#### CHAPTER TWO

### Exploring Incoming Honors Students' Beliefs About Online Courses

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#### INTRODUCTION

T echnological advances and recent public health concerns have given dramatic rise to the number of online courses offered in educational settings. Despite this movement toward virtual education, a strong penchant for face-to-face learning persists among college students. A 2019 Educause Study of Undergraduate Students and Information Technology survey of 53,475 students from 160 institutions in seven countries indicated 70 percent of undergraduate college students preferred face-to-face courses (Gierdowski). This trend presented locally as well in multiple distributions of the Student Experience in the Research University (SERU) at one institution, with the preference for face-to-face learning more pronounced for honors students. In the 2019 distribution, 76 percent of honors students preferred face-to-face

courses over their online counterparts while 59 percent of non-honors students expressed this preference. The existence of this phenomenon begs for an understanding of students' beliefs about online courses and how in a world where online education has become prevalent, honors educators can create online courses that best support learning and engagement.

High-achieving honors students exhibit many of the behaviors that positively correlate with successful online learners: they are often highly motivated, self-directed, self-disciplined, independent learners who read and write well and are technologically capable (Barbour 17). At the start of online education, a significant portion of the courses targeted high-achieving, advanced placement students (Johnston and Barbour 16), and today, a substantial portion of online K-12 learners are still high achieving. Little is known, however, about these students' beliefs about online learning, particularly as they transition from high school to rigorous academic programs in college. Although numerous studies have examined online courses with a focus on academic performance, this metric is flawed for honors students who persistently exhibit academic success. Exploring beliefs about online courses with honors students provides the opportunity to remove the question of academic success from the equation and gain a deeper understanding of the educational experiences that shape students' beliefs about learning in this environment.

Understanding the dynamics of epistemologies, conceptions, and beliefs related to online learning is complex and challenging. Beliefs are an important source of motivation for students' educational choices; they influence perceptions and attitudes that, in turn, affect behaviors. The terms "perceptions" and "beliefs" have been used, sometimes interchangeably, in educational research to explore online courses, but differences exist: ultimately beliefs shape perception. Pajares contends, "All human perception is influenced by the totality of this generic knowledge structure—schemata, constructs, information, beliefs but the structure itself is an unreliable guide to the nature of reality because beliefs influence how individuals characterize phenomena, make sense of the world, and estimate covariation" (310). The author goes on to argue that beliefs are deeply personal to each individual and unaffected by persuasion; they can be formed through experience, events, and sometimes chance. Asking honors students about online courses and their strong convictions provides evidence that what they think about online courses can be clearly defined as a belief.

This essay highlights the findings of a 2018 longitudinal mixedmethod explanatory sequential design study conducted at a large research institution with this purpose in mind. The study explored incoming honors students' beliefs about online courses and how beliefs changed after the first semester of college coursework. Beliefs about online courses were deconstructed using the Community of Inquiry framework (Garrison, Anderson, and Archer 88), a questionnaire aligned with this theory (Arbaugh, Cleveland-Innes, Diaz, Garrison, Ice, Richardson, and Swan 135), and semi-structured interviews. The findings, highlighted in this essay, provide valuable insight into design and instructional strategies that support online learning and engagement for honors students.

#### **BUILDING A COMMUNITY OF INQUIRY**

The complex nature of online learning and the educational and transactional issues that occur therein make understanding from a theoretical lens effective online course design and instruction a challenging area of exploration. A few theories about online courses have emerged in recent years; currently, the most comprehensive conceptual framework designed to study online learning effectiveness in higher education is the Community of Inquiry (Garrison, Anderson, and Archer 88).

The Community of Inquiry is one of the leading models guiding research and practice in online and blended learning. It offers a methodological solution to examine online learning and a means to monitor knowledge construction in a collaborative online learning environment. The structure of the framework has been confirmed through factor analysis and studied extensively over the last two decades. The model contends that educational experiences occur at the intersection of three unique but interdependent elements: Cognitive Presence, Teaching Presence, and Social Presence (Figure 1). The interdependence of the elements is essential to their effectiveness in an online learning context and their ability to impact the quality of the educational experience and learning outcomes in a university setting. Each element is broken down into descriptive categories and operationalized through observable indicators.

