# Collaborative Curriculum Design and Assessment: Piloting a Hybrid First-Year Writing Course

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## Abstract

We needed to provide options and to create space for first-year writing courses at a growing tier-one, four-year, public university. Therefore, three faculty members—the program director, the associate director, and a full-time teaching fellow—collaborated to create, pilot, and assess a hybrid version of our writing course. The teaching fellow taught four face-to-face sections of the course and then shifted her curriculum design to teach four hybrid sections the following semester. After both semesters, she provided blinded data to the other two faculty for collaborative assessment of three data sets: the student performances per assignment-specific and final grades, the instructor's journal, and the students' survey responses.

Students in the face-to-face and hybrid sections performed equally, with mean final grades differing by only 10.74 points on a 1000-point scale (means of 815.54 points in face-to-face and 804.80 in hybrid—a difference of 1.07%, which is not statistically significant). We discovered the value of journaling for the instructor to reflect, note questions, revisit design decisions, and document solutions for future courses. We identified issues in the course design and found that inconsistencies in assignment-specific grades were paralleled with concerns in the instructor's journal and students' survey responses. We also noted that collaborative design and assessment benefits our students, our faculty, our program, and our university.

Online, hybrid, and blended learning are recent trends in higher education that allow effective pedagogical methods to benefit students, instructors, and universities. However, shifting a face-to-face class to a hybrid or online format is challenging, particularly in the first semester. This shift requires planning as well as content design and development—much like writing a new course.

In assessing our program, we recognized that we needed to provide our students with a hybrid option for our first-year writing course; therefore, we objectively and strategically shifted our face-to-face curriculum to a hybrid (one-half face-to-face, one-half online) format. Our formal objectives were

- to design and implement a hybrid version of our first-year writing course,
- to support an instructor in the design and implementation and prepare her for future hybrid sections and for leadership in our growing program,
- to assess learning outcomes in both types of sections to ensure consistency, and
- to document our process for future use and improvement.

In undertaking this project, we worked collaboratively: three faculty members partnered through the process, allowing the instructor-of-record to decide how to structure and teach her class while her two colleagues (the program director and associate director) supported her and assessed the class outcomes. In addition to achieving our objectives for the program, we also obtained grant support, invested in our university's teaching center, and encouraged other instructors to pursue our university's online teaching certification.

The project results include a well-designed hybrid version of our course, assessment data justifying the hybrid format as a viable and equivalent option, learning experiences related to online education and curriculum development, and a community of invested instructors.

We chose a hybrid format because hybrid and blended learning are proving effective for learning (Chak & Fung, 2014; Choi & Han, 2015; Liu et al., 2016; Melonçon & Arduser, 2013; U.S. Department of Education, 2010). However, various studies contradict these studies. One study (Ilic, Nordin, Glasziou, Tilson, & Villanueva, 2015) found that hybrid learning was no more effective but that students' attitudes toward their course content was improved in a hybrid class. Another study (Xin, Kempland, & Blankson, 2015) found that students performed better in blended classrooms than in hybrid or online courses. Although research reports are mixed, the new hybrid format aligns with our university's strategic plan (Benson, 2016).

Most important, we recognized that, in building a hybrid first-year writing course, we could provide an option for our students without compromising course content. Research reports that students in hybrid and online courses benefit because they

- practice and strengthen their skills in communication (Akyol & Garrison, 2008; Varvel, 2001),
- learn more about technology (Varvel, 2001),
- take ownership of their learning (Fitzgerald, Anderson, & Thompson, 2015),
- connect with classmates (Anderson & Deel, 2013; Bannier, 2014),
- create knowledge (Bailey, Hendricks, & Applewhite, 2015; Bryant & Bates, 2015), and
- have flexibility in "attending" class (Berry, 2006)—that is, they can work around busy schedules and personalize their experiences to meet their learning styles (Moreillon, 2015).

Hybrid and online courses provide students with options that can enhance their education.

### **Our Program and our History of Distance Learning**

Our university, The University of Texas at Dallas (UTD), is a large and rapidly growing university in the southwestern U.S. The university is a Carnegie Tier-1 Research Institution with an enrollment of more than 27,000 students. Its distinguished alumni include an astronaut and a Nobel-Prize-winning biochemist (UTD, n.d.). UTD was founded in 1969 as a graduate research institution, adding bachelor's degrees for transfer students only in 1975 and offering full undergraduate curricula in 1990. The first-year writing program also began in 1990 (Our History—Creating the Future, n.d.). The focus of our young first-year writing program, a onesemester course, is on rhetoric with an emphasis on argument. The course equals a first-year, second-semester course at many schools, as the more fundamental composition course is not required for UTD's degree plans.

