classes partly because instructor presence is more readily perceived. Regardless of modality, clarity of instruction and instructor accessibility consistently predict perceived TP, whereas deficits in TP often lead to alienation from both instructors and peers, ultimately diminishing the learning experience.

Teaching presence (TP) is commonly conceptualized as comprising three interrelated dimensions (Anderson et al., 2001). The first is Instructional Design and Organization (DO), which involves structuring the course, sequencing activities, and developing assessment systems, including the preparation of learning materials and interactive tasks. The second is Facilitating Discourse (FD), referring to the instructor's role in sustaining learner interest and motivation by guiding discussions, encouraging feedback, and fostering consensus, thereby promoting collaborative knowledge construction. The third is Direct Instruction (DI), which entails the provision of scaffolded support based on the instructor's disciplinary expertise and pedagogical knowledge. This includes clarifying complex content, offering targeted feedback, and correcting misconceptions, thereby transcending traditional one-way lecturing.

A substantial body of empirical research demonstrates that TP functions as the engine of the CoI model. By cultivating a supportive climate, fostering interaction, and providing academic guidance, TP significantly enhances student engagement and improves online learning outcomes (Garrison & Arbaugh, 2007).

2. Student Engagement

Student engagement is a pivotal construct in educational psychology and the learning sciences, typically defined as the quality and intensity of learners' participation in academic activities. Engagement is generally conceptualized as comprising three dimensions: behavioral, cognitive, and emotional (Fredricks et al., 2004). As a multidimensional psycho-behavioral construct, engagement is strongly associated with academic achievement and predicts outcomes such as self-efficacy, persistence, and foreign-language attainment (Guo et al., 2023).

Behavioral engagement refers to observable actions such as attendance, attention, persistence, and classroom participation (Finn & Zimmer, 2012). In higher education, active participation in discussion and collaboration predicts deep learning and academic success, whereas absenteeism and inattention signal disaffection (Bond et al., 2020).

Cognitive engagement denotes the mental effort and intellectual investment directed toward higher-order thinking, such as knowledge integration, critical reasoning, problem solving, and self-regulation (Reeve et al., 2020). It overlaps with metacognitive competencies like goal setting and monitoring. High cognitive engagement strengthens comprehension and academic performance, although overreliance on technology may dampen critical thinking (Vargas-Murillo et al., 2023).

Emotional engagement encompasses affective experiences and attitudinal reactions, including interest, enjoyment, satisfaction, anxiety, and belonging (Reschly & Christenson, 2012). Positive emotions foster persistence and deep learning, whereas anxiety and frustration undermine sustained effort (Chan & Hu, 2023). Emotional engagement is shaped strongly by classroom climate, teacher–student interaction, and peer support (Meeuwisse et al., 2010).

Collectively, this behavioral–cognitive–emotional triad constitutes the dominant analytical framework for engagement, offering a systematic account of how learners interact with content, peers, and instructors. Although additional dimensions such as agentic engagement and social engagement (Philp & Duchesne, 2016) have been proposed, in language-learning contexts these often overlap with behavioral engagement. Accordingly, the three-dimensional model remains the most widely accepted and explanatory framework.

3. Online Learning Performance

Learning performance is generally defined as the results and achievements attained during the learning process, encompassing both objective indicators (e.g., grades, completion rates) and subjective perceptions (e.g., satisfaction, self-efficacy, learning experience). The pandemic-driven shift to online instruction has further heightened its research salience (Qureshi et al., 2023).

Key influencing factors. Research has identified multiple determinants of online learning performance. From a technological standpoint, Task–Technology Fit (TTF) is a critical factor that interacts with cognitive immersion. At the learner level, behavioral, cognitive, and emotional engagement each positively affect performance (Qureshi et al.,

2023). Satisfaction, moreover, reflects students' global evaluation of the learning experience and predicts both motivation and continuance. Instructional design and resource allocation also matter: clear content, frequent interaction, and timely feedback are associated with higher performance (Wang, 2022). For instance, instructor-generated video resources have been shown to reduce dropout rates and improve grades in certain disciplines, though cross-disciplinary effects vary.

