

Faculty Perspectives About Distance Teaching in the Virtual Classroom

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Abstract

Much research has been done to understand how to make online teaching increasingly effective for students, but more needs to be understood about the implications of such a medium for faculty members, departments, and universities. We relied on survey data to explore the challenges and advantages that faculty members who teach nonprofit management courses have with hybrid and online courses. We also discuss faculty recommendations on what their departments and universities could do to help facilitate online teaching. The findings indicate that the main advantage of teaching hybrid courses is the ability to be innovative and the main advantage to teaching online courses is working remotely. However, for hybrid and online courses, the main challenge is decreased interaction with students. Suggestions that respondents had for university administrators included increased training and updating policies related to online teaching.

Keywords: *distance learning; distance teaching; online education; nonprofit education*

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The expansion of online education by universities and colleges continues to accelerate rapidly, with nationwide online enrollment rates having increased more rapidly compared to their face-to-face counterparts (Ni, 2013). Some also see much potential for online education and the developing world in the future (Robertson, 2015). Within the nonprofit education community, anecdotal evidence suggests an increased interest in expanding online offerings. As of April 2017, the Nonprofit Management Education Programs research initiative led by Prof. Mirabella at Seton Hall University listed 343 universities and colleges offering nonprofit-related courses,¹ and 24% of these institutions offered at least one online course in their program. The education literature stemming from this rapid expansion has predominantly adopted a student-centered approach while devoting considerably less attention to the effects of teaching online on faculty.

In this article, we adopt a faculty-centered approach to shed light on this side of the online education equation. In other words, our focus is on distance *teaching*, not distance *learning*. This exploration includes a venture into understanding the advantages and challenges of teaching hybrid and online courses from a faculty perspective, as well as going beyond the virtual classroom walls to understand how faculty think their departments and universities are supporting distance teaching. By shifting the discussion away from a student focus whereby faculty are expected to implement “effective” online courses, we aim to understand the experience of online *teachers* as opposed to the traditional emphasis on online *learners*.

In the first section, we review the literature on online teaching that analyzes faculty’s and university administration’s greatest perceived challenges. In the second section, we define the different modes of online teaching. We find that teaching online has different meanings for different people. By clarifying the related dimensions of the concept, we can refine the challenges and benefits for each strategy. In the third section, we discuss our exploratory research design and the answers of 43 respondents to a Web-based survey regarding their experiences with online teaching. In the fourth section, we present our results and discuss their implications for teaching students in nonprofit management programs. We conclude the article with a series of recommendations to frame further research on the teacher side of the online experience and to suggest potential strategies to address some of the outstanding challenges. This article contributes to the emergent literature concerning the perceptions of faculty engaged in the two main versions of online teaching: hybrid and online courses. It could also contribute to a much needed dialogue between online faculty, departments, and university administrators.

Distance Teaching

Distance learning (DL) and distance teaching (DT) are nothing new; in fact, they are believed to be more than 177 years old. Correspondence courses by mail from 1840 have now developed into the current perception of distance education, which includes various media such as videos and virtual classrooms (Matthews, 1999). Online courses more specifically have evolved from their earlier version in which an instructor would upload a reading list and a syllabus on a university-sponsored website and expect stu-

¹See the project’s website: <http://academic.shu.edu/npo/list.php?sort=name>

dents to submit final papers at the end of the term. This style of online teaching, a clumsy adaptation of traditional correspondence courses without the VHS or cassette tapes, accounts for much of the bad reputation online courses have among many faculty members. Unfortunately, there is a widespread perception that the quality of online education is not equivalent to the traditional model (Ciabocchi, Ginsberg, & Picciano, 2016; Sellani & Harrington, 2002). These negative perceptions persist despite research consistently demonstrating good learning outcomes. Allen and Searman (2013) noted that “most chief academic officers rate the learning outcomes for online education ‘as good as or better’ than those for face-to-face instruction, but a consistent minority consider online to be inferior” (p. 5). Some preliminary evidence suggests that these negative perceptions might be gradually changing (Yick, Patrick, & Costin, 2005), but this change is dependent on whether an institution has online offerings (Allen & Searman, 2013). Detractors often think it is not “real teaching,” because it requires a fundamental alteration in the way faculty prepare curriculum and allocate their time vis-à-vis the traditional teaching model.

Instructors teach online for many reasons. Research on massive open online courses (MOOCs) suggests that instructors see an appeal in branching out to diverse audiences, increased reputational benefits, and at times sheer altruism (Hew & Cheung, 2014). Other instructors might be compelled to teach online courses for contractual reasons or because of the very nature of the programs to which they belong. However, some have noted the important costs of entry of the online model for institutions because administrators might be reluctant to invest in computers, servers, and technical support (Matthews, 1999). It remains unclear whether institutions are transferring some of the costs of teaching online onto faculty by asking them to produce, edit, and host their own material.

The current literature on online teaching has investigated some of the general challenges faced by colleges and universities with regard to online teaching. Some of the typical concerns are related to course design decisions as well as faculty workload (see Palloff & Pratt, 2013; Yick et al., 2005) and faculty governance (Ciabocchi et al., 2016; Sellani & Harrington, 2002). However, more attention is needed on the implications of teaching partially or totally in a virtual forum in education.

Faculty Perspectives

Palloff and Pratt (2013) clearly stated, “Technology is not the focus of the online course and remains merely a vehicle for course delivery” (p. 61). However, faculty need to learn how to best operate the vehicle. For individual teachers, online classes have shown to be more labor intensive than in-class courses (Bremner, 1998; Hew & Cheung, 2014). Research shows that on average faculty teaching graduate students spend 10.7 hr/week/course of teaching, consistently more than they do in-class courses (Santilli & Beck, 2005). This increased workload can also be attributed to practices that are inefficient or ineffective. For example, many online teachers rely on discussion forums as suggested by education specialists on various campuses to increase interactions with students despite the important time commitment to do so. However, although educational specialists recommend the use of moderated forum discussions, research shows that the effects of this practice on learning outcomes are mixed (Means, Toyama, Murphy, Bakia, & Jones, 2009). In other words, practice is not always rooted in strong empirical evidence, which can contribute to the increasing workload report-

ed by many online teachers. Research estimates that faculty workload has increased by at least 14% more hours for online faculty to teach the same number of students online as in a traditional setting (Tomei, 2006).