#### Spear and Antonenko

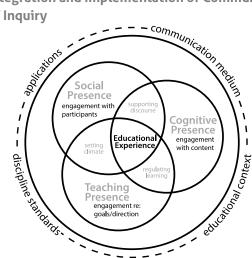


Figure 1. Integration and Implementation of Community of Inquiry

Social Presence is the students' ability to project and establish meaningful personal and purposeful relationships within the context of the course. Review of the Social Presence in conjunction with Cognitive Presence has resulted in a revised definition focused on, according to Cleveland-Innes, Garrison, and Vaughan, "the ability of participants to identify with the group or course of study, communicate purposefully in a trusting environment, and develop personal and affective relationships progressively by way of protecting their individual personalities" (69). Open communication, group cohesion, and personal/affective projection define a successful Social Presence and describe the way students feel effectively connected. Social Presence can vary based on the types of learning activities present in the course and the opportunities available for students to benefit from the perspectives of others; it requires the creation of a climate that supports probing questions, skepticism, and expressing and contributing to ideas.

Teaching Presence encompasses the methods employed to construct a quality online educational experience. It represents the structure of a course and its leadership, which are two components that play a critical role in the interaction and discourse needed for higher-order learning. Teaching Presence has proven to be a critical element for realizing intended learning outcomes. It can be broken

<sup>(</sup>Garrison, Anderson, and Archer, 2000)

down into three categories: (1) design and organization; (2) facilitation of learning, including discourse; and (3) direct instruction in an online course. Sample indicators associated with the Teaching Presence may include curriculum design and methods and creating opportunities for constructive and collaborative exchanges. Evidence suggests that Teaching Presence shapes the educational experiences that create space for Cognitive Presence.

Cognitive Presence is associated with higher-order acquisition and application of knowledge. It derives from Dewey's reflective thinking model, which contends critical thinking and discourse deepen the meaning of our experiences and the learning that occurs through this process. The phases include (1) a triggering event, where a problem or issue in need of further inquiry is presented by the instructor; (2) an exploration phase, where students discuss the issue and develop meaning through critical thinking, discussion, and discourse; (3) an integration phase in which students construct meaning; and finally, (4) a resolution phase, where newly gained knowledge is applied and tested. Of the three elements, the definition of Cognitive Presence has changed the least over the years.

With decades of research to support its validity, the Community of Inquiry is a valuable framework in the design, creation, and assessment of online learning and instructional design strategies. It offers a concrete method to understand online education and strategies for supporting critical thinking and higher-order learning. The remainder of this essay will discuss the key findings of a study designed using the Community of Inquiry framework to explore honors students' beliefs about online courses and how beliefs about online courses evolved as students transitioned from high school to college. Implications and specific strategies for creating a successful community of inquiry in an online course designed for honors students will be discussed.

#### ONLINE COURSE DESIGN AND INSTRUCTION FOR HONORS STUDENTS

A recent study conducted with honors students sought to explore incoming students' beliefs about online courses. The findings offer a rich understanding of techniques for building and teaching online courses that support learning and engagement for honors students. The recommendations provided in the remainder of this essay are based heavily on the findings of this study as well as on existing literature surrounding online learning and the Community of Inquiry framework. Each section contains a discussion of the key research findings and recommendations to be incorporated into practice. The examples are derived from various data points: pre-survey and post-survey Community of Inquiry questionnaire and open-ended questions, interviews conducted using maximal variation sampling, and the integrated data.

#### THE IMPORTANCE OF TEACHING PRESENCE

Numerous studies have determined the importance of Teaching Presence in an educational community of inquiry (Huang et al. 1882; Akyol and Garrison 65; Gallego-Arrufata et al. 81). During every phase of this study, Teaching Presence played a major role in influencing honors students' beliefs about online courses. Survey results showed that students' beliefs about Teaching Presence significantly improved from high school to college. Statistically significant improvements were noted in two Teaching Presence categories: (1) Design and Organization, and (2) Facilitation. Qualitative data and interviews provided evidence of the essential role instructors play in student engagement and active learning in online courses. The honors students in this study articulated clear discontent with the lack of instructor presence and supported learning in high school online courses; many felt online courses were "self-taught" and "impersonal," with one student stating, "Instruction of course material was highly automated with minimal teacher input. Shortcomings of the automation would leave me feeling frustrated, I would often have to go outside the course for a better understanding."

