Creating an Effective Online Instructor Presence

Why Is Instructor Presence Important in Online Courses?

Student outcomes in online courses trail considerably behind those in face-to-face courses.[1] In order to gain insight into why this might be, CCRC undertook a series of studies that examined 23 high-demand, entry-level online courses at two community colleges in one state.[2] CCRC researchers observed the online courses, reviewed course materials, and interviewed course instructors as well as 46 students who were enrolled in at least one of the courses.

Together, these studies shed light on the fact that it is important for online instructors to actively and visibly engage with students in the teaching and learning process—perhaps with even greater intentionality than in face-to-face courses. In interviews, online students said that they placed a high value on interaction with their instructors,[3] and a quantitative analysis indicates that higher levels of interpersonal interaction were correlated with better student performance in online courses.[4]

Drawing on our research, the following guide discusses how instructors can increase their presence in online courses in ways that may contribute to improved student retention and performance. It also describes a case study of a course in which the instructor used some basic interactive technologies to create a meaningful instructor presence.

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This is part three in CCRC's online learning practitioner packet. To learn more about student outcomes in online courses, see *What We Know About Online Course Outcomes* (part one). For ideas on how administrators can support effective online learning, see *Creating an Effective Online Environment* (part two).

DEFINITION

ONLINE COURSE

Throughout this practioner packet, an "online" course refers to a course held entirely online, as opposed to a "hybrid" course which consists of both online and face-to-face instruction.

What the Research Tells Us

Students Want to Feel That the Teacher Cares

Developing a connection to the instructor is critically important to students. Yet overall, students we interviewed felt that their connection to the instructor was weaker in online courses than in

face-to-face courses. When evaluating their online experience, students expressed disappointment when they sensed a lack of "caring" from their teachers; in those cases, they reported feeling isolated and like they had to "teach themselves."[5]

Students reported a greater sense of teacher presence and caring when instructors used interactive technologies consistently and purposefully. For instance, students reported a higher level of engagement when teachers incorporated live audio and video chats or video-capture lectures using web conferencing software such as Adobe Connect.[6] Students also got a sense of teacher caring when the instructors posted frequently in chat rooms, invited student questions and responded quickly to those questions, provided detailed feedback on student assignments, and asked for and responded to student feedback about the course.[7]

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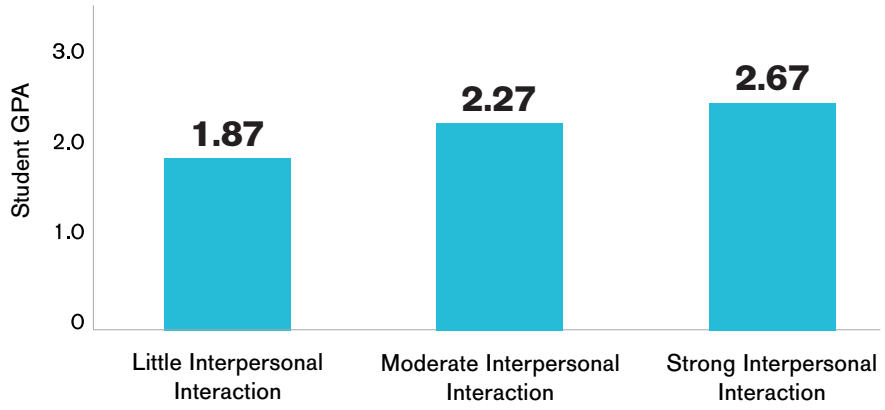
Interpersonal Interaction is the Most Important Course Quality Factor

CCRC researchers rated each of the 23 online courses they observed in terms of the depth of its interpersonal interaction as well as other quality factors, such as clarity of learning objectives and effectiveness of technology integration, and used these ratings to predict student grades. The course's level of interpersonal interaction was the most important factor in predicting student grades; students in low-interaction courses earned nearly one letter grade lower than students in high-interaction courses.[8]

Relationship Between Level of Interpersonal Interaction and Student Performance[9]



Online Instructors Tend to Make Minimal Use of Interactive Technologies

Most of the online courses we observed tended to be text-heavy. Course materials that introduced content generally consisted of readings and lecture notes. Few courses incorporated auditory or visual stimuli and well-designed instructional software. In most courses the only interactive technology was an online discussion board, which was primarily geared toward peer-to-peer interaction.