Wolcott and Betts's (1999) discussion of one administrator's view sums it well: "Teaching at a distance involved a lot of 'hidden work' such as creating extensive course materials, communicating with off-campus students . . ." (p. 35). This added "hidden work" is rarely recognized formally by universities and colleges, which simply count distance education as teaching that is equal to traditional course delivery toward tenure despite evidence of a greater time investment (Wolcott, 1997). Palloff and Pratt (2013) noted, there is no clear agreement on how online teachers are evaluated for tenure purpose (p. 38). This also raises the issue of compensation for course development and online programs administration (Palloff & Pratt, 2013). These concerns contribute to the increase of faculty workload and may deter faculty, especially those who are pre-tenure, from engaging actively in online teaching.

Faculty have also lamented how some students in online courses lack initiative to guide their own learning and constantly e-mail their instructors with questions, unlike most students in a traditional classroom setting (Lewis & Abdul-Hamid, 2006). This can significantly increase the e-mail traffic between students and instructors, unlike in a traditional classroom setting. Increased communication is essential for online faculty and enables them to promote a cohesive learning environment and a better student experience, but it also requires additional time (Ladyshevsky, 2016).

The literature is less explicit about whether these faculty perceptions about the challenges in their practice vary depending on the type of courses they teach (hybrid or online courses). To offer some insights into this gap, we ask the following research questions regarding the advantages of teaching hybrid and online courses:

- **Research Question 1a:** What do instructors who teach nonprofit courses view as the greatest advantages to distance teaching for online courses?
- **Research Question 1b:** What do instructors who teach nonprofit courses view as the greatest advantages to distance teaching for hybrid courses?

In addition to the advantages, we seek to understand the challenges for faculty of teaching hybrid and online courses. Therefore, we pose the following questions:

- **Research Question 2a:** What do instructors who teach nonprofit courses view as the greatest challenges to distance teaching for online courses?
- **Research Question 2b:** What do instructors who teach nonprofit courses view as the greatest challenges to distance teaching for hybrid courses?

Administration and Governance Challenges

Scholars have noted the lack of coordination or consensus on the expectations of what online courses can deliver (Al-Bataineh, Brooks, & Bassoppo-Moyo, 2005). Indeed, the increasing change of the online landscape requires a rethinking of the traditional work space to include virtual academic staffing to promote engagement and faculty retention (Ladyshevsky, 2016). Whether it is adopting more flexible work arrangements or negotiating several time zones or simply allowing digital signature for official documents, university administrators and their human resource departments can be slow to adopt these necessary innovations (Ladyshevsky, 2016). Ladyshevsky (2016) noted that retention issues, particularly for younger cohorts of academics, could

be addressed by the normalization of “virtual faculty,” that is, faculty members who do not have a regular presence on campus yet teach classes remotely and participate in campus meetings electronically (Valentine & Bennett, 2013, p. 3), but there is concern that this could affect informal communication networks within the university.

Furthermore, the bureaucratic nature of universities can potentially constrain individual faculty members’ academic freedom in designing their courses and their material. A recent study found that 70.9% of university governance leaders responded that a formal approval required at the university or college level is needed to offer on-line programs (Ciabocchi et al., 2016). This points to a strong administrative control over online courses. Indeed, the authors recommend that tailored review processes for online and blended courses be put in place (Ciabocchi et al., 2016). This is not to say that oversight is not desirable, but it can highlight the disconnect between faculty’s experiences and administrators’ vision of online teaching. Furthermore, institutional oversight by technology specialists and administrators over individual courses is unlike the classroom format and can potentially deter innovation in online courses and exacerbate frustrations when the technology and support do not match faculty needs and vision. The increasing volume of online offerings affects the support staff’s workloads, which university administrators must consider (Palloff & Pratt, 2013).

Another set of challenges relates to the norms, policies, and regulations surrounding online teaching. Online teaching has challenged faculty and administrators to think about intellectual property rights ownership (Hunt et al., 2014). Indeed, how should intellectual property be tackled if institutions massively invest into the infrastructure of online courses? Are all the types of online courses subject to the same intellectual property claims? Furthermore, the issue of plagiarism and violations of academic integrity policies can be exacerbated in online environments (Hew & Cheung, 2014; Matthews, 1999). Aside from the issue of students not submitting original work, the online environment also makes authenticating the identity of those who are enrolled and submitting work challenging. However, the research is not clear on whether Internet-based courses are plagued with a greater level of plagiarism than face-to-face courses are (McGee, 2013).

Resource-wise, institutions of higher education can have a limited infrastructure and experience repeated failures (Matthews, 1999), which thus creates additional pressures on individual faculty members and support staff. Important questions are now being raised across campuses about the hidden costs of teaching online. Should colleges and universities provide powerful computers, video editing software, additional file storage, Internet usage, and more to faculty teaching online? Because of the many categories of online teaching, as depicted in Table 1, the costs can vary considerably from one faculty member to another. University and college administrators also need to invest in staff training and technical support (Matthews, 1999) and to replace obsolete technology continually.

Institutions face another important challenge: evaluating not only a student’s learning outcomes but also a teacher’s performance (Ni, 2013). There are two important structural considerations. First, research has consistently shown lower response rates for online than in-class evaluations of faculty work (Dommeyer, Baum, Hanna, & Chapman, 2004). Second, online courses are increasingly taught by female faculty members. A 2006 survey noted that 53% of surveyed online teachers were women,

unlike a few years prior (Kim & Bonk, 2006). One online experiment has shown that students consistently rate female faculty lower than their male counterparts, all else being equal (MacNell, Driscoll, & Hunt, 2014). Although the increase of women in higher education is desirable, it is important to consider whether gender biases within academia could be exacerbated in an online format, as women are required to do uncompensated hidden work related to online teaching, in conjunction with gender biases in student evaluations, both of which significantly affect future career progression.

Many institutions of higher education are investing in online education. These investments include learning management systems (LMS), technical support, and increasing and marketing the availability of online courses, to name a few. What is less known is whether faculty feel supported in this shift. Because this paper focuses on distance teaching and differing perceptions of faculty who teach online and hybrid courses, we ask the following questions:

- **Research Questions 3a:** How do instructors who teach nonprofit courses view their university's support for distance teaching for online courses?
- **Research Questions 3b:** How do instructors who teach nonprofit courses view their university's support for distance teaching for hybrid courses?