UTD's student population has doubled in the last 10 years. The university's rapid growth has challenged administration and faculty who are seeking to accommodate student enrollments, including the need to increase the number of sections of the first-year writing course and challenges for classroom space. In each of the last three years, UTD has offered 95 to 100 sections of this first-year course, with each section having an enrollment cap of 19 students, and we anticipate increasing to 100 sections next year with an increased enrollment cap of up to 22 students per section.

Hybrid sections of the first-year writing course were considered not only as a trial for the delivery method and as a potentially popular option for today's technology-savvy undergraduate students but also as a means to alleviate pressure on available classroom space. Most classrooms are scheduled from 8 a.m. until as late at 9:45 p.m. Hybrid classes allow for twice as many sections to be offered in the same space as face-to-face classes: For example, a face-to-face class can occupy a classroom from 10:00 to 11:15 a.m. on Tuesdays and Thursdays, but in the same classroom, we can schedule a Tuesday hybrid at 10:00 a.m. and a Thursday hybrid at 10 a.m.

Before this project, UTD experimented with online education and invested in a credentialed online-learning team. The faculty in our team also previously succeeded with hybrid sections of several upper-level communication courses. Our university library also maintains resources to provide services to distance students. Therefore, we naturally considered piloting hybrid sections of our first-year writing course as more sections were demanded.

Our first-year writing course uses a common syllabus that instructors may slightly adapt but maintains a consistent textbook, assignments, breakdown of grades, and general course structure. The instructors share resources through an online group, which is maintained by the program director and associate director. To ensure that we are consistent, our instructors use Blackboard, our university's online-learning portal.

Because a majority of our instructors are doctoral students, turnover of instructors is a challenge. Therefore, to ensure continuity in this project, we invited one of our teaching fellows to serve as the instructor-of-record. Our teaching fellows are program graduates with doctoral degrees and years of teaching experience; they know the course content and university resources and are established in our teaching faculty. The teaching fellow who was the instructor-of-record provided us with security—that is, she would replicate and improve the course and train other instructors to teach a hybrid form of the course. (Since creating the hybrid version of our first-year writing course, the instructor-of-record has trained another teaching fellow, thus building on the teaching community through this project.)

#### **Theories and Principles that Influenced our Design**

Two of our researchers have extensive experience with distance education, including their own education, course development, university service, and assessment responsibilities; however, because online education changes so quickly, we searched for literature related to online-education theory, hybrid-course development, and innovative tools and methods. We started with Moore's (1993) foundational Theory of Transactional Distance, which identifies that effective design requires *structure*, *motivation*, and *interaction*. Although Moore's theory is 25 years old, his theory continues to be relevant and applicable for online instruction and tools. His theory's three priorities are echoed by other scholars. Emphasizing consistent course structure and interaction, Dutkiewicz, Holder, and Sneath (2013) write,

Studies also indicate that students indicate a preference for consistent design. Poor design is often stated as a contributing factor in student dissatisfaction with the quality of an online course (Hathaway, 2009). In one study, more than 90% of the students surveyed indicated that online courses should be organized in a consistent structure as opposed to each instructor designing a completely customized course. However, more than 90% of students in this same study also indicated that the quality of the online course was dependent on customization gained through high levels of interaction between the instructor and the learners (Young & Norgard, 2006). Additionally, when the learners received personalized feedback, as opposed to collective feedback, they indicated a

higher level of personal satisfaction as well as an increased perception of enhanced learning (Hathaway, 2009).

We need to design consistently and connect with our students. Additionally, instructors need to emphasize meaningful action and interaction: "...an open and distributed learning environment that uses pedagogical tools, enabled by the Internet and Web-based technologies to facilitate learning and knowledge building through meaningful action and interaction" (Dabbagh & Bannan-Ritland, 2005, cited by Colorado & Eberle, 2010, p. 5). Design must be planned to ensure effective delivery, and assessment enables the instructor to measure student outcomes and improve course design (Maid & D'Angelo, 2013). Assessment can include a variety of methods (e.g., faculty survey, student survey, student feedback, and review of course content; Dutkiewicz, Holder, & Sneath, 2013) with the objective being to measure outcome and to identify what works per student performance and opinions. Instructors need to motivate students by considering cultural differences and expectations (St. Amant, 2017). Instructors also need to know how to teach and to want to learn new technology and methods for student learning (Hewett & Powers, 2007). We determined that structure (consistent design), strategies to motivate students to improve their satisfaction and their reasons for investing in the course, and interaction between instructor and student (including personalized feedback and other communication) would make our hybrid design more effective. "Some of the key components in online courses are the design of instructional material for the content delivery, student assessment of material, discussion management, time management and frustration handling" (Khan, Ebgue, Palkie, & Madden, 2017, p. 108).

