**High-Impact Community of Inquiry Articles: Analysis and Implications for Online Teaching**

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**Abstract**
The Community of Inquiry (CoI) framework has become a dominant model for online and blended learning research, with certain publications emerging as high-impact touchstones. This study identifies the top-cited CoI and teaching presence articles and analyzes the characteristics that make them influential. Using a dataset of seminal CoI publications—including citation counts, abstracts, key takeaways, and practical applications—we examine shared themes, authorship patterns, methodological approaches, and practical relevance among these works. The results reveal that the most impactful CoI studies often establish foundational concepts, introduce reliable measurement instruments, or demonstrate strong links between CoI elements and student outcomes. Notably, teaching presence—the instructor’s design, facilitation, and direction of learning—features prominently in many high-impact articles, underlining the vital role of the online instructor. We conclude that articles with clear theoretical contributions, robust evidence, and direct implications for practice tend to garner the greatest influence in CoI scholarship. Based on these findings, recommendations are provided for both educators and researchers, aimed at enhancing online teaching practice and informing future inquiry.

**Key Words:** Community of Inquiry (COI), Teaching Presence, Online Teaching, Hybrid Teaching

**Introduction**
In recent decades, the Community of Inquiry (CoI) framework has framed much of the discourse on effective online teaching and learning. First introduced by Garrison, Anderson, and Archer (1999), CoI posits that meaningful online learning emerges from the interplay of three presences: cognitive, social, and teaching presence (Figure 1).

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Figure 1 About Here

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Cognitive presence represents learners’ ability to construct and confirm meaning through reflection and discourse; social presence is the ability of participants to project themselves socially and emotionally; and teaching presence is the design and facilitation of the learning experience to achieve educational outcomes (Anderson, Rourke, Garrison, & Archer, 2001). Together, these presences form a collaborative learning environment conducive to deep inquiry (Garrison et al., 1999). Over 20 years later, the CoI model remains the most widely cited framework for online course design and research, having been referenced in thousands of studies across disciplines (Garrison, Anderson, & Archer, 2010).

Amid this expansive literature, a handful of articles stand out as high-impact contributions that have shaped subsequent CoI research and practice. These works are extensively cited and serve as cornerstones for both scholars and practitioners. Identifying these influential articles and understanding what makes them impactful can provide valuable insights. For researchers, it illuminates the types of studies and characteristics that advance the field; for educators—especially those in higher education online programs—high-impact CoI articles offer evidence-based guidance for enhancing teaching strategy and developing an effective online teaching identity.

Although the CoI framework comprises three interrelated components—cognitive, social, and teaching presence—our analysis reveals that teaching presence has emerged as the most frequently and robustly explored element in high-impact literature. While cognitive and social presence are essential for building effective online learning communities, teaching presence is often viewed as the driving force that shapes and supports both. Influential studies have repeatedly focused on how an instructor’s role—in terms of course design, facilitation, and direct instruction—directly impacts student learning outcomes by enhancing both cognitive and social dimensions (Anderson et al., 2001; Shea & Bidjerano, 2009). Therefore, this paper concentrates on the top-ranked teaching presence articles. This focus is justified by its prominence in our dataset and by its clear, actionable implications for online teaching and faculty development.

**Methodology**

*Data Collection:*
A dataset of the top-cited CoI and teaching presence articles was compiled using published bibliometric and literature review findings. The dataset includes each article’s citation count, abstract, key takeaways, and notes on practical applications. These articles primarily encompass the original CoI theoretical papers (e.g., Garrison, Anderson, & Archer, 1999; Garrison, Anderson, & Archer, 2010), subsequent empirical studies validating the framework (Arbaugh et al., 2008; Garrison, Cleveland-Innes, & Fung, 2010), and works focusing on one or more of the CoI presences—especially teaching presence (Anderson et al., 2001; Shea & Bidjerano, 2009).

*Analysis:*
A qualitative content analysis was conducted to identify patterns and common characteristics among the top-cited articles. Abstracts and summaries were reviewed to note each article’s primary theme (e.g., theoretical model development, instrument validation, or empirical test of CoI relationships) and its conclusions. Recurring topics such as the emphasis on teaching presence, methodological approaches, and practical implications for online teaching were coded. Authorship patterns and publication venues were also examined to observe collaboration trends. These observations were synthesized to determine which traits contribute most to an article’s impact in the CoI literature.

**Additional Literature**
While our focus is on teaching presence, the CoI literature is extensive and includes important studies on cognitive and social presence as well. For instance, Akyol and Garrison (2011a, 2011b) have examined metacognition and cognitive presence, while Kozan and Richardson (2014) discuss the interrelationships among social, teaching, and cognitive presence. Other studies extend the framework into diverse educational contexts, such as mathematics (Goos, 2004), blended learning (Law, Geng, & Li, 2019), and video lectures (Scagnoli, Choo, & Tian, 2017). Furthermore, research on innovative instructional approaches—such as gamified education (Mahmud, Husnin, & Tuan Soh, 2020), MOOC engagement (Watson et al., 2016; Jung & Lee, 2018), and meta-analyses of teaching presence (Caskurlu, Maeda, Richardson, & Lv, 2020)—complements the core CoI studies. Additional perspectives on instructor identity and professional image have been offered by Avery and Greenwald (2023) and by marketing scholars Kotler (2017a, 2017b) and Hicks, Gray, and Bond (2019). Finally, several studies have focused on instructional effort and network analysis within online learning (Shea, Hayes, & Vickers, 2010a; Shea, Hayes, & Vickers et al., 2010b; Shea et al., 2012). Collectively, these works provide a comprehensive view of the multifaceted nature of the CoI framework.