Defining Distance Teaching Courses

Because much of the literature discussing the challenges of teaching online rarely clarifies what is meant by “online courses,” we explain the different online teaching modes. This will later structure our analysis of survey results. Generally, online education refers to all teaching and learning that is reliant on the Internet (Ciabocchi et al., 2016). Means et al. (2009) define online *learning* as the “learning that takes place partially or entirely over the Internet. This definition excludes purely print-based correspondence education, broadcast television or radio, videoconferencing, videocassettes, and stand-alone educational software programs that do not have a significant Internet-based instructional component” (p. 9). However, Palloff and Pratt (2013) remind us that the development of sound online courses, *online teaching*, is as important as the learning experience. Moreover, this definition illustrates how the focus is on *where* the learning occurs (over “the Internet”) rather than *when* it occurs. The timing of delivery is relevant to faculty experiences as live courses and recorded lectures will necessitate different pedagogical strategies and potential time investment for course development.

Tallent-Runnels et al. (2006) suggested a helpful distinction between “synchronous” and “asynchronous” online classes:

Synchronous online classes are offered in such a way that all students are online and communicating at the same time, while asynchronous online classes are those that students can log on to and work on even if no one else is logged on at the same time. (p. 93)

Albeit a helpful distinction, it is an incomplete one as the difference between a ‘Real Time’ (RT) (synchronous) and ‘On Demand’ (OD) (asynchronous) course refers to *when* and *not where* the content is delivered. This distinction on time and space of delivery is relevant to faculty's experiences, as an on campus real-time course with an on-

line section will differ from a remote synchronous class in which none of the students share a physical classroom together but interact in real-time for a fixed amount of time.

Therefore, the other dimension that one must consider simultaneously when discussing online teaching is the location of delivery of the content. Contrary to synchronous and asynchronous discussions, which focused on when content was delivered, whether a course is on campus (face-to-face), hybrid (blended), or fully online refers to *where the content is shared* with an audience. In the on-campus, or traditional, delivery mode, the faculty meets with the class at a set schedule, on a university campus. The hybrid format allows for a portion of the class to be taught face-to-face and the rest online. The balance between these elements can vary greatly. For example, “flipped classrooms” use on-demand content for students to review before class and arrive ready to discuss the material during regular class meetings. The core of the learning strategy is still based somewhat on the traditional model, as for some students discussions in face-to-face settings are key to the learning experience. Still, traditional lecture and support materials are being assigned before students enter the classroom. By framing course delivery through the lenses of timing and mode of delivery, we can organize the spectrum of types of online courses along these two dimensions, as seen in Table 1.

Table 1

Course Delivery Matrix

		Course timing	
		On-campus	Online
Mode of Delivery	Real-Time (Synchronous)	Classroom setting and face-to-face interaction	Synchronous interaction through learning management system (LMS)
	Hybrid	Synchronous and asynchronous classroom setting and university LMS	All content delivery through LMS, both synchronous and asynchronous
	On-Demand (Asynchronous)	LMS course delivery and on-campus office hours	All content delivered asynchronously and office hours online only

On-Campus, Real-Time

On-campus, real-time courses reflect the traditional setting in which all interactions (except for e-mails) occur in the face-to-face format in a campus classroom.

On-Campus, Hybrid

Traditionally (or as traditional as within the last 10 years can be), hybrid courses were on-campus courses with an online component, such as the flipped classroom model (recorded content, live discussions). Hybrid courses offer a mix of real-time and on-demand material. In other words, instructors can deliver hybrid courses synchronously and asynchronously. Policies that define a “hybrid” course vary by institution. Ciabocchi et al. (2016) noted that the time spent online can vary between 30% to 80%. For instance, in Florida, the Board of Governors (the overseers of the state univer-

sity system) defines distance-learning courses as those in which 20% to 80% of the course takes place online. Anything over 80% is classified as a distance-learning course. Florida's public university system is not unique, and each university or college's governing body should have policies and definitions in place about how distance learning is operationalized, as different fee structures are associated with each mode of delivery.

On-Campus, On-Demand

In on-demand courses, all of the content is delivered asynchronously. This includes lectures, student feedback, course work, and the interaction between the students in the course. On-demand courses provide students the opportunity to go to campus to access not only course materials, but also the technologies needed to complete class projects if a student does not have access to the proper technology at home. An example is when students who need to work on group or class projects meet on campus to use specialized software; on campus, technical assistance would also be available. However, instructors hold in-person office hours, so while students are participating in the course at their own convenience, instructors are required to be physically on campus some of the time.

Online, Real-Time

Real-time online classes are as close as one can get to sitting in a classroom without being there. Instructors deliver this format synchronously, whereby all interaction happens in real time. This includes the lecture, group projects, and student questions. This is possibly the most technology heavy mode of delivery, requiring all students and faculty to have access to a high-speed broadband Internet connection, as well as a microphone and camera so that the instructor can deliver the course in a manner that most reflects the traditional classroom experience.

Online, Hybrid

Faculty teaching online and relying on a hybrid format most often hold virtual meetings during which students log on to the designated online platform. However, with this type of online course, many class activities such as group work or presentations are done asynchronously with the results later uploaded onto the content management system.

Online, On-Demand

Online, on-demand courses are delivered completely asynchronously. Instructors must carefully design their course and provide the material, including recorded lectures, podcasts, interactive activities, and student presentations. Students and instructors do not meet regularly, because the content is available to the students through the content management system. Often, instructors must have their entire course ready to go by the first day of class.

Research Design and Empirical Approach

This research is inherently exploratory because the universe of online and hybrid courses is currently unknown. We distributed a Web-based survey to all 82 schools listed as offering at least one online course in the Seton Hall University nonprofit programs database as of October 2016.² Since 1995, this research project led by Prof.

²The database is accessible here: <http://academic.shu.edu/npo/list.php?sort=state&type=ol>

Mirabella has sought to examine the impact of nonprofit education on the community. Because our research focuses on the perceptions of faculty who teach online, it was appropriate to send the Web-based survey to schools that were identified as offering at least one online course, as opposed to sending the Web survey to a more general list, which would include programs beyond nonprofit education.

E-mails were sent to the contact person for each university on the list in October 2016, and two e-mails were returned as undeliverable, for a total of 80 schools surveyed. A request for the respondent to forward the letter and survey link to other faculty members who taught hybrid and online courses was included in the letter that sought their participation in this study.