Measurement approaches. Empirical research on learning performance typically employs two approaches. The first relies on objective indicators such as grade point average (GPA) or exam scores. The second uses self-report scales that capture learners' subjective experiences and perceptions (Chang et al., 2019). For example, Yu et al. (2010) developed a validated instrument containing items such as "I have learned how to complete course assignments efficiently," which has demonstrated high reliability and validity in subsequent studies (Nkhoma et al., 2015).

C. Methods

In China, College English serves as both a foundational and a general-education course. Its objectives extend beyond the acquisition of linguistic knowledge and skills to include higher-order competencies such as intercultural communication, autonomous learning, and critical thinking. From a second-language-acquisition perspective, College English learning is a highly interactive socio-cognitive practice, whose effectiveness depends on the synergy between external instructional support and internal self-regulation. Externally, teaching presence facilitates authentic communicative situations through course design, interactional guidance, and timely feedback. Internally, learners engage in metacognitive regulation and motivation management by setting goals, monitoring progress, and reflecting on outcomes (Ellis, 2015).

The empirical setting for this study was a College English MOOC hosted on the Chinese University MOOC platform (https://www.icourse163.org/). Participants were first-year undergraduate students enrolled in this course at a comprehensive university in Wuhan during the first semester of the 2024 academic year. A total of 463 questionnaires were distributed to students.

This study employed three established measurement instruments adapted to the research context. Teaching Presence was assessed using a 13-item scale developed by Arbaugh et al. (2008). Student Engagement was measured according to the three-dimensional framework proposed by Fredricks et al. (2004), which captures behavioral, emotional, and cognitive aspects of engagement. Learning Performance was evaluated using items adapted from Sun and Rueda (2012). All items were rated on a six-point Likert scale ranging from 1 ("strongly disagree") to 6 ("strongly agree"). The questionnaire was distributed online via Wenjuanxing (https://www.wjx.cn/). To enhance data quality, a minimum completion-time threshold and reverse-coded items were incorporated. Of the 463 responses collected, 278 valid cases were retained after removing incomplete or otherwise invalid submissions.

D. Results and Discussion

1. Model Development and Research Hypotheses

Within online-education research, teaching presence (TP) is widely regarded as a primary antecedent of student engagement. Although scholars debate the precise mechanisms that foster language learners' investment in virtual environments, there is broad agreement that instructors'

design, facilitation, and direct support exert measurable effects on students' behavioral, emotional, and cognitive engagement.

Instructional Design and Organization

Course design functions as the engine of engagement. In face-to-face settings, collaborative and interactive tasks such as role-plays and games have been shown to increase participation (Eddy-U, 2015). Comparable effects are observed online. Gómez-Rey et al. (2016) identified the instructor's role as "designer" as the most critical in asynchronous learning, with task and material quality directly shaping student engagement. Similarly, Cole et al. (2019) demonstrated that perceptions of active-learning activities—including scenario-based tasks and peer/self-assessment—predict engagement levels. Gamified platforms such as Kahoot and Nearpod also enhance motivation and sustain participation (Ong & Quek, 2021). Collectively, these findings suggest that sound instructional design and purposeful use of technology are prerequisites for student engagement.

H1. Instructional design and organization positively predict behavioral engagement.
H2. Instructional design and organization positively predict emotional engagement.
H3. Instructional design and organization positively predict cognitive engagement.

Instructor Support and Facilitation

In online learning, the absence of face-to-face cues heightens the importance of instructor support, which functions as both a buffer against social distance and a key enabler of virtual presence (Lomicka, 2006). Rotar (2020) emphasized that effective support must be proactive and sustained, rather than limited to reactive responses. Multiple communication channels—including email, instant messaging, and learning management system forums—help maintain a sense of community. When support needs are met, students report higher satisfaction and stronger performance (Gopal et al., 2021). Clear navigation, timely feedback, and emotional responsiveness thus emerge as essential triggers for engagement.