In addition to structure, motivation, and interaction, we considered the development of a community—not only for the faculty members involved in the project but also for the students, particularly those in the hybrid sections who had one-half of the time in the classroom that face-to-face students had (Khan, Ebgue, Palkie, & Madden, 2017). Through this community, the instructor could create a course that encourages students to enhance their digital literacy and to exchange ideas.

Structure requires extensive planning, advance construction of course materials, and consideration of students' needs and desires. To create this consistent design (Dutkiewicz, Holder, & Sneath, 2013), we used the design of the face-to-face course as our foundation (to be consistent with our other sections). We met several times to discuss ideas on how to shift instruction, content, in-class discussions, workshops, and resources to the hybrid format. In the end, the instructor-of-record taught a hybrid course with a consistent design of simple, manageable modules. She recorded lectures in brief videos (each less than 15 minutes) and scheduled reading assignments between meetings so she could use face-to-face time for workshops.

Motivation, the students' reasons for completing work and learning to achieve the course objectives, is vital if students are going to take ownership of their learning and thus be primed to succeed in the class. The course content instructs students on how to expand their skills in writing, analysis, and critical thinking to prepare for college-level and professional communication. To motivate the students, the instructor allowed students to make choices in the topics about which they were writing, which gave the students more interest in the topics. (Our program encourages this because our student population is diverse.) She communicated consistently with students (also a part of interaction) and affirmed them as they worked through the writing process. She also encouraged her students in peer review to affirm each other—to note not only what the students needed to improve in their compositions but also what the

students were doing well. The instructor personalized her comments, spending a majority of her work out of the class communicating with students.

In planning this hybrid writing-intensive course, we discussed methods through which the instructor could interact with students, including methods that we use in face-to-face classes such as using students' names and responding to personal emails, but we also applied other methods. First, the instructor-of-record video-recorded lectures so her students could see her during instruction. She used a high-quality camera and also recorded in the university's recording studio, which provided unique technology like the ability to record a white board while she was writing notes. Second, she blocked time each week to interact. She invited students to meet with her during scheduled virtual (online) and face-to-face office hours; she responded to emails within 48 business hours; she provided prompt, personal feedback on the course discussion board and on student drafts; she sent Friday summary emails; and she published a Monday newsletter with the closing of "Come see me!," "Email if you have questions," or "See you in class." Finally, she went to great lengths to personalize her communication with her students, using their preferred names and responding to personal emails.

#### **Tools Used in the Piloted Hybrid Class**

The instructor-of-record integrated tools into her design to enhance students' active learning: "seeking new information, organizing it in a way that is meaningful, and having the chance to explain it to others" (Allen & Tanner, 2005, p. 262). The students used technology to participate in face-to-face and online discussions, to complete group work and peer reviews, and to encourage students to share information. Students used the online-learning portal, turnitin.com, learning videos, and supplemental videos and readings.

**Online-learning portal.** Each learning module was uploaded in the online-learning portal so students could prepare for class, access course documents, and review links to supplemental tools and examples. Each week, the instructor sent announcements as emails to the students through the online-learning portal. She sent "Friday Follow-ups," and "Monday Motivations" on schedule to connect with the class as a whole. The announcements contained valuable course-specific information such as course administrative details, and each announcement included a reading assignment with sources (or links), a video assignment with sources (or links), and links to the weekly reading quiz and discussion-board post.

Students in the hybrid sections participated in the discussion board each week in lieu of the in-class discussions in the face-to-face sections. The instructor separated students into two groups—the Tuesday sections (38 students) and the Thursday sections (38 students). Each week, the instructor asked the students to participate in a forum to analyze and connect seemingly disparate readings, to apply the chapter to an external source, or to complete a related analysis exercise. Each student moderated two weeks on the discussion board, so each weekly post had four to five students who moderated throughout the week and ended with a summary post.

The instructor maintained a gradebook through the online-learning portal so students could see their grades; she found that the online gradebook resulted in fewer grade complaints at the end of the semester.

The instructor has used the online-learning portal for 10 years for reading quizzes, so she has established numerous question sets for quizzes. She used these questions for quizzes for her face-to-face as well as hybrid students. In formatting the weekly quizzes, she allowed unlimited attempts and randomized questions and answers. She did not provide feedback for students who

missed questions because she wanted to encourage her students to search for answers. The students loved and hated this—They were able to earn 100% if they persisted, but they needed to return to course materials to find answers. This format was good for their learning and made it difficult for them to cheat.

