

Guest Editorial Preface

Special Issue on the Evolving Nature and Understanding of Online Learning and Teaching Related to Students, Faculty, and the Literature

Montgomery Van Wart, California State University, San Bernardino, USA

Anna Ya Ni, California State University, San Bernardino, USA

The study of online learning and teaching is not only challenging because of the complexity of understanding the nuances of online learning and teaching itself, but because it continues to evolve. There are at least four overlapping reasons that account for the evolution of online learning and teaching.

First, the technology of online learning continues to evolve, as well as its availability on internet. Up from one billion users in 2005, world internet usage is now estimated at 4.9 billion people, or about 63% of the world population (ITU, 2021). Of the 2.9 billion people who remain offline, 96 percent live in developing countries, although the gap was decreased during the pandemic. At the same time, the capabilities of online learning have expanded enormously, and continue to expand (Joosten et al., 2020). Improvements include the dramatic enhancements to videoconference technology, game-based learning programs, dashboards, as well as enormous speed and reliability upgrades. In addition, the platforms that host educational courses, learning management systems, have also improved because of newly embedded features and interoperability, as well as better ease of use (Turnbull, Chugh & Luck, 2020). In fact, virtual learning management systems are becoming common and expected in many traditional courses (Washington, 2019).

A second reason that online learning and teaching continue to expand and develop is that our understanding of online learning teaching strategies has improved so much. Challenges to learner satisfaction were common as online learning courses evolved (Summers, Waigandt & Whittaker, 2005). While the benefits of active learning models in the online mode were understood early on in propagating techniques such as the flipped classroom (e.g., Knight & Wood, 2005), it took some time for these techniques to mature (e.g., Jensen, Kummer & Godoy, 2015; Tang et al., 2020). Additionally, it has only been in recent years that more targeted strategies for weaker students (e.g., Baum & McPherson, 2019) as well as for integrating cultural and learning style diversity (e.g., Kumi-Yeboah et al., 2020; Seliskar, 2021) have gained attention in online learning.

A third reason that online learning is evolving is because of students themselves. Students perceive themselves to be more ready for online learning than in the past, even if their expectations may sometimes be unrealistic (Martin, Stamper & Flowers, 2020). Exposure to online courses tends to increase perceptions of readiness, so the pandemic greatly enhanced this aspect (Ni et al., 2021).

Additionally, flexibility and convenience have become increasingly prominent considerations among students on average (Muthuprasad, 2021). All of this has fueled student demand for online learning.

A fourth overlapping reason for the rapid evolution of online teaching is the increased experience of faculty overall. In the early years of a technology innovation, scouts and “champions” were important for adoption (Cummings et al. 2005). Teaching online courses was relatively common by 2019, even though only 37.2 percent of all students in higher education were taking one or more online courses (NCES, 2019). The pandemic radically expanded the number of faculty teaching online which encourages future adoption; however, not all faculty had good experiences because of the emergency involuntary nature of the transition. Despite concerns about the abrupt transition and a number of less-than-satisfactory experiences, on average faculty were substantially less resistant to teaching online as traditional courses resumed being the standard mode of delivery (Dumont et al., 2021).

This symposium takes four different perspectives to examine the evolution of online learning and teaching in the higher education environment. The first article sets the stage by providing a narrative review of the field. In “Online learning: What we know, what we don’t know, and some opportunities for substantial improvement in higher education settings,” Van Wart contrasts the improvements in online education in terms of faculty training and support, technology, and student readiness, with the continuing challenges related to “additional skills to be learned by faculty, various challenges in implementing integrity tools, mode selection issues, lowered perceived learning experience, increased faculty workload, student choice “traps,” and faculty satisfaction conflicts.” Among the numerous opportunities to improve online education in higher education, none seems more important than strategic planning which was so clearly lacking in much of the higher education community around the world. It discusses all of the forces encouraging evolution.

The second piece turns to fundamentals shifts in faculty adoption patterns. Written by Pamela Medina, Anna Ni, Jing Zhang, Yunfei Hou, Miranda McIntyre, and Nidhi Vij, it is titled, “The ‘mainstreaming’ of online teaching and conflicted faculty perceptions”. The prior literature tended to find faculty were highly dubious about the ability of online teaching to produce learning outcomes similar to traditional teaching. In contrast, this study found that faculty tend to have positive perceptions about knowledge outcomes of online teaching. Although faculty were found to perceive areas that could be improved, most faculty members intended to teach online again post-pandemic.

The next two pieces turn to student perspectives and focus on the distinctiveness of various student groups related to online learning. Becky Sumner, Jesus Canelon, Carmen Beck, and Miranda McIntyre examine the different context and perceptions of underrepresented minority (URM) students at a public institution in which minority students are the majority. Despite drawing students from the same area, the authors found that “URM students are 46% more likely to be employed, first-generation students, and have substantial family responsibilities than non-URM students.” More striking was the fact that while URM students thought that they would work harder than non-URM students, they expected their performance achievement to be less. In addition, URM students were less strategic than traditional students in terms of their selection of online courses than non-URM, focusing more on their perceived need of greater flexibility as well as their enjoyment of such classes than non-URM students who were more sensitive to the effort required by such classes and the support that they would receive.

The fourth piece in the symposium focused on a single set of related disciplines often taught as a single discipline: accounting and finance. Authors Yu Liu, John Dorocak, Dongman Kim, and Winifred Scott investigated what leads accounting and finance students to perceptions of quality and satisfaction. While their regression analysis found eight potential factors, two were insignificant. System trust was not significant, which is in line with the literature (Van Wart et al., 2020a), but neither was social comfort, which is sometimes found to be a significant factor (Van Wart et al., 2020b). Even more significant was the finding that accounting and finance students in the study were not particularly concerned about taking technical courses in their majors in an online mode which is not consistent with the literature (Van Wart et al., 2020b).

The final article takes a philosophical bent on learning, in Reclaiming the Workplace as Emancipatory Learning Site. Marx noted how the insidious effects of modern society *can* alienate

individuals from purpose. Welton keeps the deep-structure critique but scraps Marx's perspective on inevitability. While not all aspects of the Marx/Welton critique apply to online education, a surprising number do. Loss of ownership over one's work process as is seen in industrial work and mass production has a parallel in the loss of the learner's sense of control over her or his learning environment. In an online environment the learner can feel that (1) technology has become an alien intermediary, (2) there is an increased workload, and (3) there are new skills required in addition to the traditional ones. Work and purpose can become separated and lost in complex environments, according to Welton's updated interpretations of Marx, which is also true with learning and purpose in which there is a lower perceived amount of learning when it is not well integrated with authentic student and faculty interaction. Modern work can also break up natural community, and certainly student-to-student interaction are all the more challenging in online environments. Yet just as modern work has found numerous ways to combine technology and efficiency, while still maintaining providing a sense of worker control, organizational integration, and worker community (at its best), so too must online education find ways to make online education empowering, inclusive, and communally satisfying.

So the symposium indicates that the patterns and practices in online teaching and learning in higher education are still evolving rather rapidly, clearly spurred by the revolution—albeit somewhat time limited in its direct effect—in online teaching caused by the pandemic. Research continues to explore the phenomenon of online teaching and learning itself, but also document its continuing evolution.

Montgomery Van Wart

Anna Ya Ni

Guest Editors

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