To complement the initial list and maximize the response rate, a challenge for Web-based surveys (see Lin & Van Ryzin, 2012), we decided that snowball sampling using our own social networks (Facebook and Twitter) would be the most efficient method given our connections to other academics who teach nonprofit-related courses in higher education. Again, recipients were asked to pass along the link to the survey to other faculty members who have taught online or hybrid courses. Because of the method used to gather responses, it was not possible to calculate a reliable survey response rate.

The survey was conducted through Qualtrics, was open from October 2016 through February 2017 to allow for any laggard respondents, and resulted in 43 responses, with 39 respondents completing the full survey. The survey used skip logic and contained 50 questions, 40 of which were close ended. The remaining 10 were open ended, the purpose of which was to elicit a greater understanding of respondents' perceptions. Once the survey closed, the responses were analyzed in SPSS 22.0, the open questions were coded using NVivo Pro, and similar themes or groupings in the responses were identified.

Overview of the Data

Of those who completed the survey, 62.8% had experience teaching a hybrid course within the last 5 years, and 79.1% had taught online courses. These courses were at undergraduate and graduate levels, with 51.3% of respondents teaching in nonprofit management programs, 20.5% in public administration programs, 10.3% in political science programs, and 17.9% in other disciplines. Blackboard was the LMS used most (38.1%), followed by Canvas (23.8%), Moodle (11.9%), and BrightSpace (4.8%). Other LMSs were used by 20.9% of respondents, who at times indicated using more than one LMS.

Even though the survey was sent to only those who teach at least one hybrid or online course, the typical teaching experience for respondents was traditional, face-to-face (on-campus, real-time) on-campus courses (48.8%), with the least typical teaching experience being online, on-demand courses (33.3%; see Tables 2 and 3).

In addition to the types of courses and which LMS respondents were using, we also inquired about the respondents' rank, the type of university where they taught, and whether the respondent received any training on how to teach either hybrid or online courses. Most respondents taught at a research/teaching university (56.4%), followed by research-intensive universities (23.1%), teaching universities (15.4%), liberal arts colleges (2.6%), and community colleges (2.6%). Most respondents held the rank of assistant professor (30.8%), followed by associate professor (25.6%), lecturer/

Table 2*Percentage of Respondents' Typical Teaching Experience (n = 41)*

Method of delivery	On campus %	Online %
Real-Time	48.8	4.9
Hybrid	19.5	0.0
On-Demand	9.8	9.8
Other/NA	7.3	

Table 3*Least Typical Teaching Experience (n = 41)*

Method of delivery	On campus %	Online %
Real-Time	9.5	23.8
Hybrid	9.5	4.8
On-Demand	7.1	33.3
Other/NA	11.9	

instructor (15.4%), full professor (12.8%), adjunct professor (10.3%), and graduate assistant/other (5.2%). Of all of the respondents, 68.4% had received training on how to teach or design hybrid and/or online courses, with 88.5% having been trained through their institution and 11.5% through an outside organization. A 1999 survey of 60 faculty showed completely different results: 75% of the respondents had not participated in training other than what they needed to understand the basic function of their LMS (Palloff & Pratt, 2013). The gender makeup of respondents was roughly equal, with 51% female and 49% male.

Discussion: Is Distance Teaching a Panacea or a Poison?

Many stakeholders have pushed for more online courses, often without considering or fully understanding the impact of teaching in this medium. This study seeks to add to this conversation. In this section, we discuss the data in terms of course preparation and course implementation. Then we discuss the advantages and challenges respondents have in teaching hybrid and online courses. Respondents were also asked their perceptions of what departments and universities could do to assist in facilitating faculty who are teaching or want to teach online.

Course Preparation

Faculty who teach online know that a lot of work goes into course preparation for a successful class. Moreover, they need more time to design a new course than to revise an existing course. Although faculty members may use different course designs for their hybrid and online courses, they all use the LMS in a manner that allows for the effective delivery of course content and engagement of students. Some basic staples of an online course include lectures, readings, and assignments.

Respondents were asked how many hours per week *on average* they invested in course development the first time they taught a hybrid or online course; the mean was 15.5 hr ($SD = 8.8$) and 18.7 hr ($SD = 10.8$), respectively. This is much more than that previously reported at 10.7 hr/week/course and already considerably more time than face-to-face courses (Santilli & Beck, 2005). The time invested for the second, third, and fourth iteration of the same course was reduced to a mean 8.8 hr ($SD = 8.1$) and 8.2 hr ($SD = 6.1$), respectively. This brings the combined average time spent on hybrid or online courses to 12.2 hr for hybrid courses and 13.5 hr for online courses, well beyond original estimates (see Santilli & Beck, 2005). The dramatic decrease in hours spent on course preparation could be a result of faculty simply reusing the course as is, but 52.1% of respondents noted that they always or often record new lectures for their hybrid courses and 50% noted the same of their online courses. Similarly, 52.1% of respondents who teach hybrid courses noted they create new assignments when revising courses and 41.3% of respondents who teach online courses noted the same.

Table 4

Course Preparation for Hybrid and Online Courses (n = 23)

Always or often	Hybrid %	Online %
Record new lectures	52.1	50.0
Change textbooks or readings	30.4	20.7
Redesign course website ^a	22.7	23.3
Create new assignments	52.1	41.3

Note. Course preparation scale: *never, rarely, sometimes, often, always, don't know.*

^a $n = 22$

Part of the effectiveness of recorded course lectures, assignments, and the design of the course in the LMS could be related to whether a faculty member received training on how to best teach online. This is interesting because in the face-to-face, or traditional, format, most academics are not specifically taught how to develop and deliver a course; they are trained to be experts in their fields and they learn from how the material was delivered to them in course settings on how best to engage and inform students. Although resources are available to faculty who want to improve their teaching skills and pedagogy, it is not a requirement at most institutions. However, delivering courses online, or a portion of a course online, has become a field unto itself, and organizations are developing best practices on how to deliver content and enhance engagement. Some institutions are following suit by incentivizing or requiring faculty to complete these courses prior to teaching hybrid or online courses or, at the very least, requesting the course design itself be reviewed for quality using a specific metric, such as Quality Matters³.