The importance of course instructors providing intellectual and scholarly leadership was a consistent theme. The relationship between Teaching Presence and Cognitive Presence directly corresponded with honors students' beliefs about online courses. Many believed the lack of instructor visibility directly impacted the learning that took place in the classroom. In regard to high school online courses, one student argued, "Online courses seemed like a chore to everyone and nobody expected to really learn with any sort of quality instruction. To some extent it was like reading a poorly formatted textbook with the occasional Wikihow." Another stated, "Online courses don't allow opportunities for learning unless the student is self-motivated and interested in learning all the course material on their own. The teachers through an online course most times are practically useless at teaching concepts to each student because it is physically impossible in an online setting." Students desired a personal connection with instructors; one student noted: "I appreciate when the instructor records their lectures so that you can actually see the person talking to you. Because even though they aren't there, it feels more like you know that professor and they seem more approachable." Others talked about how instructor involvement in learning, including emails and instructors asking questions to clarify challenging topics, allowed the opportunity for students to feel comfortable asking questions in an online class. Students valued the presence of the instructor, particularly in the form of lectures, which provided an opportunity to hear from an expert who could expand on the topic in a more meaningful and memorable manner.

Beliefs about online courses were more positive when instructor involvement was pronounced and there was evidence of instructor support for learning through regular and personal connection. Regular communication via email, course announcements and reminders, and virtual connection points outside of class hours proved beneficial. Personal connection was fostered through instructor visibility and the use of webcams and videos in online courses. In asynchronous courses, students appreciated seeing the instructor and not just slides or material on pre-recorded videos. Furthermore, expressed concern for students' ability to learn and personal connections were formed when instructors were responsive to requests, were accessible, and provided timely feedback on assignments.

#### Implications for Practice

**Instructor Visibility.** Being able to see and hear the instructor offered a personal connection that proved valuable to overall learning and course engagement. The lack of a physical instructor left many students feeling as if a course remained impersonal, automated, and unsupported. Courses offering regular, live, or recorded lectures were preferred over self-guided readings and content that engage learners in independent exploration. Students felt a deeper connection with

instructors in courses where the content was delivered by the instructor through unscripted lectures that offered dynamic anecdotes, real-world context, and an opportunity for memorable storytelling.

**Regular Communication.** A high degree of instructor communication was essential for learning, building relationships, and forming community within an online course. Students valued meaningful communication in the form of timely and frequent feedback on assignments, regular email communication and course announcements, instructor communication outside of content discussions, and instructor responsiveness. Communication that offered encouragement, direction, and opportunities for critical thinking were beneficial in support of meaning-making. Students expressed appreciation for instructors who were highly interactive and present in the course (e.g., sending out weekly announcements, check-in emails with individual students, engagement in discussion boards).

**Course Design.** Clear communication was also expressed as a need in relation to online course design and navigation. Students appreciated when course requirements were well articulated and activities and supplemental resources were explained in a way that emphasized their support for learning and course objectives. For many, intentional course design reinforced the purpose of each assignment and how it contributed to overall learning. A clear and shared understanding of the course goals enhanced students' willingness and ability to cognitively engage. Reminders of due dates and exams provided directly by the instructor or the Learning Management System positively impacted beliefs.

**Course Content.** Students desired the opportunity to engage in higherorder thinking and learning and valued the role instructors played in helping them accomplish this goal. Critical thinking, higher-order reflection, and discourse were important, and honors students appreciated when instructors incorporated learning-focused activities and supplemental resources where they could achieve resolution into online courses. The inclusion of media (e.g., articles, external videos, or links) without clear context or connection to the course learning objectives proved a source of frustration and negatively impacted engagement and learning. The relevance of activities and external material should be discussed by the instructor or among the course participants to build buy-in.