H4. Instructor support positively predicts behavioral engagement.
H5. Instructor support positively predicts emotional engagement.
H6. Instructor support positively predicts cognitive engagement.

Direct Instruction and Climate Building

Instructors also play a pivotal role in shaping classroom climate. Stone (2017) showed that an inclusive and supportive climate strengthens belonging and participation, whereas feelings of isolation undermine engagement. Moreover, peer relationships and group interaction dynamics often predict engagement more strongly than teacher–student relations (Cole et al., 2019). Accordingly, direct instruction should be complemented by deliberate efforts to foster community through collaborative tasks, interactive discussion, and shared problem-solving.

H7. Direct instruction positively predicts behavioral engagement.
H8. Direct instruction positively predicts emotional engagement.
H9. Direct instruction positively predicts cognitive engagement.

Linking Student Engagement to Learning Performance

Extensive empirical research confirms that student engagement is a robust predictor of academic achievement and overall learning experience (Bond et al., 2020).

Studies consistently demonstrate positive associations between engagement and performance across modalities. Junco et al. (2010) found that academic Twitter use improved grades, while Balwant et al. (2018) validated the impact of all three engagement dimensions in face-to-face contexts. Shah and Barkas (2018) identified attendance and resource use as predictors of achievement, and in blended and online courses, Law et al. (2019) and Hosen et al. (2021) reported that active effort and positive affect enhanced both knowledge mastery and perceived learning experience. Additional evidence indicates that engagement reduces study time while deepening comprehension (Owston et al., 2013).

From a theoretical perspective, the three engagement dimensions may operate independently or synergistically (Christenson et al., 2012). Emotional engagement is especially salient: it frequently influences persistence by fueling behavioral and cognitive investment (Reyes et al., 2012). Positive affect facilitates sustained effort, whereas negative emotions hinder both learning and well-being (Boekaerts, 1993). The overarching principle is straightforward: greater engagement leads to stronger learning performance.

H10. Behavioral engagement positively influences learning performance.
H11. Emotional engagement positively influences learning performance.
H12. Cognitive engagement positively influences learning performance.

Theoretical Model

Drawing on the preceding arguments, this study proposes the model shown in Figure 1. Teaching presence—comprising instructional design and organization, instructor support, and direct instruction—functions as the exogenous variable. Student engagement, operationalized as behavioral, emotional, and cognitive engagement, acts as the mediating construct. Learning performance, encompassing both objective achievement and subjective evaluations, serves as the outcome variable.