For those who received training ($n = 26$) compared with those who did not receive training ($n = 12$), fewer respondents who received training for online teaching,

³Quality Matters is a quality assurance company that evaluates online courses. For more information visit, <https://www.qualitymatters.org/about>

which includes course design, noted that they recorded new lectures in either hybrid or online courses. In other words, those who did not receive training spent more time recording new lectures for the next iteration of their course (see Tables 5 and 6). Those who received training also redesigned the course website and created new assignments for the next iteration of the course at greater proportion. This could indicate that they were more comfortable making adjustments based on student feedback and prior experience.

Table 5

Hybrid Course Preparation and Training (n = 38)

Always or often	No training	Training
	%	%
Record new lectures	71.4	43.8
Change textbooks or readings	33.3	29.4
Redesign course website	20	23.6
Create new assignments	50	53

Note. Course preparation scale: *never, rarely, sometimes, often, always, don't know.*

Table 6

Online Course Preparation and Training (n = 38)

Always or often	No Training	Training
	%	%
Record new lectures	50.0	44.5
Change textbooks or readings	8.3	26.3
Redesign course website	16.7	25.0
Create new assignments	33.4	42.1

Note. Course preparation scale: *never, rarely, sometimes, often, always, don't know.*

Course Implementation

The implementation of the online portion of hybrid courses, and wholly online courses, varies greatly depending on the number of assignments, the number of students in the course, and the level of student engagement with other students and faculty. To measure how faculty perceived their hybrid and online courses, we asked about the greatest challenges and advantages to each, the maximum number of students allowed to register, and their engagement with the students during the semester.

Advantages: Hybrid courses. When asked about their hybrid courses, 45.8% of respondents selected the ability to be innovative in course design and delivery, 33.3% identified the ability to maintain a flexible schedule, and 12.5% noted the ability to link to dynamic content and the ability to reuse course materials in the next iteration of the course. This indicates that online course delivery enriches the course and accommodates individuals' schedules.

Respondents were also asked to elaborate briefly on the main advantages to teaching hybrid courses. The written responses to advantages with hybrid courses ($n = 21$) resulted in three main themes: face-to-face engagement (61.9%), flexibility (42.9%), and technology advantages (9.5%). Face-to-face engagement was the most identified advantage, specifically the ability to utilize class time better by “flipping” the classroom, that is, having the lectures online for students to watch prior to class and reserving class time for discussion and engagement. One respondent noted, the hybrid format is “encourag[ing] participation and providing foundational materials in preparation for face-to-face [meetings to] facilitate deeper group work.” Another said that the hybrid format “combines the best of both worlds—in person interactions so you know your students, online so they can study at their own pace and on their own schedule.” A third indicated, “I save classroom time for guests to come and speak to the class so the students could get many more perspectives on the field from current practitioners.”

Respondents were not specifically asked about whether the advantage was for the faculty member or the students, and this is noticeable in the results. In regard to flexibility, the respondents noted the flexibility that hybrid courses provide to faculty members and to students. Flexibility was provided in scheduling, group work, and travel. One respondent said, “Working remotely means I can work at times that are convenient for me and my family.” Another said, “The flexible schedule for my hybrid course allows students in their groups to work on their projects.” A third noted how “it gives students who need to travel for work or have colds [the ability to] still attend and participate.”

Advantages: Online courses. The greatest advantages of teaching online courses, according to the respondents, were the ability to work remotely (40%), followed by the ability to maintain a flexible schedule (30%), and the ability to be innovative with course design and delivery (13.3%).

Respondents were also asked to elaborate briefly on the main advantages to teaching online courses. The written responses to advantages with online courses ($n = 25$) resulted in three main themes: flexibility (44%), individual engagement (24%), and reach (20%). Once again, flexibility was referenced for faculty and for students. One respondent noted, “I am able to travel to conferences and not having to worry about canceling class.” Another noted how online courses are “convenient because one doesn’t need to travel, pay for parking, walk on dark streets at night, enter dark, unguarded classroom buildings, etc.” With regard to students, as with the advantages to hybrid courses, “students have flexible scheduling and can meet the requirement of the course as they wish.” Another said, “The ability for the instructor and the student to work remotely is also very important for adult/non-traditional students who have to juggle work, family, and school.”

Challenges: Hybrid courses. Perceived challenges not only increase the level of faculty’s resistance to teaching in these newer media, but may also taint the experience for those who already are teaching in these newer media. When asked what they perceived to be the greatest challenges to teaching hybrid courses, 33.3% noted the decreased level of personal interaction with students, followed by 29.2% who said their ability to maintain a reasonable schedule. Another 16.7% found their greatest challenge was updating course materials for a new iteration of the course.

Again, respondents were also asked to elaborate briefly on the main challenges to teaching hybrid courses ($n = 15$). Most of the responses fell into three main categories: misinterpretation from students (33.3%), being disconnected from students (20%), and time commitment (13.3%). Students' misinterpretations centered on assignments, course concepts, and course expectations. One respondent said, "Students may estimate that they have more time and they do not." Another noted, "More than one student had a hard time understanding that text or images from a website when used in a student's electronic presentation need[ed] to be acknowledged and cited the same as traditional text sources."

Although hybrid courses usually have a face-to-face component, faculty can still feel disconnected. One noted, "The decreased interaction with students creates the illusion for them that they are on track and on schedule with their schedule with their projects, which is not always the case." Another explained, "The chemistry you build over a semester through sustained engagement can be disruptive between online and in class if not done well."

When speaking of time as a challenge to hybrid course delivery, one respondent noted that "time to properly develop the course, paying attention to pedagogy, best practices, quality over quantity, and have any assistance once the course is underway" was the main challenge. Intuitively, one can see that as more students enroll in class, more time is needed for grading, assignments, and communicating with students.

For the maximum number of students who can register for courses, the mean number of undergraduate students allowed to register for hybrid courses was 37.9 ($SD = 24.1$), and the mean number of graduate students allowed to register for hybrid course was 25.3 ($SD = 8.9$). These numbers indicate that the fear of increasing the number of students who can enroll in hybrid courses did not flesh out in the data.

Challenges: Online courses. For respondents who taught online courses, 41.9% selected decreased personal interaction with students, followed by 16.1% who selected that updating course content was the greatest challenge. Of the respondents, 12.9% identified being innovative with course delivery and the ability to maintain a reasonable schedule as being the most challenging aspect of teaching online course.

