Designing an educational experience that fosters higher-order thinking and learning is a significant challenge in a campus setting, and more so in an online setting. The constantly changing nature of educational technology adds even more complexity to the situation and educational research struggles to provide relevant recommendations and best practices. Therefore, this thesis provides theoretical, methodological, and practical contributions to the research community in five areas : (1) The addition of _emotional presence_ to the Community of Inquiry (CoI) framework holds the potential to enrich social presence. A teacher seeking to enhance their educational design can benefit from a deliberate focus on emotional aspects. This extension offers researchers fresh perspectives and advances understanding in this area. However, there are valid arguments against expanding the framework, as it may introduce unnecessary complexity. (2) Digital technologies play a crucial role in designing effective online educational settings to accommodate the various presences within the CoI. A review of bring-your-own-device (BYOD) applications in higher education identified several _tools that can support individual CoI presences_. However, while technological advancements have addressed numerous issues, challenges persist. (3) The CoI framework is rooted in principles of _active learning_, which are vital for fostering social presence and cognitive presence in online settings. Evaluating the implementation of active learning classrooms (ALC) revealed intriguing connections between campus-based and online teaching. However, assessing student activity in online environments can be challenging. Visualizations of Google Docs revision history prove valuable for diagnosing collaborative patterns and identifying low collaboration and interaction between group participants, which otherwise could hinder higher-order thinking and critical discourse. (4) The rapid growth of online educational settings in higher education has generated an abundance of student data for _learning analytics_. Unfortunately, _ethical considerations_ have not received adequate attention. Key ethical areas in learning analytics are discussed. (5) The _methodological contribution_ lies in the design that utilizes a pragmatist worldview as the guiding philosophy of science for a mixed methods approach, coupled with a pragmatism philosophy of education, that in turn, guides the theoretical and educational stances.

These results have implications for higher education teachers striving to develop their educational practice.