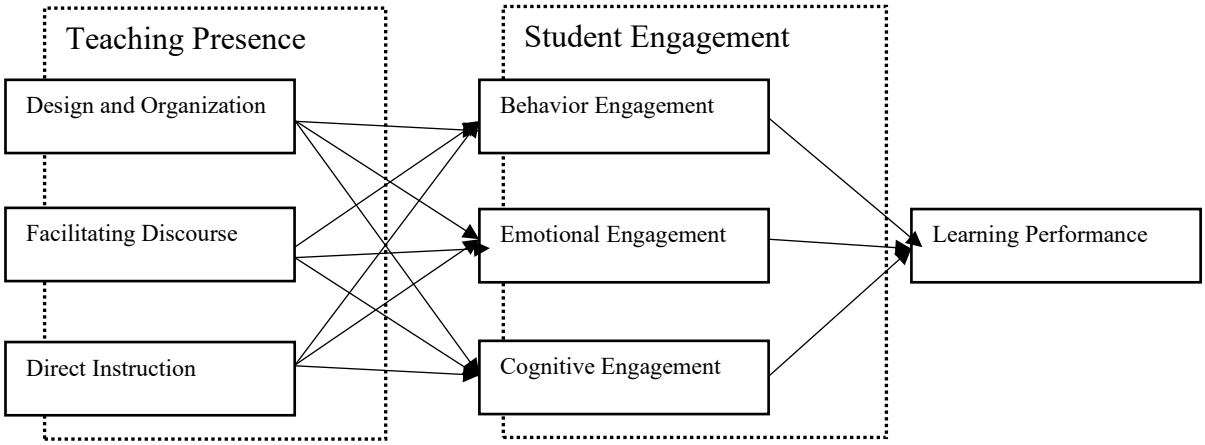

Figure 1. Conceptual framework

Partial least squares structural equation modeling (PLS-SEM) was employed to test the proposed model. PLS-SEM is particularly suitable for small-to-medium sample sizes, non-normal data distributions, and complex models, and it is oriented toward both theory development and predictive analysis. All analyses were conducted using SmartPLS 4.0, following the recommended two-step procedure: (1) assessment of the measurement model and (2) testing of the structural model (Hair et al., 2021).

2. Measurement-Model Results

The measurement model demonstrated satisfactory reliability and validity (see Tables 1–3). With respect to indicator reliability, factor loadings ranged from 0.733 to 0.940, all exceeding the recommended threshold of 0.70. Internal consistency was also adequate, with Cronbach's α values ranging from 0.819 to 0.931 and composite reliability (CR) values ranging from 0.880 to 0.948, both surpassing the 0.70 benchmark. Convergent validity was confirmed, as the average variance extracted (AVE) values ranged from 0.648 to 0.879, well above the 0.50 criterion.

Table 1. Construct's reliability and validity

Latent variable	Items	Factor loading	Cronbach's α	CR	AVE
Design & organization	DO1	0.853	0.893	0.925	0.756
	DO 2	0.871			
	DO 3	0.885			
	DO 4	0.870			
Facilitating Discourse	FD1	0.861	0.920	0.938	0.716
	FD 2	0.868			
	FD3	0.837			
	FD4	0.805			
	FD5	0.884			
	FD6	0.819			
Direct instruction	DI1	0.892	0.855	0.912	0.776
	DI2	0.890			
	DI3	0.859			
Emotional Engagement （EE）	EE1	0.898	0.931	0.948	0.786
	EE 2	0.907			
	EE3	0.935			
	EE 4	0.920			
Behavioral Engagement （BE）	BE 1	0.831	0.819	0.880	0.648
	BE2	0.773			
	BE3	0.808			
	BE4	0.806			
Cognitive Engagement（CE）	CE1	0.820	0.891	0.920	0.696
	CE2	0.857			
	CE3	0.867			
	CE4	0.848			

Latent variable	Items	Factor loading	Cronbach's α	CR	AVE
	CE5	0.777			
Learning Performance（PF）	PF1	0.940	0.862	0.935	0.879
	PF2	0.935			

Discriminant validity was established, as all heterotrait–monotrait (HTMT) ratios were below the recommended threshold of 0.90 (see table 2), thereby confirming adequate construct distinctiveness (Henseler et al., 2015).

Table 2. The discriminant validity: HTMT ratios

	EE	BE	CE	DI	DO	FD	PF
EE							
BE	0.506						
CE	0.531	0.809					
DI	0.421	0.647	0.412				
DO	0.446	0.625	0.462	0.830			
FD	0.463	0.662	0.498	0.881	0.841		
PF	0.595	0.738	0.847	0.441	0.544	0.516	

Model fit was satisfactory, with a standardized root mean square residual (SRMR) of 0.054 (see table 3), which falls below the recommended cutoff of 0.08, and a normed fit index (NFI) of 0.981, which exceeds the benchmark value of 0.90. Together, these indices indicate good overall model fit (Bentler & Bonett, 1980; Hu & Bentler, 1998).

Table 3. Goodness-of-fit summary.