In the written responses about the greatest challenge respondents face in teaching online courses ($n = 20$), the three main themes were student engagement (35%), time commitment (30%), and design the course (15%). With regard to student engagement, one respondent noted, "It is so hard to judge student comprehension without the verbal feedback that face-to-face instruction provides." Another respondent had a similar comment with regard to decreased student engagement, noting that "finding ways to verify students understand the concepts without creating an avalanche of grading" was the greatest challenge to teaching online courses.

When respondents were discussing issues related to the time commitment that is needed to teach online courses as being the main challenges, one said it was "the up-front effort required to 'do it right.' This also means that re-prepping—e.g. redoing videos or changing texts – is much more involved for online courses." Another referred to the time needed to allocate to grading:

I have taken to heart that the cornerstone of online teaching is regular engagement with the student—students have to feel like the professor is watching their progress rather than just engaging with an automated program . . . This takes more time than a typical F2F course—maybe 8–10 hours per week for a 16-student graduate course.

Regarding course design, respondents said the main challenge was “learning the possibilities the first time around.” Another noted, “It’s hard to stay on top of the best methodology while at the same time delivering a quality product.” Because the course is delivered completely online, its design and feel affect how students experience the course and thus how they evaluate the instructor. Student engagement and the amount of time faculty need to allocate to an online course are affected by the number of students enrolled in the course, because it greatly affects the ability of faculty to be engaged on an individual level. Relatedly, class size, or the fear that administration will greatly increase enrollment in online courses, may not only affect the ability of faculty to engage students, but may also decrease the number and types of assignments required for students.

The fear of overly large classes is a common critique for online courses; our data show that this fear may be overblown. The mean number of undergraduate students allowed to register for online course was 37.1 ($SD = 24.6$). At the graduate level, one would expect to see smaller class size, and this was found in the data, with the mean number of graduate students allowed to register for online course being 27.1 ($SD = 9.8$). However, this could be a function of the type of university or college at which respondents teach or the type of course they teach, and it was not something we could parse out in our data.

A key part of course implementation regardless of class size is communicating with students. Respondents were asked about the main ways they communicate with students and which methods are most effective. As Table 7 shows, 73.0% of respondents ($n = 37$) deemed e-mails as either most effective or effective, and 72% use e-mail as their main or only communication tool. Similarly, respondents felt that communicating in person with students was most effective (48.6%) or effective (18.9%). These numbers represent a slight decrease from a 2000 National Education Association survey that found that 83% preferred e-mail communication with their online students (Hardy & Bower, 2004).

Table 7

Communication Modes and Effectiveness

Mode of communication	Mostly/always or only	Most effective
	%	%
E-Mail	71.8 ^a	72.9 ^b
Discussion Boards	48.7 ^a	35.1 ^a
Video Chat	10.8 ^a	43.2 ^b
Telephone	10.6 ^c	2.7 ^b
In Person	21.1 ^c	67.5 ^b

Note. Communication scale: *never, sometimes, about half of the time, most of the time, always/only*. Effectiveness scale: rank order, 1 = *most effective*, 6 = *least effective*.

^a $n = 39$. ^b $n = 37$. ^c $n = 38$.

Although 68% of respondents said in-person was the most effective way to communicate with students, only 21.1% mostly or always communicated with their students in this way. Perhaps the most intriguing result is the small proportion of respondents who seemed to rely on video chat to communicate with their students (10.8% either always or half the time) or via telephone (10.6% either always or half the time) compared to those who claimed to never video chat with their students (35.1%) or call them over the phone (26.3%). The data suggest that our respondents preferred asynchronous versus synchronous modes of communication. This could be one of the factors contributing to the increased workload of faculty in online courses.

Department and University

In addition to being asked specifically about their experiences with hybrid and online courses, respondents were asked about the challenges they face teaching hybrid and online courses in their department and university, as well as their opinions on what their department and university could do to help facilitate online teaching.

Department. The written responses about the challenges respondents had about their department fell into one of four themes: lack of training (40.7%), outdated policies (25.9%), lack of understanding of hybrid and online education by administrators (22.2%), and faculty within the department who resist teaching hybrid or online courses (14.8%). Training was further divided into two types: technical (19%) and how-to (82%). Hardy and Bower (2004) noted that most higher learning institutions focus on the technological aspects rather than on helping faculty manage the transition from a traditional to an online environment. The perceived lack of training opportunities is important, as training is key to the success of distance learning instructors (Hardy & Bower, 2004).

Regarding training, one respondent noted a “lack of support on how to use the tools and overall lack of coherent connection between such use and how this format enhances student learning outcomes.” Another respondent, whose answer was coded as faculty resistance, said, “The staff hired to help faculty have never taught and have no idea what’s involved. They are just technicians and they have a lot of power over your course. There is not the same freedom that one has in the classroom.” Another answered the question in terms of how it affected student learning, writing that the greatest challenge is “consistent use of technology across all faculty members so students get the same type of experience.”

The need to update policies to reflect hybrid and online courses spanned from mandated on-campus office hours, to recognition in faculty annual evaluations and course releases, to how much time it takes to design and implement online courses. One respondent said, there is “no recognition of [the] much greater number of hours invested in online courses and development.” This is consistent with other studies that have shown the increased workload for courses in an online environment (Palloff & Pratt, 2013; Tomei, 2006; Yick et al., 2005). When speaking of contracts, another noted, “We are required by contract to be present on campus for office hours. It is unacceptable, but they will not change it due to contract language.” This example points to the bureaucratic rigidities of higher education, which have important consequences for distance teaching (Palloff & Pratt, 2013). A third wrote how “fitting policies that were generated for a traditional teaching setting to an online course” was the greatest department challenge. This mismatch between the procedures developed for in-class

courses and the online realities highlights the gap between administrative rules and faculty experiences.

Respondents offered many suggestions ($n = 24$) for facilitating online teaching. Most suggested that departments offer more training and support for faculty who teach online (20.8%). Others suggested that departments offer incentives (12.5%), such as recognition, a course release when designing a new online or hybrid course, and a stipend for new courses. Despite the emphasis in the literature of the “controversial” nature of compensation discussions (Palloff & Pratt, 2013, p. 38), surprisingly few faculty members highlighted this in their answer. Further research is needed to understand whether this is because faculty do not believe departments can provide adequate compensation or rather other improvements are more urgently needed. Others recommended that department administrators educate themselves about hybrid and online education and to gain a better understanding of the demands of hybrid and online courses on faculty. One respondent wrote, “Have the people who ask us to teach online teach online themselves so they know what the experience is like.” This is an important consideration in promoting an effective dialogue between administrators and faculty.