**Turnitin.com**. Each week, students submitted drafts of their assigned analytical essays via turnitin.com, and the instructor commented on each draft (or on the final essays) and recorded assignment grades in the turnitin.com gradebook. Students also submitted drafts via turnitin.com for peer review, which created some issues and confusion for students. (We find that reciprocal peer review is more effective to ensure that everyone receives a worthwhile review. The instructor has students conduct peer review as a workshop in her face-to-face sections and the students work together, so her goal was to create a parallel experience.) She noted that many of the students did not know how to use turnitin.com, so she needed to answer questions about the tool.

**Videos of lectures**. When we started to create course content, we anticipated that the instructor would use videos of lectures for course content. She recorded instruction, and the university's distance-learning team formatted the videos into various formats (streaming Flash, mp4 video, and downloadable mp4 audio) so she could provide the videos and PowerPoint slides via the online-learning portal. After recording many of her lectures, the instructor realized that her most interactive lessons were best suited for class meetings. However, she uploaded the videos so that, if a student missed class or wanted to review the fundamental theories, the students could view the videos.

**Supplemental videos and readings**. The instructor provided supplemental resources for her face-to-face sections and had those ready to share with her hybrid sections. The videos were available via YouTube, so she added those to the online-learning portal (which was a handy tool for providing links for the students), and she downloaded PDFs for the readings (we maintain bibliographies so we can download fresh copies of articles each time we use a copyrighted item). As she provided resources, she modeled citation and attribution practices so the students could learn from her examples.

## Designing and Implementing the Online Elements of our Hybrid Course

Our project had four phases:

- 1. Design the hybrid version of our first-year writing course.
- 2. Teach a semester of four face-to-face sections of the course.
- 3. Teach a semester of four hybrid sections of the course.
- 4. Assess the student data as well as the instructor's experiences, which she documented in teaching reflections, as well as her observations and experiences and the students' responses in a course survey.

Our assessment from phase four is what we record in this manuscript.

### Methods

Before we started our project, we obtained approval of our plans from our university's Institutional Review Board to ensure that our research methods were ethical and that we were protecting our students and their personal data.

We considered our research method to be a quasi-experiment because we sought to control the courses to create only one variable: the format of the course. (In 2015, Xin, Kempland, & Blankson conducted a similar quasi-experiment that compared course assignments between blended, hybrid, and online sections of an undergraduate course.) The content, requirements, assignments, and instructor were the same. The students registered for class in the same way and used the same online-learning portal. We identified the face-to-face students as our control group and the hybrid students as our experimental group with the variable being the hybrid format of the course. We recognized that we could use a variety of assessment methods (e.g., faculty and student surveys, feedback, and reflection; Dutkiewicz, Holder, & Sneath, 2013) as well as the students' graded performances. We sought to triangulate our study to compare the two class formats with three data sets.

#### **Data Set One: Assessment of Student Learning Outcomes**

After both semesters, the instructor recorded blinded student data in an Excel spreadsheet for analysis. The data included students per randomly assigned numbers, majors, classifications (year in college), grades for each assignment, midterm and final grades, and numbers of emails and office visits with the instructor. We used standard statistical equations programmed in Excel to determine the mean, median, and mode for the data. The investigators also categorized majors and classifications and calculated data related to office visits and emails. (A portion of our findings are in the Results section.)

### Data Set Two: Instructor's Reflective Writing

As part of our research process, the instructor kept an informal journal during the project to help her remember and to document her experiences as an instructor teaching a hybrid course for the first time. She maintained her journal on her personal computer and noted weekly reflections. After the two semesters ended, she shared her journal, and we have addressed some of her notes in the Results section.

#### **Data Set Three: Student Surveys**

The instructor surveys her students at the end of each semester to ask about their experiences in the course. Her survey asks

- 1. What did you find helpful in the course?
- 2. What did you find less helpful? What would you change?

3. Is there anything else you want the instructor to know about the course?

The instructor blinded the students' responses for our analysis.

### Results

Our university offers approximately 50 undergraduate majors, and sections of our firstyear writing course are diverse, as reflected in the demographics in Table 1.