**Results**

*Profile of Top-Cited CoI Articles:*
The set of highest-impact CoI articles is headlined by the seminal work of Garrison, Anderson, and Archer (1999), which introduced the CoI framework. With thousands of citations to date, this foundational piece provided both the conceptual model of cognitive, social, and teaching presence and a methodology for content analysis in online discussions. Subsequent works by these authors (Garrison, Anderson, & Archer, 2010) and others have built on this framework, often emphasizing teaching presence as crucial in bridging theory with practice (Anderson et al., 2001).

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Table 1 About Here

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A notable cluster of high-impact studies emerged in the late 2000s, reflecting a shift toward empirical validation and expansion of the CoI framework. Arbaugh et al. (2008), for example, developed and validated the CoI Survey instrument, providing a reliable tool for measuring social and cognitive presence. Their factor analysis revealed that teaching presence could be conceptually divided into aspects related to course design and in-course instructional behavior. This work has become a standard reference for subsequent studies.

Other influential articles have explored the relationships among CoI presences and their effects on student outcomes. Shea and Bidjerano (2009) demonstrated through structural equation modeling that teaching presence and social presence account for a significant portion of the variance in cognitive presence, underscoring the instructor’s role in online learning. Similarly, Garrison, Cleveland-Innes, and Fung (2010) provided evidence that teaching presence not only directly affects student learning outcomes but also supports social presence.

The analysis of authorship patterns reveals a strong collaborative network, with core scholars such as Garrison, Anderson, Archer, Arbaugh, and Shea frequently co-authoring influential studies. This network effect, combined with publication in reputable journals such as *The Internet and Higher Education*, has helped disseminate and reinforce the CoI framework across both research and practice.

*Content Themes and Practical Utility:*
High-impact CoI articles tend to blend theoretical significance with practical relevance. They frequently address questions central to online education—such as effective measurement of online learning communities and the role of instructor behavior in fostering deep learning. In addition, these articles often provide direct implications for practice, offering educators evidence-based strategies to improve online teaching. For example, the emphasis on teaching presence in studies by Anderson et al. (2001) and Shea and Bidjerano (2009) has influenced online teaching practices by highlighting the need for active course design and facilitation.

**Discussion**
The analysis of the top-cited CoI articles reveals several key factors that contribute to their impact:

* **Foundational Contributions:**
Articles that introduce or significantly refine a theoretical model tend to have lasting influence. The original CoI paper (Garrison et al., 1999) set the stage by providing a comprehensive framework that subsequent research could build upon.
* **Empirical Rigor:**
High-impact studies employ robust methodologies—ranging from qualitative content analyses to large-scale quantitative surveys. Empirical validation (e.g., Arbaugh et al., 2008; Shea & Bidjerano, 2009) ensures that the CoI framework is grounded in data, increasing its credibility and utility.
* **Practical Relevance:**
Many influential articles explicitly discuss the implications for teaching practice. By detailing actionable strategies for enhancing teaching presence, these works appeal to both researchers and practitioners, bridging the gap between theory and practice.
* **Collaborative Authorship and Network Effects:**
The concentration of influential research among a core group of scholars has created a cumulative body of work that is widely cited and continually built upon. This collaborative network not only reinforces the foundational models but also encourages ongoing innovation in CoI research.
* **Enduring Relevance:**
The timing of these publications coincides with significant shifts in higher education toward online learning. Their focus on fundamental aspects of learning and teaching ensures that their insights remain applicable despite rapid technological changes.

For educators, these findings offer practical guidance for building an effective online teaching presence. By aligning their instructional practices with the principles established in high-impact CoI research, instructors can enhance student engagement and learning outcomes. For researchers, the analysis suggests fruitful areas for future study, such as further refinement of measurement tools and the exploration of new variables (e.g., learner presence) within the CoI framework.

**Conclusion**
The analysis of top-cited CoI articles indicates that scholarly impact in this field is driven by clear theoretical contributions, robust empirical evidence, and a focus on practical applications. Foundational works such as those by Garrison, Anderson, and Archer (1999) and subsequent studies have not only defined the CoI framework but also provided tools and insights that continue to shape online education. Teaching presence, in particular, emerges as a critical element that both predicts student outcomes and informs effective online teaching practices.

For educators, the evidence suggests that investing in strategies to strengthen teaching presence—through thoughtful course design, active facilitation, and clear communication—can significantly enhance the online learning experience. For researchers, the findings underscore the importance of developing rigorous, practice-oriented studies that build on the established CoI framework while exploring new contexts and variables. Ultimately, the enduring influence of high-impact CoI research demonstrates that a well-articulated theoretical model, combined with actionable insights, can drive both academic scholarship and practical innovation in online education.

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Figure 1: Community of Inquiry



Source: Modified from Garrison, Anderson, and Archer (1999)

**Table 1: Top Cited COI and Teaching Presence Articles (See Excel Spreadsheet)**