University. The challenges that respondents ($n = 29$) had with teaching hybrid or online courses at the university level fell into three themes: financial support from administration (31%), the university’s policies regarding online education (27.6%), and the LMS (17.2%). The responses about lack of financial support for hybrid and online courses focused on institutional support rather than individual compensation. One respondent wrote, “[The university] advocate[s] it, but they lack the resources to support it.” Similarly, another wrote that the greatest challenge faced from the university is the “capacity to support the technical aspects of using [the LMS] and access the help desk resources.” Our results are consistent with results in research that shows that LMS experiences for students and faculty are central to overall experience and learning (Almarashdeh, 2016). Another noted the need for more staff support, writing that the greatest challenge is “funding for teaching assistance or course development to prep to teach hybrid.” The emphasis on support beyond individual financial compensation is intriguing because it signals a strong need for additional resources on campus to improve faculty’s teaching experiences.

Given that most universities had policies regarding teaching prior to hybrid and online courses, it is expected that not all policies have been adequately updated to align rules, procedures, or evaluations on course delivery regardless of the mode. One respondent noted, “The university imposes inalterable rules that aren’t always consistent with a good online class.” Another wrote, “Although it isn’t a written rule, online teaching certainly isn’t valued for tenure. It’s a cash cow rather than a real educational experience.” The written responses about the LMS note the poor infrastructure. Again, this is consistent with research that highlights the bureaucratic rigidities of university administration and innovations in an online environment (Palloff & Pratt, 2013; Tomei, 2006; Yick et al., 2005).

The recommendations that the respondents had for their universities were similar to those they had for their departments: provide staff support, a course release, or a stipend and care about the faculty members who are asked to teach hybrid and online courses. However, one respondent’s recommendation to the university was to “break your romantic infatuation with the technology and realize it is the means, not the end for student learning outcomes.”

Conclusion

Whether online teaching is a panacea in which faculty enjoy a flexible schedule and the possibility to innovate in their course delivery or a poison that burdens faculty with heavy workload is unclear. The reality is probably somewhere in the middle. Our results show that students, faculty, and their institutions ought to think carefully about the development of online teaching across campuses. The respondents were asked in general about their experiences with online and hybrid teaching, but further research should investigate whether the experiences of faculty who teach in the nonprofit sector are different from the experiences of those who teach in other fields.

We conclude this article by drawing from our evidence regarding the main lessons from faculty members' experiences with online teaching. We asked the following question to our participants: *A colleague asks for your advice regarding her online course. You would like to help but you are running late for (another!) meeting. What is the one piece of advice you would share?* By reflecting on the advice faculty would like to share, we gain a better sense of the real challenges and benefits to online teaching.

In total, 37 respondents offered advice. Their answers were diverse and at times surprising. For example, two respondents simply advised against online teaching: "Don't do it! It's not worth the time and loss of any semblance of work-life balance." Others answered in the opposite way: "Focus on how this might help students learn, not on how this might make your life be easier." These comments are symptomatic of the range of experiences, some positive and others negative.

Our respondents discussed four general lessons that they would share with their colleagues. The first important lesson revolved around the need to engage and interact with students. One respondent put it well, suggesting to a colleague who is thinking about teaching online to "create opportunities for engagement. Just because it is online doesn't mean the class can't be engaged." Indeed, another noted, "Give lots of feedback to each student to keep them anchored. Otherwise they drift away (another downside of no face-to-face interaction)." Some emphasized the need for sustained and consistent interactions, weekly, to connect with the students. Indeed, research has shown that prompt feedback, particularly in an online setting, helps keep students personally engaged (Vitale, 2010).

The second important lesson was about designing the course. A respondent noted, "Be clear, be consistent but flexible, and above all stay organized." The need to stay organized is an important dimension of a successful online experience for students (Hardy & Bower, 2004). It can also help faculty in the long term to reduce their time spent on course preparation. Others discussed the need to be extremely explicit in every aspect of the course and not to be afraid of redundancy. One suggested, "Be redundant online, put content in multiple places, so that students find what they need fast." Instructors can strive for innovation and originality, but students respond well to accessibility of content, simplicity, and clear expectations. For example, one respondent noted, "Do not make it too cumbersome for the students just to try to control participation."

The third lesson discussed institutional support. The respondents emphasized the need for faculty to investigate what resources they have access to. For example, one piece of advice was that "the university had better be sure they have a strong support team for both faculty and students before they start encouraging online teaching."

Another noted how “there are TONs of resources online, and if she hasn’t already taken the Online Skills Mastery course through our university, she should, it helped a TON.” It is important that faculty seek support through colleagues, their university, and the greater community of online teachers. One respondent noted, “The university provides lots of guidance. Go see what’s available to you.” This prevalent advice shows the need for better communication channels between administrators, departments, and their faculty. Beyond individual compensation for the increased workload, faculty expressed the need to feel supported through qualified staff and working technology.

Finally, the most common piece of advice suggested by respondents related to time management. The respondents advised others to have realistic expectations and anticipate spending more time than in traditional settings. For example, one respondent suggested, “Plan on everything (prep, grading, etc.) taking at least twice as long as you would expect.” Another said, “Double your prep time to make sure everything is copacetic BEFORE going live and/or publishing.” The importance of effectively managing time and acknowledging from the beginning the time investment necessary for online teaching is the most important lesson from our respondents. In one respondent’s own words, “Say yes [*to teaching online*] but TAKE YOUR TIME with the material before being ready to deliver it!” The increased workload noted in this research is consistent with that in most distance-teaching research that notes the lack of recognition for professional advancement purposes (Ladyshevsky, 2016; Palloff & Pratt, 2013). It is an important reminder and warning that these issues will rise as online offerings increase and be a potential source of conflict between administrators and faculty.

In conclusion, we discussed throughout the article key considerations, both positive and negative, that must be addressed prior to jumping into the virtual world in order to create a win-win-win-win environment for the faculty member, the department, university, and most important, the student. In other words, far more than increased flexibility that drives faculty and increased student numbers that drive departments and administrators need to be considered. After all, universities, departments, and faculty members are here to further the knowledge and experiences of students so that they can become productive members and leaders within our communities. That is the goal we strive for, but we do so with considerable constraints, mainly time and resources.

