

Teaching Psychology Online: Approaching Excellence and Avoiding Defeat

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It is now a rhetorical question to ask whether students learn effectively via online instruction. We have over ten years of observations, personal experiences, and well-designed research inquiries that demonstrate that online students learn as well as their face-to-face counterparts. In some cases, they even out-perform them.

Now that we know students can learn effectively online, other questions emerge. Do all students succeed online? If not, who does and who does not? Can all disciplines be taught online, or are certain courses better suited than others? And if two different instructors develop and teach an online course on the same subject and one is a success and the other an utter failure, what are the factors that led to the disparate outcomes? I address these questions by focusing on what we know about teaching postsecondary psychology courses online. Specifically, the questions and solutions are discussed in relation to four issues: individual student characteristics, course or program level, instructional design, and level and type of interaction.

Consider Individual Student Characteristics

Two thirds of the variance predicting college success is accounted for by student characteristics (Pascarella & Terenzini, 1991; 2005). It is reasonable to assume that this speaks true of online students as well. In fact, I argue that online students are more diverse in terms of what they bring to the classroom, making individual characteristics even greater predictors of student success. Whereas we cannot control students' personal characteristics, we need to understand how they may impact their learning experiences.

From a four-year investigation (Kerr, Ryneearson, & Kerr, 2003), we learned that the most prevalent characteristics that lead to successful online learning include: (a) reading and writing skills, (b) motivation, (c) independent learning, (d) technology skills, and (e) adult learner characteristics. First, adequate reading and writing skills are paramount for success in the online classroom. Regardless of the advances in instructional technology and multi-media, text remains one of the most effective means of exchanging information for learning. Likewise, effective online courses make use of optimal interaction, which includes synchronous (e.g., live chats) and asynchronous (e.g., email and discussion boards) methods. Both require proficiency in expressing oneself in writing.

Second, effective online learners are high in internal and achievement motivation. These students take the initiative in the online classroom, plan ahead, and are actively engaged in their learning. Motivated students are also self-directed, do not have to rely on others to interpret or complete assignments, and are accountable for their own learning. Fourth, sufficient technology skills are necessary for online learning success, but online instructors and researchers have found that most online courses require a

minimum skill set, and if motivated, novice online students ramp up their needed technology skills quickly. The minimum skill set includes the ability to browse the Internet, send and receive email with attachments, and employ appropriate "netiquette" in the classroom discussion forums (<http://www.albion.com/netiquette/>).

Finally, the student characteristics that have received the most empirical attention are those of the adult learner (Knowles, 1998). Online instruction that meets adults' learning needs is effective instruction that requires them to draw upon their personal and professional experiences, encourages them to solve real life problems, and allows them to construct meaning from their assignments (Driscoll, 2002).

Determine Course or Program Level

Most psychology professors agree that teaching first-year students requires different strategies than teaching upper division students. Likewise, there are instructional differences between teaching upper division undergraduate and graduate students. Educational research suggests that first-year students lack many of the requisite skills and characteristics previously discussed (i.e., adequate reading and writing skills, independent learning, self-direction; NCPPHE, 2006), leaving them ill-prepared for the demands of online learning. This trend leaves me to believe first-year students need face-to-face instruction with professors who are knowledgeable of their learning preferences and sensitive to their developing needs.

With this caveat, I contend that all psychology courses can be taught online effectively. My reasoning, in part, is due to the fact that psychology courses of all types and levels have been taught online for years. The successful ones are those that carefully match online technologies to course objectives and requirements. For example, instructors of lower-level courses (i.e., general psychology) with large enrollments find that automated quizzes allow them to provide learners with several criterion-referenced tests. The quizzes are auto-graded and provide students with instant feedback on their individual and class performance. These features result in reduced grading for instructors and increased opportunities to improve performance for students.

Upper-level courses that require research and APA writing work well online. Student papers can be submitted and graded electronically. Instructors can insert edits, comments, and grading rubrics, and then return graded papers to students with ease. With electronic submission, instructors can submit student papers to online plagiarism detection services (i.e., <http://mydropbox.com/> or <http://turnitin.com/>) and receive an objective report to assist them in academic integrity cases. The Internet also facilitates upper division courses by allowing instructors to post and share articles online securely, providing students with access to academic search engines and online journal databases that provide full-text articles.