#### LEARNER CHARACTERISTICS AND PREFERENCES

Historically, a strong argument has surrounded the role gender plays in student learning and development. Based on the findings of this study, learner characteristics, specifically gender, impacted the way honors students engaged in online courses and the level of support needed in this learning environment. This study provided evidence that gender was a significant between-subjects factor for first-year high-achieving students' beliefs about online courses, particularly relative to Teaching Presence. Among this population, males consistently reported more positive beliefs about the role the instructor played in their online courses than females.

Females placed more importance on relationships and instructor interaction in online courses than males. Females desired more guidance, direct support, and interaction from course instructors to facilitate learning and engagement in online courses. Males expressed a difference in instructional needs as they pertained to social engagement and learning supported by online course instructors; they viewed course materials provided by the instructor as tools for guiding the class toward an understanding of the topic and engaging students. Females did not equate engagement with course content and materials with teaching. For instance, one female student stated, "There would be 10 long articles or websites and one small assignment to follow up all of it. [If the instructor said] make sure you pay special attention to these articles or sections of these articles. I think it would be a lot more encouraging with figuring out what I was actually supposed to be learning." In contrast, a male said, "I would go through videos again or through the homework to see what I could have done better. And just the fact that I was working through different things, I learned a good amount." Males were more willing to leverage external resources and seek outside answers to unknowns instead of asking for help from instructors (Gunn, McSporran, Macleod, and French 22).

#### **Implications for Practice**

**Resources.** Students valued the inclusion of resources that supported learning and meaningful connections; incorporating a variety of avenues for support into online courses without students expressing this need was appreciated. Students noticed and appreciated when instructors accounted for and supported unique learning styles, engagement preferences, and capabilities. Supplemental activities and resources that allow learners to build knowledge with the support of the instructor proved to be beneficial to different populations of learners. Examples include a discussion of the reading that highlights important points or a class demonstration of a practice problem.

**Connection.** While much of the instruction provided in online courses, particularly asynchronous courses, is driven by relatively passive and impersonal pedagogical approaches (e.g., graded assignments driven by readings), learning is often influenced by interpersonal exchanges and the discursive negotiation of knowledge. Offering multiple avenues for connecting with course instructors and regular communication was appreciated and aided in overall learning. Females valued relationships and interaction in online courses and appreciate direct communication with the course instructor. Virtual office hours or providing an office phone number to speak directly with the instructor created positive opportunities for connection and support. Opportunities for one-onone support through video conferencing or virtual meeting check-ins were also noted as valued experiences. Students appreciated when instructors initiated connection; many feared how they would be perceived if their first interaction with the instructor was a question about the course content. Instructors who created virtual classroom environments where questions were encouraged made students, particularly females, more comfortable reaching out for help.

#### SOCIAL PRESENCE AND RETENTION IN ONLINE LEARNING

Education as a social construct is not a new idea, nor is the idea that social exchange contributes to critical thinking and inquiry. A recent meta-analysis (Richardson et al. 402) confirmed that student satisfaction and perceived learning in online courses were strongly related to Social Presence. The findings of this study also argue for the importance of Social Presence in online learning in the context of course discussions and peer acknowledgment. Additionally, findings indicate the more online courses honors students take at the college level, the more likely they are to appreciate Social Presence. These results were consistent with existing literature (Boston et al. 67).

Statistically, both pre-survey and post-survey responses indicated that Social Presence played a significant role in first-year honors students' intent to enroll in future online courses. Pre-survey agreement with the statement, "I felt comfortable participating in the course discussions," strongly predicted intent to enroll in future online courses. In the post-survey, students who expressed agreement with the statement, "I felt that my point of view was acknowledged by other course participants," were almost seven times more likely to intend to enroll in future online courses. Acknowledgement from their peers was expressed in several interactive course elements including real-time discussions, discussion boards with debatable topics that take place in a comfortable environment, games, icebreakers, semester/term-long group projects, and informal learning environments. Many of the students expressed value in the interaction, support, and learning that took place through GroupMe.

