## Introduction to *Online Learning*Volume 22 Issue 1

Peter Shea, Editor, Online Learning University at Albany, State University of New York

In this issue of *Online Learning*, we present 13 articles researching Massive Open Online Courses (MOOCs), leadership perspectives, student engagement, academic integrity, pedagogy, and support. These papers advance our understanding of online learning with insights from a broad array of national and international investigators using quantitative, qualitative, and mixed methods approaches to inquiry.

The first paper in this issue is "Comparing the Factors That Predict Completion and Grades Among For-Credit and Open/MOOC Students in Online Learning" by Ma. Victoria Almeda of Teachers College, Columbia University; Joshua Zuech, Chris Utz, Greg Higgins, and Rob Reynolds of NextThought; and Ryan Baker of the University of Pennsylvania. In the study the investigators ask whether learners behave the same way in MOOCs and for-credit courses. The answers matter both for research and practical purposes. To answer this question, the authors compare students enrolling in the same online course in for-credit and noncredit modes to develop models based on student interaction and participation that might predict final course grades. The paper examines whether the automated models developed generalize between these populations to understand whether the same patterns of interaction are predictive of student success among both noncredit and for-credit learners. Their findings indicate that the models of interaction and participation predict students' course grades for new students across both populations. They conclude that these models can be used by instructors and course designers to identify both forcredit and noncredit at-risk learners to provide better support.

The next paper in this section is "Customizable Modalities for Individualized Learning: Examining Patterns of Engagement in Dual-Layer MOOCs" by Matt Crosslin and Justin T. Dellinger of University of Texas at Arlington, Srecko Joksimović and Vitomir Kovanović of University of South Australia, and Dragan Gašević of Monash University and The University of Edinburgh. In this study the authors develop different pathways through a MOOC, one that is more learner controlled and one that is more instructor controlled. However, at all times learners retain choice regarding which pathway they take. In this mixed methods study, quantitative data suggested that many learners were interested in trying different pathways to course completion, and qualitative results indicate areas for improvement in dual-layer MOOC design and technology going forward.

The following section begins with "No Significant Differences Unless You Are a Jumper" by Richard Fendler, Craig Ruff, and Milind Shrikhande of Georgia State University. In this paper the authors investigate conditions under which students in online and classroom sections might improve their performance. More specifically, the authors compare the performance of more than 500 undergraduate students enrolled in classroom and online sections of a finance course. Their predictive model identifies students who may have performed up to a full grade better or worse in the opposite modality had they chosen differently. Though there are potential limitations based on

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class size and instructor differences, the results provide an interesting foundation for additional research and suggest opportunities for advisors to inform students of risks and opportunities for improved performance either in classrooms or online.

In "Breaking Barriers Through Edmodo: A Qualitative Approach on Perceptions of Malayan University Graduates," Farha Alia Mokhtar of Universiti Utara Malaysia employs a qualitative case study approach to better understand the benefits of an online learning management system in the Malaysian context. The author notes that many Malaysian educators use available social networks to support learning in their classrooms. She notes that social networks in education present disadvantages, and she uses in-depth interviews to illuminate student perspectives on the advantages of an alternative: the Edmodo LMS (a product also in wide use in precollege settings in the United States). This research provides insights into the specific advantages identified by her interviewees and employs some rigor to ensure reliability across these cases.

In the next paper, "Impact of a Web-Based Adaptive Supplemental Digital Resource on Student Mathematics Performance," by Laurie Sharp of West Texas A&M University and Marc Hamil of Canyon Independent School District, we find an evaluation of a tool to support student performance with state-mandated annual standardized mathematics assessments in precollege settings. The study finds that the use of the tool explains significant proportions of variance in outcomes on state mathematics assessments among elementary and middle school users but not students in high school. The assessment was conducted only on high-level users of the tool, and the authors caution that additional research needs to be conducted with others, including assessing the impact of use by gender, race/ethnicity, socioeconomic status, and special student populations. These results are suggestive and do require additional study.

Next is "Computer Science Students' Attitudes Towards the Use of Structured and Unstructured Discussion Forums in Fully Online Courses" by Moanes Tibi of Beit Berl College, Israel. In this paper the author investigates students' attitudes toward the use of structured and unstructured discussion forums in fully online computer science courses. The paper also considers students' suggestions that might help in redesigning such forums for an improved learning experience. Perhaps not too surprisingly, students had significantly more positive responses about participation in the structured forums compared to those who participated in the unstructured ones.