Yes, even statistics is being taught online successfully. In fact, it is my favorite online course to teach. Most statistics instructors have heard the following student claim: "Dr. Anova, I understand the problems when you work them on the board, but when I get home, I get stuck or miss a step." Streaming video technologies allow instructors to record themselves solving computations and upload them in a format that does not take up a ton of server space. This allows students to watch the problem solution over and over until they get it right.

Finally, professional graduate coursework can be taught effectively and enhanced with online technologies as well. Internship and practicum courses benefit from the tracking features of online technologies. Both on- and off-site supervisors can log time and duties completed, require student interaction via discussion forums, and host live meetings with geographically-separated students in chat rooms. Counseling courses that

require small group work and role-playing benefit from these features as well because both discussion and chat forums will time and date stamp each participant's comments, providing a detailed transcript that records who said what and when. These transcripts are available all term and are an excellent resource for record-keeping, post-course reference, and evaluation of student learning.

Apply Best Practices in Instructional Design

Outside what the student brings to the classroom, the number one predictor of student performance is instruction. Regardless of learning modality, good teaching is good teaching. Effective online instructors identify and adhere to a proven instructional model. The models that have demonstrated effective online student learning are constructivist in nature. It is from the constructivist approach that we get the term "student-centered." Additionally, in designing online courses, the content and materials need to be organized, thorough, and accurate. Likewise, instructors need to be flexible, proactive, and understand that often - less is better.

Furthermore, effective online instruction embraces the shift from linear toward non-linear learning. An example of linear learning is our historical use of textbooks. We take in information, page by page, in a serial process until the last page is read. The information age has produced an onslaught of non-linear examples, such as web pages. Web pages provide information in various formats, chunking information for easier and quicker access. On a single web page there may be tables of text arranged in columns, hyperlinks for jumping within text, and menu buttons for external links. There are multiple navigation options to facilitate user ease, flash animation, streaming video clips, and embedded search engines.

Because of the success of these designs, we now see these "web" features displayed on our televisions as our news screens now depict side bars, ads, future viewings, and ticker tapes that let us see if our mutual funds and favorite sports teams are winning or losing. Frankly, there is not enough time in a lifetime to take it all in, so "reading the last page first" has become an effective problem solving strategy.

To meet this generation of online students "where they are," online course developers may employ a number of strategies: (a) break dense paragraphs of text into smaller sections for swifter visual digestion, (b) highlight or bold instructions, due dates, and information that is needed often, (c) provide at least two forms of navigation that avoid dead ends, i.e., where the BACK button must be employed to return to an important page, (d) test pages and links often to ensure they are working, and (e) design and deliver content and feedback in the same manner throughout the term. Consistency of design and delivery reduces student anxiety, prevents instructor errors, and allows students to have accurate expectations of the course early on.

Select Level and Type of Interaction

Currently, the biggest criticism of online learning from both instructors and students is the lack of human touch. It is very hard to convey online the nonverbal aspects that define us. Unless streaming video is used excessively, tone of voice, hand gestures, facial expressions, and humor are altogether missing in cyber space. Though a legitimate concern, we have learned how to approximate and incorporate these nonverbal skills into our writing. The human relations element inherent in successful face-to-face classes is produced online via the amount, type, and levels of interaction. In general, there are three ways that interactions occur in any classroom, virtual or otherwise. Students

interact with the instructor, they interact with the material, and they interact with other students.

To enhance online interaction, instructors can: (a) provide an open discussion area that encourages informal student discussion, (b) create weekly discussion assignments that require a response to the instructor's prompt as well as responses to classmates that lend unique contributions to the thread, (c) encourage students to work together on assignments and provide access to chat rooms so that they can meet in real time, (d) specify a consistent convention for posting questions and answers (i.e., discussion) so that students can help each other, and (e) participate regularly in all discussions and provide students with feedback on assignments regularly and in less than one week after assignment deadlines.

Future Directions

Our work is not done. Learners at all levels continue to need online education alternatives, so how can we best help learners to succeed online? We need to develop and implement tutorials and student services in the space between student self-assessment and enrollment in the first online course. Preliminary results suggest that instructors' use of verbal immediacy yields improved performance and higher student satisfaction. True experimental designs are needed to determine the real impact verbally immediate behaviors have on student outcomes. Our online journey continues. I hope you've picked up a few tools here to help you craft and convey your personal web presence.

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