	Saturated model	Estimated model
SRMR	0.054	0.109
NFI	0.909	0.988

3. Structural-Model Findings

After confirming the adequacy of the measurement model, 5,000 bootstrap samples were generated to assess path significance. Key findings (see table 4) are summarized below:

Instructional design and organization did not significantly predict behavioral ($\beta = 0.137$, $p > 0.05$), emotional ($\beta = 0.161$, $p > 0.05$), or cognitive engagement ($\beta = 0.148$, $p > 0.05$), suggesting that its direct influence on engagement may be limited. This result indicates that engagement in online College English may depend more on task challenge, classroom climate, and learners' self-regulation. Facilitating discourse exerted significant positive effects on all three engagement dimensions: behavioral ($\beta = 0.356$, $p < 0.01$), emotional ($\beta = 0.325$, $p < 0.05$), and cognitive ($\beta = 0.479$, $p < 0.001$). These findings indicate that interaction and dialogue effectively stimulate participation, affective identification, and higher-order thinking.

Direct instruction showed no significant influence on behavioral ($\beta = 0.121$, $p > 0.05$) or emotional engagement ($\beta = -0.038$, $p > 0.05$) and was marginally negatively related to cognitive engagement ($\beta = -0.176$, $p = 0.074$). This pattern suggests that excessive direct guidance may inhibit autonomous learning and deep cognitive processing. Student engagement → learning performance: All three engagement dimensions significantly predicted learning performance: behavioral ($\beta = 0.163$, $p < 0.05$), emotional ($\beta = 0.202$, $p < 0.001$), and cognitive engagement (β

= 0.536, $p < 0.001$). Cognitive engagement had the strongest effect, highlighting its central role in promoting online learning outcomes.

Table 4. Model Path Coefficients and Hypothesis Testing Results

Hypothesis path	coefficientβ	t-Value	p-Values	Testing results
H1 : DO -> BE	0.137	1.252	0.211	Not Supported
H2 : DO -> EE	0.161	1.166	0.244	Not Supported
H3 : DO -> CE	0.148	1.602	0.109	Not Supported
H4 : FD -> BE	0.356	2.959	0.003	Supported
H5 : FD -> EE	0.325	2.113	0.035	Supported
H6 : FD -> CE	0.479	4.489	0.000	Supported
H7 : DI-> BE	0.121	1.129	0.259	Not Supported
H8 : DI -> EE	-0.038	0.295	0.768	Not Supported
H9 : DI-> CE	-0.176	1.786	0.074	Not Supported
H10 : BE -> PF	0.163	2.503	0.012	Supported
H11 : EE -> PF	0.202	3.540	0.000	Supported
H12 : CE -> PF	0.536	7.555	0.000	Supported

Note: [a] $p < 0.05$, [b] $p < 0.01$, [c] $p < 0.001$

E. Conclusion

Situated within the context of College English online instruction, this study examined the chain of relationships among teaching presence, student engagement, and learning performance. Using partial least squares structural equation modeling (PLS-SEM), we investigated how the three dimensions of teaching presence—design and organization, facilitating discourse, and direct instruction—influence behavioral, emotional, and cognitive engagement, and how these engagement dimensions, in turn, mediate learning performance. The findings yield four key conclusions.

First, student engagement is the primary predictor of online learning success. Cognitive engagement exerted the strongest effect, underscoring the central role of deep processing, critical thinking, and problem-solving in determining performance. Emotional engagement also contributed positively by sustaining interest, enjoyment, and motivation, while behavioral engagement, though comparatively weaker, remained significant, highlighting the foundational importance of participation and persistence. Collectively, these findings reinforce the principle that higher engagement leads to higher performance and suggest that online education reforms should prioritize the activation of cognitive and emotional engagement.

Second, teaching presence operates unevenly across its dimensions. Only facilitating discourse demonstrated significant positive effects on all forms of engagement. In contrast, design and organization and direct instruction were non-significant, and in the case of cognitive engagement, even slightly negative. These results indicate that careful course structuring and teacher-centered explanations, while necessary, are insufficient on their own; interactive discourse is the decisive lever for engagement. Accordingly, the shift from a knowledge-transmission model to a learning-facilitation model is essential.