Students appreciated courses that included instructional software and other technologies that diversified instructional approaches. Technology seemed particularly useful when it supported

interpersonal interaction, allowing students to see, hear, and get to know their teachers despite the physical distance between them. When optimized, technological tools can help instructors to establish a knowledgeable and approachable presence, a vital element of strong online courses.

Unfortunately, our research indicates that *effective* integration of interactive technologies is difficult to achieve, and as a result, few online courses use technology to its fullest potential.[10] Simply *incorporating* technology into a course does not necessarily improve interpersonal connections or student learning outcomes. For instance, in the courses we observed, instructors commonly required students to post on a discussion board, but it was rarely clear how these posts would contribute to student learning.[11]

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Using Technology to Help Students Learn: A Case Study[12]

How can instructors create a presence in the virtual space that effectively supports student learning? In one of the courses CCRC researchers observed—an online introductory chemistry course—the instructor used widely available interactive technologies to create a robust presence and help students master challenging course material.

The following case study demonstrates how an online course can be designed to address student concerns that they "have to teach themselves" in online courses. Through a thoughtful combination of audio lectures, discussion board and chat sessions, practice problems, and virtual and actual lab experiences, the instructor created a supportive learning environment that enabled students to master challenging course material in a subject that can be difficult to teach online.

An analysis of student performance in this course supported CCRC researchers' impression that the instructor's methods were effective. Students enrolled in this section of online introductory chemistry received higher grades than similar students who took the same course online with different instructors.

Lectures

Instead of simply posting lecture notes, the instructor used Adobe Connect to post a video of her weekly lecture accompanied by a PowerPoint presentation. The narrated slides allowed for a thorough demonstration and explication of concepts and improved the instructor's ability to proactively address content-related questions. Students reported that the narrated slides personalized the course experience for them and created a sense of connection with the instructor.

Within the narrated PowerPoint presentations, the instructor provided sample problems and used the Paint program to give step-by-step demonstrations of how to format solutions to problems. These demonstrations were cited by students as particularly effective in helping them to grasp the material. Though the narratives took a considerable amount of time for the instructor to create, she was able to archive them and use them for several semesters.

Homework Assignments

Each week, students completed problems using an instructional software program called MasteringChemistry. The software offered tutorials on each set of problems, provided hints on how to approach the problem for students who were stuck, and offered extended opportunities to practice concepts.

Once students completed an assignment, the software graded it and gave them immediate feedback on their performance. The feedback gave students a clear understanding of areas where they needed more help. Just as important, the instructor was readily available to provide additional guidance when needed.

The software allowed for automated submission of assignments, and the instructor was able to track student performance on each assignment. The software also allowed the instructor to monitor students' use of hints and tutorials, enabling her to track specific areas where students were having difficulty. The instructor then used this information to inform weekly live chat sessions with the students.

In addition to graded MasteringChemistry homework assignments, the instructor provided non-graded textbook problems each week so that students had opportunities for practice without hints. She encouraged students to complete these problems for test preparation in particular.

Discussion Board

The course had a discussion board on which students could post and respond to each other's questions. Although many online students reported that peer-to-peer discussions on chat boards seemed to be "a waste of time," the instructor for this course provided a clear rubric for postings to help students engage in a more meaningful dialogue. Students gained extra credit for postings that adhered to the rubric and could earn up to the equivalent of a 15 percent increase in their final exam grades through posts on the board.

The instructor provided a clear rubric for chat board postings to help students engage in a more meaningful dialogue.

Throughout the course, the instructor was a highly visible presence on the board. She consistently monitored it to respond to questions and to confirm or correct postings left by students, as shown in the following example:

> **Student 1:** *"Rank the following items in order of decreasing radius: Na, Na+, and Na-." However, the picture only shows "Na+, Na+, and Na+." I imagine all the ions are the same and have the same size, but when I overlap them as equivalent, it tells me it's incorrect. Any ideas?*
>
> **Student 2:** *I am stuck on the same problem. That ain't right!!!*
>
> **Student 3:** *It seems that the information is not inputted correctly. If you look at the problem and see how they list the "Na, Na+, and Na-," go off the order that is provided in the problem. Ignore the fact that all the blocks technically say "Na+, Na+, and Na+." I did this after I had a failed attempt and I [passed] the second time using the above method…*

> **Instructor:** *Yes, it is absolutely an error in its presentation. I just sent this to the publisher to fix. Actually the squares should read in the order: "Na, Na+, Na-." Thus knowing that Na- > Na > Na+, the correct order should be: third square > first square > second square. If you still cannot get it, let me know.*

When students posed a question on the asynchronous discussion board, the instructor's responses were more prescriptive than they might be in a face-to-face setting. She reported that in the past, the time it took to engage in a back-and-forth discussion increased students' frustration, and thus she now provides complete answers to questions the first time she responds.