Many honors students expressed boredom and dissatisfaction with "checkpoint" assignments intended to engage them in learning through social exchange, unmonitored peer discussions with limited learning objectives serving as a prominent example. Students described online course discussion boards as superficial, especially when the instructor was not part of the conversation. One student stated, "I've never been a part of a discussion where I thought—wow, we're really talking about something. That's one of the things I hate about discussions. They feel very robotic and like busywork. We're supposed to communicate and share ideas, but most of the time we're just trying to finish our posts by the end of the night."

#### **Implications for Practice**

**Online Discussion Boards.** Students expressed disdain for the artificial exchanges that occur in online discussion boards and the lack of thought and effort that go into completing these sorts of assignments.

Anchoring text-based discussion prompts around debatable questions and shared artifacts that fostered the negotiation of knowledge proved to be more effective than just posing a question about the reading and requiring students to respond to their peers. Consistent and facilitated instructor interactions in discussion boards were described as a means for supporting engagement and learning.

**Voice.** Students benefited from the opportunity to have a voice in the virtual classroom. Providing activities and assignments that socially engaged them in discourse, discussion, and critical thinking was valued. Providing intellectually stimulating opportunities for information sharing or the facilitation of a course discussion was appreciated. Examples included team projects that spanned the semester and allowed students to build deeper peer connections and check-ins where instructors would ask thought-provoking review questions at the start of each class session.

**Informal Classrooms.** Many honors students expressed an appreciation for the social channels used for support and knowledge acquisition when they were established and maintained by their peers. GroupMe, in particular, was noted on several occasions as a valuable resource, with many students feeling more comfortable checking in informally with peers than with the course instructor if they did not understand a concept or assignment. While instructor creation of these connection points or instructor interference in the discussion would likely change the dynamic, instructors may consider unintrusive strategies for encouraging and supporting the creation of these informal learning spaces.

**Open and Inclusive Environment.** Honors students needed to feel safe and confident among their peers to ask challenging questions and engage cognitively with the course content to confer meaning. Students desired the opportunity to ask probing questions, offer skepticism, and express and contribute to ideas, but they required meaningful connections (student-to-student, student-to-instructor) before they felt comfortable enough to engage. Honors students craved the opportunity to be acknowledged and valued by their peers. One way to achieve this in online courses was through small group discussions in place of an

entire class discussion. Finding ways to engage students from the start of the course, be it through introductions, breakout rooms, learningbased games, or dialogue relevant to course content, helped to create a more open and inclusive environment and, thus, more positive beliefs.

#### CREATING ENVIRONMENTS THAT FOSTER KNOWLEDGE ACQUISITION AND LEARNING

Post-survey (after the first semester of college coursework) responses showed improvement on all Community of Inquiry elements—Teaching Presence, Social Presence, and Cognitive Presence. This finding indicates honors students' beliefs about the quality of the educational experience afforded in online courses improved from high school. Improved beliefs are attributable to the quality of the educational experiences afforded in online courses at the university level and their ability to support knowledge acquisition and learning. One student argued online courses at the college level offered more of an academic experience: "I believe in their capacity for academic information a little more now just because they feel a bit less watered down now that I'm at [college]. The course materials [are] elevated compared to the cartoons and videos that they would show [in high school], and I appreciated that a lot [sic]."

The consistent rise in scores across Teaching Presence, Social Presence, and Cognitive Presence from pre-survey to post-survey supports the theory that these elements are independent but highly interdependent in creating a community of inquiry. The connection between the three elements was similarly pronounced in the interview phase with students talking about how their interactions with instructors and peers created an environment that supported learning and knowledge acquisition.

#### **Implications for Practice**

**Intellectual Challenge.** Honors students desired the opportunity to engage in constructive and collaborative activities that promoted knowledge acquisition in online courses. Critical thinking, higherorder reflection, and discourse were essential. High-achieving students appreciated when instructors incorporated learning-focused activities and supplemental resources that promoted "actually learning." Assessments that required little thought or understanding of the material (e.g., quiz questions tied directly to answers in the text, unmonitored discussion boards) left students feeling frustrated and as if the learning was transient and superficial.

**Shared Resolution.** Students valued online course assignments that provoked higher-order thinking and provided an opportunity to achieve resolution within the virtual classroom setting. An example would be incorporating the opportunity for students to lead an online course discussion; this activity gives students voice and strengthens relationships and overall learning.

