

Introduction to Section II of *Online Learning* Volume 23, Issue 4

Peter Shea

Editor of *Online Learning*
University at Albany, SUNY

Section II of this final issue of 2019 contains seven articles that were received through our regular submission process. These papers reflect a wide range of themes, research questions, and methods. This collection of studies advances our understanding of instructional quality, K-12 online learning, degree completion, doctoral education, and professional development in online educational settings.

The first paper is “An Examination of Instructional Approaches in Online Technical Education in Community Colleges” by Brian Horvitz, Lisa R. Garcia, and Regina Garza Mitchell of Western Michigan University and Cheryl Calhoun, of Santa Fe College. Technical education plays an important role for preparing students to enter a changing workforce, and online learning provides flexible access in the furtherance of that mission. In recent years community colleges that provide technical education have had to go beyond the technical to also prepare students with soft skills, such as socialization, teamwork, organization, and time management. However, we have little systematic knowledge about how this is being accomplished with the help of online instruction. This National Science Foundation–funded study asks how online learning components have been integrated into technical education in 15 NSF Advanced Technological Education (ATE) funded projects. Based on semistructured interviews with key personnel from each project, the authors uncover patterns of instructional delivery methods and support for “hands-on” learning that provides a new benchmark for understanding the organization of online technical education.

The next paper in this section is “K-12 Student Perceptions of Online Teacher and On-Site Facilitator Support in Supplemental Online Courses” by Jered Borup and Chawanna Chambers of George Mason University and Rebecca Stimson of Michigan Virtual. This study focuses on online learning as organized in precollege settings and provides much needed insight with regard to the necessarily different support structures that address the needs of online K-12 learners. The students in this study were generally high school students who were working in an online system that mandates both an instructor and a facilitator. Though guidelines exist, little is known about how roles are divided between online instructors and facilitators in actual practice. This study provides details, based on student reports that provide this information. The results indicate that students received a high level of support from both online teachers and on-site facilitators, with most of the support coming from the facilitators. This was in part due to the fact that students were able to develop caring relationships with facilitators through consistent communication that often included social and personal topics. This paper will be helpful to administrators and teachers contemplating initiating new online programs or revising existing ones.

The third paper in this issue is “Investigating the Impact of Online Classes on Undergraduate Degree Completion” by Sharon Wavle and Gamze Ozogul of Indiana University. This paper builds on previous research to advance our knowledge of the effects of online course enrollment on degree completion, much of which has been conducted with community college

populations. In contrast, the purpose of this study was to examine the impact of taking online classes on rates of degree-completion among first-time, full-time undergraduate students enrolled in 4-year bachelor's degrees. The authors ask two questions. First, controlling for other predictors of degree completion, does taking one or more online classes increase the likelihood that a first-time, full-time undergraduate student will complete their degree on time? Second, is there a difference in student performance, as measured by course grades, between online and on-campus classes? The authors tracked more than 12,000 students for a 6-year period to determine the contribution of online course taking in the variance of degree completion and course grades. Students were tracked at three different campuses. Results indicate that students who took at least one online class were between 2.7 and 8.1 times more likely to complete their degree within 6 years. Interestingly, and in contrast to other research in this area, some of the students had higher course grades in their online courses than their classroom courses. This paper is a valuable contribution to the emerging research systematically investigating the impact of online learning on metrics of student success, such as time to degree.

The next two papers look at online doctoral education. The first of these is "Educational Leadership Doctoral Students' Perceptions of the Effectiveness of Instructional Strategies and Course Design in a Fully Online Graduate Statistics Course" by Mei Jiang, Julia Ballenger, and William Holt of Texas A&M University. Teaching certain content online presents unique challenges, and implementing effective online statistics instruction can be especially difficult. The authors of this paper use a qualitative approach to surface issues among nine recent doctoral students in an online statistics course. The paper explores students' perceptions about this graduate level introductory statistics course, asking whether the instructional strategies and course design helped students learn statistics. This was done in the service of developing a more effective statistics course design. Results indicate that students identified PowerPoint presentations with recorded lectures and live question and answer sessions to be the most useful instructional approaches, but the paper also contains much nuance helpful in considering the design of graduate statistics courses for online delivery.

The fifth paper is "Identifying Significant Personal and Program Factors that Predict Online EdD Students' Program Integration" by Amanda Rockinson-Szapkiw of the University of Memphis, Joe Holmes, and Jacqueline Stephens of Mercer University. This study addresses the issue of high attrition in doctoral-level education and proposes a model for online doctoral student program integration that may help us explain and predict retention. Using a 32-item self-report instrument that measures faculty integration, student integration, and curriculum integration, the authors found that the model significantly predicted online EdD students' program integration. Men had higher program integration, as did students who participated in a cohort within their online doctoral program. An increase in synchronous communication also predicted program integration.

The next paper in Section II is "A Professional Learning Program for Novice Online Teachers: Application of Professional Development Guidelines Using Threshold Concepts and Online Learning Perceptions" by Maria Northcote, Peter Kilgour, Daniel Reynaud, and Catherine McLoughlin of Avondale College of Higher Education in Australia and Kevin Gosselin of HonorHealth Research Institute. Author of this study gathered evidence about the experiences and views of students and staff to inform pedagogical guidelines to be used as the foundation of professional learning programs for novice online teachers. Central to this work is the notion of threshold concepts, the most difficult or challenging ideas encountered during the learning process.

The authors identify a number of these threshold concepts and strategies for overcoming them among novice online instructors.

The final paper in this issue is “A Cross-Institutional Study of Instructional Characteristics and Student Outcomes: Are Quality Indicators of Online Courses Able to Predict Student Success?” by Tanya Joosten of the University of Wisconsin–Milwaukee. This study examined online course instructional characteristics and their relationship to student outcomes in 2- and 4-year colleges. Instructional characteristics included learner support, course design and organization, content design and delivery, interaction, assessment, and evaluation. A student survey instrument was used to capture perceptions of the instructional characteristics of their courses, learning, and satisfaction with the courses. Data collected from the student survey was merged with student information system data (e.g., demographics). This article examines the relationship between these instructional characteristics, sometimes referred to as *indicators of online course quality*, and their relationship to student outcomes for all students and for underrepresented students. While none of the items were significantly correlated with grades, interaction with faculty and quality of course design were significantly and positively correlated with perceived learning. Interestingly, interaction with peers was negatively correlated with perceived learning.

We invite you to read and share this issue with colleagues and to consider submitting your original work to *Online Learning*.