Live Chat Sessions

The instructor conducted weekly live chat sessions using Adobe Connect software. The students submitted questions by typing them in, and the instructor spoke into a microphone to respond.

The instructor monitored the discussion board to promptly respond to any issues students were having with the lab.

The live chat sessions provided a regular forum in which students could receive direct help and watch live problem-solving demonstrations. Typically, the instructor provided oral explanations of sample problems while modeling them using Word, PowerPoint, or Paint. The instructor recorded these sessions and posted them on the course website for students who were unable to attend.

Lab Activities

Students had one lab assignment per week, which they completed using either a virtual lab or a take-home lab kit, depending on the experiment. Students used the Late Nite Labs website for experiments too dangerous to conduct at home. The website simulated a laboratory setting with virtual equipment and chemicals that students selected and measured using the mouse and keyboard.

The students wrote up reports for these labs, but the website also provided the instructor with an automated "lab log," which listed steps the students took and how long it took them to complete each step, allowing the instructor to monitor student progress. She monitored the discussion board to promptly respond to any issues students were having with the lab and addressed commonly encountered problems in her weekly chat sessions.

All other experiments were conducted using a specialized lab kit in students' homes. To prepare students for the lab, the instructor provided links to YouTube videos that gave students a sense of what to expect during their experiments. The students took photographs of each step of the experiment and wrote a lab report. They submitted the reports and photos through Blackboard, and the instructor used them to identify mistakes students made that influenced their conclusions.

The home lab activities were unique for an online class in that they provided opportunities for students to interact with each other. Because the kits were expensive, the instructor encouraged students to split the cost of the lab kit and complete the labs in groups of two to three students. Students who worked in these groups reported that they were frequently able to address questions within the group and also meet potential study partners.

Implications and Considerations

To improve students' performance and persistence in their courses, research suggests that online instructors should focus on providing targeted support for students to reach rigorous instructional goals. Establishing a meaningful instructor presence through the effective use of interactive technologies appears to be a particularly powerful strategy for enhancing student outcomes.

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As they design their online courses, instructors should take into account the following observations:

- Students perceive instructors as responsive when they encourage student questions through multiple venues and reply to questions promptly.
- Students make distinctions between technology tools integrated into a course with a clear and valuable purpose and those with no purpose. Instructors can establish this sense of purpose by integrating the technology into regular course activities and by explicitly telling students when and how to use a technology-based resource.
- Infusing audio and video throughout lectures provides multiple ways for students to engage with content and creates a strong instructor presence.
- Live weekly chat sessions allow for personalized instruction and give students the opportunity to get to know their instructor. However, participation in live chats tends to be low. Instructors can establish a flexible schedule of chat sessions and require students to attend at least a minimum number.
- Giving students a clear rubric and incentives for discussion board postings helps to stimulate more meaningful interaction.
- If instructors do not maintain an ongoing presence on discussion boards, students may feel that their participation is a waste of time.
- Students expect and appreciate detailed instructions for assignments and clear, actionable feedback in addition to numeric grades.
- Instructors can improve their online courses and engender a sense of caring by soliciting student feedback about the course and using that feedback to enhance the course.

Endnotes

1. See *What We Know About Online Outcomes* for more information about how community college students perform in online courses.
2. Bork & Rucks-Ahidiana (2013); Jaggars (2013); Jaggars & Xu (2013); Edgecombe, Barragan, & Rucks-Ahidiana (2013)
3. Bork & Rucks-Ahidiana (2013); Jaggars (2013)
4. Jaggars & Xu (2013)
5. Jaggars (2013)
6. Edgecombe, Barragan, & Rucks-Ahidiana (2013)
7. Edgecombe, Barragan, & Rucks-Ahidiana (2013)
8. Jaggars & Xu (2013)
9. Analysis based on a sample of 35 course sections from 23 online courses and transcript data from 678 students who completed at least one of the sections.
10. Edgecombe, Barragan, & Rucks-Ahidiana (2013)
11. Edgecombe, Barragan, & Rucks-Ahidiana (2013)
12. Edgecombe, Barragan, & Rucks-Ahidiana (2013)

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