Third, this study bridges theoretical gaps between teaching presence and engagement research. By modeling the complete presence–engagement–performance sequence, cognitive engagement emerged as the core mediating mechanism. These results provide empirical support for the Community of Inquiry framework and contribute an integrated perspective to both second-language acquisition and educational psychology research.

Fourth, the study offers practical implications for online College English reform. Facilitating discourse should be positioned at the center of instructional design, with the aim of cultivating inquiry-oriented learning communities rather than focusing solely on content delivery. Specifically, (a) instructors should use high-quality questioning, peer collaboration, and timely feedback to stimulate emotional and cognitive engagement; (b) curricula should integrate interactive and critical-thinking activities that promote meaningful learning; and (c) universities should provide training and resources to support instructors in building vibrant learning communities, thereby advancing a shift from "technology-enabled" to "learning-centered" instruction.

Finally, several limitations and directions for future research warrant attention. The regional and course-specific sample limits generalizability, and the cross-sectional design precludes causal inference; future research should adopt longitudinal or experimental approaches. Moreover, reliance on student self-reports constrains the scope of measurement. Subsequent studies could incorporate learning analytics, classroom observations, or qualitative methods to capture more nuanced interaction processes.

In sum, this study highlights the pivotal role of the "facilitating discourse → engagement → performance" pathway in online College English. Cognitive engagement functions as the primary driver of performance, while facilitating discourse emerges as the most effective trigger. Future reforms should therefore prioritize interaction, reconceptualize the instructor's role, and strengthen community building to enhance both the quality and equity of higher education..

References

Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. Journal of Asynchronous Learning Networks, 5(2). http://www.aln.org/alnweb/journal/jalnvol5issue2v2.Htm

Arbaugh, J. B., Cleveland-Innes, M., Diaz, S. R., Garrison, D. R., Ice, P., Richardson, J. C., & Swan, K. P. (2008). Developing a community of inquiry instrument: Testing a measure of the Community of Inquiry framework using a multi-institutional sample. The Internet and Higher Education, 11(3–4), 133–136. https://doi.org/10.1016/j.iheduc.2008.06.003

Balwant, P. T., Birdi, K., Stephan, U., & Topakas, A. (2018). The dimensionality of student engagement: A critical analysis. Studies in Higher Education, 44(12), 2324–2346. https://doi.org/10.1080/03075079.2018.1535903

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness-of-fit in the analysis of covariance structures. Psychological Bulletin, 88(3), 588–606. https://doi.org/10.1037/0033-2909.88.3.588

Boekaerts, M. (1993). Being concerned with well-being and with learning. Educational Psychologist, 28(2), 149–167. https://doi.org/10.1207/s15326985ep2802_4

Bond, M., Buntins, K., Bedenlier, S., Zawacki-Richter, O., & Kerres, M. (2020). Mapping research in student engagement and educational technology in higher education: A systematic evidence map. International Journal of Educational Technology in Higher Education, 17(1), 1–30. https://doi.org/10.1186/s41239-019-0176-8

Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: Perceptions, benefits, and challenges in higher education. International Journal of Educational Technology in Higher Education, 20, 43. https://doi.org/10.1186/s41239-023-00411-8

Chang, C. T., Tu, C. S., & Hajiyev, J. (2019). Integrating academic type of social media activity with perceived academic performance: A role of task-related and non-task-related compulsive Internet use. Computers & Education, 139, 157–172. https://doi.org/10.1016/j.compedu.2019.05.019

Christenson, S. L., Reschly, A. L., & Wylie, C. (Eds.). (2012). Handbook of research on student engagement. Springer. https://doi.org/10.1007/978-1-4614-2018-7

Cole, A. W., Lennon, L., & Weber, N. L. (2019). Student perceptions of online active learning practices and online learning climate predict online course engagement. Interactive Learning Environments, 30(4), 606–616. https://doi.org/10.1080/10494820.2019.1619593

Eddy-U, M. (2015). Motivation for participation or non-participation in group tasks: A dynamic systems model of task-situated willingness to communicate. System, 50, 43–55. https://doi.org/10.1016/j.system.2015.02.002

Ellis, R. (2015). Understanding second language acquisition (2nd ed.). Oxford University Press.