#### CONCLUSION

The findings of this study on beliefs about online courses conducted with incoming honors students identify Teaching Presence as the factor with the greatest influence on beliefs about online courses. Gender differences were found, with females reporting higher expectations of online courses, particularly Teaching Presence. Additionally, this study found a significant link between Social Presence and online course retention: implementing meaningful discussions and fulfilling students' desire to feel acknowledged by their peers were drivers of future intent to enroll in online classes. Overall, beliefs about online courses improved from when students entered college to the end of their first semester: they felt the online collegiate environment better fostered learning and knowledge acquisition. Evidence suggests that honors students' beliefs about online courses can be influenced by the quality of the educational experiences afforded in online courses. Providing honors students with high-quality online educational experiences through intentional design and instruction built to support a meaningful community of inquiry has the potential to create positive beliefs about online learning.

#### WORKS CITED

- Akyol, Zehra, and D. Randy Garrison. "The Development of a Community of Inquiry Over Time in an Online Course: Understanding the Progression and Integration of Social, Cognitive and Teaching Presence." *Online Learning*, vol. 12, no. 3, 2008, pp. 3–22.
- Arbaugh, J. B., et al. "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*, vol. 11, nos. 3-4, 2008, pp. 133–36.
- Barbour, Michael K. "Today's Student and Virtual Schooling: The Reality, the Challenges, the Promise." *Journal of Distance Learning*, vol. 13, no 1, 2009, pp. 5–25.
- Boston, Wally, et al. "An Exploration of the Relationship Between Indicators of the Community of Inquiry Framework and Retention in Online Programs." *Journal of Asynchronous Learning Networks*, vol. 13, no. 3, 2009, pp. 67–83.
- Cleveland-Innes, Martha, et al. *Handbook of Distance Education*, edited by Michael Grahame Moore and William C. Diehl, 4th ed., Routledge, 2019, pp. 67–78.
- Dewey, John. How We Think. Heath, 1933.
- Gallego-Arrufata, Maria-Jesus, et al. "Online Distributed Leadership: A Content Analysis of Interaction and Teacher Reflections on Computer-Supported Learning." *Technology, Pedagogy and Education*, vol. 24, no. 1, 2015, pp. 81–99.
- Garrison, D. Randy. "Online Community of Inquiry Review: Social, Cognitive, and Teaching Presence Issues." *Journal of Asynchronous Learning Networks*, vol. 11, no.1, 2007, pp. 61–72.
- ---. "Social Presence and Interdependence." *The Community of Inquiry*, Oct. 2017, thecommunityofinquiry.org/editorial6.
- Garrison, D. Randy, et al. "Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education Model." *The Internet and Higher Education*, vol. 2, nos. 2–3, 2000, pp. 87–105.
- Gierdowski, Dana C. "ECAR Study of Undergraduate Students and Information Technology, 2019." *Educause Center for Analysis and Research*, Oct. 2019, library.educause.edu/-/media/files/library/2019/10/studentstudy2019.pdf.
- Gunn, Cathy, et al. "Dominant or Different? Gender Issues in Computer Supported Learning." *Journal of Asynchronous Learning Networks*, vol. 7, no. 1, 2003, pp. 14–30.

#### Spear and Antonenko

- Huang, Kun, et al. "The Role of Learners' Epistemic Beliefs in an Online Community of Inquiry." *British Journal of Educational Technology*, vol. 50, no. 4, 2019, pp. 1882–985.
- Johnston, Sharon, and Michael K. Barbour. "Measuring Success: Examining Achievement and Perceptions of Online Advanced Placement Students." *American Journal of Distance Education*, vol. 27, no. 1, 2013, pp. 16–28.
- Pajares, M. Frank. "Teachers' Beliefs and Educational Research: Cleaning up a Messy Construct." *Review of Educational Research*, vol. 62, no. 3, 1992, pp. 307–32, doi.org/10.3102/00346543062003307.
- Richardson, Jennifer C., et al. "Social Presence in Relation to Students' Satisfaction and Learning in the Online Environment: A Meta-Analysis." *Computers in Human Behavior*, vol. 71, 2017, pp. 402–17.

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