References

- Al-Bataineh, A., Brooks, L., & Bassoppo-Moyo, T. C. (2005). Implications of online teaching and learning. *International Journal of Instructional Media*, 32, 285–294.
- Allen, I. E., & Searman, J. (2013). *Changing course: Ten years of tracking online education in the United States*. Retrieved from Babson Survey Research Group website: <http://onlinelearningsurvey.com/reports/changingcourse.pdf>
- Almarashdeh, I. (2016). Sharing instructors experience of learning management system: A technology perspective of user satisfaction in distance learning course. *Computers in Human Behavior*, 63, 249–255. <https://doi.org/10.1016/j.chb.2016.05.013>
- Bremner, F. (1998, November 16). On-line college classes get high marks among students: Cyber courses handy but more work for teacher. *USA Today*, p. 16E.

- Ciabocchi, E., Ginsberg, A. P., & Picciano, A. G. (2016). A study of faculty governance leaders' perceptions of online and blended learning. *Online Learning, 20*(3), 52–73. <https://doi.org/10.24059/olj.v20i3.974>
- Dommeyer, C. J., Baum, P., Hanna, R. W., & Chapman, K. S. (2004). Gathering faculty teaching evaluations by in-class and online surveys: Their effects on response rates and evaluations. *Assessment & Evaluation in Higher Education, 29*, 611–623. <https://doi.org/10.1080/02602930410001689171>
- Hardy, K. P., & Bower, B. L. (2004). Instructional and work life issues for distance learning faculty. *New Directions for Community Colleges, 128*, 47–54. <https://doi.org/10.1002/cc.174>
- Hew, K. F., & Cheung, W. S. (2014). Students' and instructors' use of massive open online courses (MOOCs): Motivations and challenges. *Educational Research Review, 12*, 45–58. <https://doi.org/10.1016/j.edurev.2014.05.001>
- Hunt, D. H., Davies, K., Richardson, D., Hammock, G., Akins, M., & Russ, L. (2014). It is (more) about the students: Faculty motivations and concerns regarding teaching online. *Online Journal of Distance Learning Administration, 17*(2), 62–71.
- Kim, K.-J., & Bonk, C. J. (2006). The future of online teaching and learning in higher education. *Educause Quarterly, 29*(4), 22–30.
- Ladyshewsky, R. K. (2016). The virtual professor and online teaching, administration, and research: Issues for globally dispersed business faculty. *International Journal of E-Learning Distance Education, 32*(2), 1–15.
- Lewis, C. C., & Abdul-Hamid, H. (2006). Implementing effective online teaching practices: Voices of exemplary faculty. *Innovative Higher Education, 31*(2), 83–98. <https://doi.org/10.1007/s10755-006-9010-z>
- Lin, W., & Van Ryzin, G. G. (2012). Web and mail surveys: An experimental comparison of methods for nonprofit research. *Nonprofit and Voluntary Sector Quarterly, 41*, 1014–1028. <https://doi.org/10.1177/0899764011423840>
- MacNell, L., Driscoll, A., & Hunt, A. N. (2014). What's in a name: Exposing gender bias in student ratings of teaching. *Innovative Higher Education, 40*, 291–303. <https://doi.org/10.1007/s10755-014-9313-4>
- Matthews, D. (1999). The origins of distance education and its use in the United States. *THE Journal, 27*(2), 54.
- McGee, P. (2013). Supporting academic honesty in online courses. *Journal of Educators Online, 10*(1), 1–31. <https://doi.org/10.9743/JEO.2013.1.6>
- Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Jessup, MD: U.S. Department of Education.
- Ni, A. Y. (2013). Comparing the effectiveness of classroom and online learning: Teaching research methods. *Journal of Public Affairs Education, 19*, 199–215. <https://doi.org/10.2307/23608947>
- Palloff, R. M., & Pratt, K. (2013). *Lessons from the virtual classroom: The realities of online teaching* (2nd ed.). San Francisco, CA: Jossey-Bass.

- Robertson, A. (2015, February 11). Can online classrooms help the developing world catch up? Retrieved April 25, 2017, from <http://www.theverge.com/2015/2/11/8014563/bill-gates-education-future-of-online-courses-third-world>
- Santilli, S., & Beck, V. (2005). Graduate faculty perceptions of online teaching. *The Quarterly Review of Distance Education*, 6(2), 155–160.
- Sellani, R. J., & Harrington, W. (2002). Addressing administrator/faculty conflict in an academic online environment. *The Internet and Higher Education*, 5, 131–145. [https://doi.org/10.1016/S1096-7516\(02\)00090-8](https://doi.org/10.1016/S1096-7516(02)00090-8)
- Tallent-Runnels, M. K., Thomas, J. A., Lan, W. Y., Cooper, S., Ahern, T. C., Shaw, S. M., & Liu, X. (2006). Teaching courses online: A review of the research. *Review of Educational Research*, 76(1), 93–135. <https://doi.org/10.3102/00346543076001093>
- Tomei, L. A. (2006). The impact of online teaching on faculty load: Computing the ideal class size for online courses. *Journal of Technology and Teacher Education*, 14, 531–541.
- Valentine, R., & Bennett, R. (2013). The virtual professor: A new model in higher education. *Administrative Issues Journal Education Practice and Research*, 3(1), 3–5. <https://doi.org/10.5929/2013.3.1.8>
- Vitale, A. T. (2010). Faculty development and mentorship using selected online asynchronous teaching strategies. *The Journal of Continuing Education in Nursing*, 41, 549–556. <https://doi.org/10.3928/00220124-20100802-02>
- Wolcott, L. L. (1997). Tenure, promotion, and distance education: Examining the culture of faculty rewards. *American Journal of Distance Education*, 11(2), 3–18. <https://doi.org/10.1080/08923649709526958>
- Wolcott, L. L., & Betts, K. S. (1999). What's in it for me? Incentives for faculty participation in distance education. *Journal of Distance Education*, 14(2), 34–49.
- Yick, A. G., Patrick, P., & Costin, A. (2005). Navigating distance and traditional higher education: Online faculty experiences. *The International Review of Research in Open and Distributed Learning*, 6(2), 1–18. <https://doi.org/10.19173/irrodl.v6i2.235>