Fang, J., Tang, L., Yang, J., & Peng, M. (2019). Social interaction in MOOCs: The mediating effects of immersive experience and psychological needs satisfaction. Telematics and Informatics, 39, 75–91. https://doi.org/10.1016/j.tele.2019.01.006

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. https://doi.org/10.3102/00346543074001059

Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework: Review, issues, and future directions. The Internet and Higher Education, 10(3), 157–172. https://doi.org/10.1016/j.iheduc.2007.04.001

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. The Internet and Higher Education, 2(2–3), 87–105. https://doi.org/10.1016/S1096-7516(00)00016-6

Glazier, R. A., & Harris, H. S. (2021). Instructor presence and student satisfaction across modalities: Survey data on student preferences in online and on-campus courses. International Review of Research in Open and Distributed Learning, 22(3), 78–98. https://doi.org/10.19173/irrodl.v22i3.5375

Gómez-Rey, P., Barbera, E., & Fernández-Navarro, F. (2016). Measuring teachers and learners' perceptions of the quality of their online learning experience. Distance Education, 37(2), 146–163. https://doi.org/10.1080/01587919.2016.1184396

Gopal, R., Singh, V., & Aggarwal, A. (2021). Impact of online classes on the satisfaction and performance of students during the pandemic period of COVID-19. Education and Information Technologies, 26(6), 6923–6947. https://doi.org/10.1007/s10639-021-10523-1

Guo, J.-P., Lv, S., Wang, S.-C., Wei, S.-M., Guo, Y.-R., & Yang, L.-Y. (2023). Reciprocal modeling of university students' perceptions of the learning environment, engagement, and learning outcome: A longitudinal study. Learning and Instruction, 83, 101692. https://doi.org/10.1016/j.learninstruc.2022.101692

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Danks, N. P. (2021). Partial least squares structural equation modeling (PLS-SEM) using R: A workbook. Springer. https://doi.org/10.1007/978-3-030-80519-7

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hosen, M. A., Soliman, M., & Islam, A. K. M. N. (2021). Examining the impact of student engagement on academic performance in online learning: Evidence from a developing country. Interactive Learning Environments. Advance online publication. https://doi.org/10.1080/10494820.2021.1969954

Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. Psychological Methods, 3(4), 424–453. https://doi.org/10.1037/1082-989X.3.4.424

Junco, R., Heiberger, G., & Loken, E. (2010). The effect of Twitter on college student engagement and grades. Journal of Computer Assisted Learning, 27(2), 119–132. https://doi.org/10.1111/j.1365-2729.2010.00387.x

Law, K. M. Y., Geng, S., & Li, T. (2019). Student enrollment, motivation and learning performance in a blended learning environment: The mediating effects of social, teaching, and cognitive presence. Computers & Education, 136, 1–12. https://doi.org/10.1016/j.compedu.2019.03.007

Lomicka, L. (2006). Understanding the other: Intercultural exchange and CMC. In J. A. Belz & S. L. Thorne (Eds.), Internet-mediated intercultural foreign language education (pp. 211–236). Heinle & Heinle.