The following article, "The Relationship Between Instructor Servant Leadership Behaviors and Satisfaction With Instructors in an Online Setting," is by Faris George Sahawneh of West Kentucky Community and Technical College and Lorraine Benuto of the University of Nevada. In this study the authors investigate a leadership philosophy they hypothesize to be more supportive of online learning. They note that the "servant leader" model prioritizes behaviors that are compatible with instructor traits found effective at meeting the needs of online students, including, for example, empathy, giving feedback, authenticity, empowerment of others, and building community. Utilizing the Servant Leadership Questionnaire (SLQ) and the Student Evaluation of Teaching (SET) survey, they found a positive correlation between student satisfaction and five components of servant leadership (but not necessarily those we might expect): altruistic calling, emotional healing, wisdom, persuasive mapping, and organizational stewardship. Concluding that this is the first study in which the relationship between individual servant leadership behaviors and online student satisfaction was examined empirically, they recommend additional research in other contexts.

The next paper, "Comparing Student Performance on Proctored and Non-Proctored Exams in Online Psychology Courses," by Lee William Daffin and Ashley Jones of Washington State University, investigates issues of academic integrity. The authors report that the literature in this area produces mixed findings about whether students are more likely to cheat online. They identify a variety of weaknesses in the literature, including small sample sizes, self-reported data, and limited class contexts. They propose to improve upon the literature by offering an investigation with a larger sample size (N = 1,694), more objective measures, and additional classroom contexts. The study hypothesized that students would earn higher scores and take more time to complete non-proctored exams than proctored exams. Data support these hypotheses. Results indicate that students score higher and take more time on non-proctored than proctored exams. The conclusions suggest that proctoring seems to be the key to reducing cheating. Alternatively, online course designers could follow decades of instructional-design advice not to depend on high-stakes assessments in non-proctored online settings. Course designs that use alternative means of assessment hold promise to make learning more authentic and to assess learning at more advanced levels on Bloom's taxonomy. As the authors conclude, we are fortunate not to be stuck with a choice between cheating and proctoring "if we, as educators, are willing to put the time into course development."

Next is "Examining the Reliability and Validity of a Turkish Version of the Community of Inquiry Survey" by Yusuf Ziya Olpak of Ahi Evran University and Ebru Kilic Çakmak of Gazi University, Turkey. In this paper the authors investigate a translated version of the CoI instrument, which is designed to measure student reports of in-depth and significant learning in the online environment. The authors carry out both exploratory and confirmatory factor analysis of the translated version with data collected from more than 1,100 students. As in the original CoI version they investigated, the Turkish version of the survey has 34 items: 13 related to teaching presence, 9 items related to social presence, and 12 items related to cognitive presence. The study concludes that the new version of the survey can be used as a tool to relate international research with national studies and to develop suggestions for future improvement.

Concluding this section is "The (Lack of) Influence of Age and Class Standing on Preferred Teaching Behaviors for Online Students" by Shannon Kennan and Paula Bigatel of Penn State University, Susan Stockdale of Kennesaw State University, and Jennifer Hoewe of the University of Alabama. In this study the authors investigate widespread perceptions that older, nontraditional students require or appreciate instructional approaches that reflect adult learning theories. Students in the study were asked to rate the importance of 35 teaching behaviors, identified through prior research to reflect best practices in online instruction. Results suggest that only seven teaching behaviors were consistently related to differences in age and class standing among online students, and those behaviors do not fit neatly within the assumptions frequently made about adult learners.

The final section of this issue contains three papers that investigate aspects of learner engagement. The first of these, "An Online Engagement Framework for Higher Education," is by Petrea Redmond, Amanda Heffernan, Lindy Abawi, Alice Brown, and Robyn Henderson of the University of South Queensland, Australia. The authors present a conceptual model that draws on recent literature to provide a richer and more useful definition of engagement in online learning environments. Utilizing a constant comparison method to investigate the literature, the paper analyzes emerging themes and identifies five key elements of online engagement. This is a nuanced contribution at a time when student engagement has become an overused buzzword in need of conceptual clarification.

## Introduction

The following article in this section is "Engagement Matters: Student Perceptions on the Importance of Engagement Strategies in the Online Learning Environment" by Florence Martin of the University of North Carolina Charlotte and Doris U. Bolliger of the University of Wyoming. In this study the authors focus on one model, Moore's Interaction Framework. This study examines student perception on various engagement strategies used in online courses based on the framework. In all, they surveyed 155 students on a 38-item instrument on learner-to-learner, learner-to-instructor, and learner-to-content engagement strategies. Learner-to-instructor engagement strategies seemed to be most valued among the three categories. The results have implications for faculty, instructional designers, and future research.

Closing out this issue is "Online Student Use of a Proximate Community of Engagement at an Independent Study Program" by Darin Oviatt, Charles Graham, and Randall S. Davies of Brigham Young University and Jered Borup of George Mason University. In this study the authors investigate which aspects of their conceptual model for community are most frequently used by students, which members of the supplemental community investigated interact most with students, and what differences in outcomes occurred based on whether students were engaged in credit recovery (summer school) or other uses of independent distance education (e.g., electives). In addition to answering these questions, they provide more nuance as to conditions under which students who interact with a PCE may receive the learning advantages associated with collaborative communities without sacrificing the flexibility of an independent study course.

We invite you to read, share, and cite these articles and to help us to continue to advance the field of online learning.