Martin, F., & Bolliger, D. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. Online Learning, 22(1), 205–222. https://doi.org/10.24059/olj.v22i1.1092

Meeuwisse, M., Severiens, S. E., & Born, M. P. (2010). Learning environment, interaction, sense of belonging and study success in ethnically diverse student groups. Research in Higher Education, 51(6), 528–545. https://doi.org/10.1007/s11162-010-9168-1

Nkhoma, M., Cong, H. P., Au, B., Lam, T., Richardson, J., Smith, R., & El-Den, J. (2015). Facebook as a tool for learning purposes: Analysis of the determinants leading to improved students' learning. Active Learning in Higher Education, 16(2), 87–101. https://doi.org/10.1177/1469787415574180

Ong, S. Y., & Quek, C. L. (2021). The use of gamification and technology-enhanced learning during the COVID-19 pandemic. Education and Information Technologies, 26(6), 6923–6947. https://doi.org/10.1007/s10639-021-10563-7

Owston, R., York, D., & Murtha, S. (2013). Student perceptions and achievement in a university blended learning strategic initiative. The Internet and Higher Education, 18, 38–46. https://doi.org/10.1016/j.iheduc.2012.12.003

Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. Annual Review of Applied Linguistics, 36, 50–72. https://doi.org/10.1017/S0267190515000094

Qureshi, M. A., Khaskheli, A., Qureshi, J. A., Raza, S. A., & Yousufi, S. Q. (2023). Factors affecting students' learning performance through collaborative learning and engagement. Interactive Learning Environments, 31(14), 2371–2391. https://doi.org/10.1080/10494820.2021.1884886

Reeve, J., Cheon, S. H., & Jang, H. (2020). How and why students make academic progress: Reconceptualizing the student engagement construct to increase its explanatory power. Contemporary Educational Psychology, 62, 101899. https://doi.org/10.1016/j.cedpsych.2020.101899

Reschly, A. L., & Christenson, S. L. (2012). Jingle, jangle, and conceptual haziness: Evolution and future directions of the engagement construct. In S. L. Christenson, A. L.

Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. Journal of Educational Psychology, 104(3), 700–712. https://doi.org/10.1037/a0027268

Richardson, J. C., Besser, E., Koehler, A., Lim, J., & Strait, M. (2016). Instructors' perceptions of instructor presence in online learning environments. International Review of Research in Open and Distributed Learning, 17(4), 82–104. https://doi.org/10.19173/irrodl.v17i4.2330

Rotar, O. (2020). Teacher support and student engagement in online learning environments. Journal of E-Learning and Knowledge Society, 16(2), 39–48. https://doi.org/10.20368/1971-8829/1135117

Shah, M., & Barkas, L. (2018). Analysing the impact of student attendance and engagement on academic performance. International Journal of Educational Management, 32(6), 1099–1112. https://doi.org/10.1108/IJEM-05-2017-0129

Stone, C. (2017). Opportunity through online learning: Improving student access, participation and success in higher education. National Centre for Student Equity in Higher Education. https://www.ncsehe.edu.au/publications/opportunity-online-learning

Sun, J. C. Y., & Rueda, R. (2012). Situational interest, computer self-efficacy and self-regulation: Their impact on student engagement in distance education. British Journal of Educational Technology, 43(2), 191–204. https://doi.org/10.1111/j.1467-8535.2010.01157.x

Sun, Y., Guo, Y., & Zhao, Y. (2020). Understanding the determinants of learner engagement in MOOCs: An adaptive structuration perspective. Computers & Education, 157, 103963. https://doi.org/10.1016/j.compedu.2020.103963

Vargas-Murillo, A. R., de la Asuncion, I. N. M., & de Jesús Guevara-Soto, F. (2023). Challenges and opportunities of AI-assisted learning: A systematic literature review on the impact of ChatGPT usage in higher education. International Journal of Learning, Teaching and Educational Research, 22(7), 122–135. https://doi.org/10.26803/ijlter.22.7.7

Wang, J., Tigelaar, D. E., Luo, J., & Admiraal, W. (2022). Teacher beliefs, classroom process quality, and student engagement in the smart classroom learning environment: A multilevel analysis. Computers & Education, 183, 104501. https://doi.org/10.1016/j.compedu.2022.104501

Yu, A. Y., Tian, S. W., Vogel, D., & Kwok, R. C.-W. (2010). Can learning be virtually boosted? An investigation of online social networking impacts. Computers & Education, 55(4), 1494–1503. https://doi.org/10.1016/j.compedu.2010.06.015