Table 1

Majors and Number of Students Pursuing those Majors Divided between Face-to-Face and Hybrid Sections

Face-to-Face Sections (n=75)	Hybrid Sections (n=74)
Accounting (3)	Accounting (1)
Arts & Technology (6)	Actuarial Science (1)
Biochemistry (1)	Arts & Technology (7)
Biology (6)	Biochemistry (6)
Biomedical Engineering (1)	Biology (10)
Business Administration (3)	Biomedical Engineering (3)
Child Learning and Dev (1)	Business Administration (2)
Comp Engineering (2)	Child Learning and Dev (1)
Comp Sci/Software Engineering (14)	Comp Engineering (2)
Criminology (5)	Comp Sci/Software Engineering (9)
Economics (1)	Criminology (1)
Electrical Engineering (4)	Electrical Engineering (3)
Finance (1)	Finance (3)
Geospatial Info Science (2)	Chemistry (1)
Global Business (3)	Global Business (1)
Healthcare Studies (2)	Healthcare Studies (3)
IT Systems (2)	Healthcare Management (2)
Literary Studies (2)	IT Systems (1)
Marketing (1)	Literary Studies (1)
Mechanical Engineering (6)	Marketing (1)
Neuroscience (4)	Mechanical Engineering (5)
Physics (1)	Neuroscience (4)
Political Science (1)	Psychology (4)
Public Affairs (1)	Speech/Language Path (1)
Undecided (2)	Undecided (1)

At the beginning of each semester, the instructor asked students to identify with a gender (male, female, or other). Additionally, she accessed the students' classifications via university records. These data are showed in Table 2.

Gender and Classification of Undergraduate Students in the Face-to-Face and Hybrid Sections

	Gender and Classification of Students with Percentages of the Study Groups						
Format of Course	Males	Females	First	Second	Third	Fourth	Fifth
Face-to-face sections (4 sections, each capped at 19 students) n = 76	50 (65.8%)	25 (32.9%)	33 (43.4%)	29 (38.2%)	11 (14.5%)	2 (2.6%)	1 (1.3%)
Hybrid sections (4 sections, each capped at 19 students) n = 74	33 (44.6%)	41 (55.4%)	29 (38.2%)	22 (29.0%)	17 (22.4%)	6 (7.9%)	0 (0.00%)

*Note*. Students noted their gender (male, female, or other, with no students reporting "other" and one student not participating) at the beginning of the semester. Classification is identified by the university and listed here: that is, freshmen ("First" for first-year students), sophomores ("Second" for second-years), juniors ("Third" for third-years), seniors ("Fourth" for fourth-years), and post-baccalaureate students ("Fifth").

We divided our results per the three data sets that we used: student performance, the instructor's journal, and the students' survey responses.

# **Results of Assessment of Student Performance through Numeric Grades**

Although we gathered data per class section, we are reporting data per face-to-face sections and per hybrid sections. In both formats, students completed three graded essays (Essays 1, 2, and 3), a prospectus/annotated bibliography, a compiled grade for peer review, a grade for the learning and writing process (including blog posts and responses to independent learning), and a grade for participation and professionalism. We calculated mean, median, and mode for the two groups of students on each grade plus students' final weighted grades. Those data are recorded in Table 3.

Grades of Students per Major Assignments (on a 100-Point Scale) and Final Grades (on a 1000-Point Scale) in the Face-to-Face and Hybrid Sections

	Assignment Grades with Weighted Values in Percentages								
Format of Courses	Central Tendency Measures	Essay 1 20%	Essay 2 20%	Essay 3 25%	Bib 5%	PRev 10%	Process 10%	Prof 10%	Total (100%)
Face-to-face sections	Mean	79.93	79.75	77.55	79.74	91.71	72.46	87.51	804.80
	Median	87	88	88.5	90	100	80	91.75	878
	Mode	89	90	90	92	100	92	91.75	917.5
Hybrid sections	Mean	81.80	80.93	77.54	82.10	79.48	90.47	85.22	815.54
	Median	88	89	88.5	94.67	100	96.78	83.25	874.80
	Mode	89	90	95	96.17	100	106.87	83.25	—*

*Note*. Assignments are Essay 1, Essay 2, Essay 3, Research Prospectus and Annotated Bibliography (Bib), Peer Reviews (PRev), the Learning and Writing Process (Process), and Participation and Professionalism (Prof). Students could earn extra credit for their process grades (as noted in the median for the hybrid section grades). \*No mode was available for the hybrid section grades; grades were calculated to four decimals, and no mode existed.

Table 4 presents how many times students emailed and visited the instructor in her office.

### Table 4

*Out-of-Class Contact (Emails and Office Visits) with Instructor in the Face-to-Face and Hybrid Sections* 

Format of Courses	Measure	Emails	Visits
Face-to-face sections	Mean	2.79	2.86
	Median	2	3
	Mode	1	3
Hybrid sections	Mean	3.15	2.87
	Median	2	3
	Mode	2	3

*Note.* Per emails, the range was 15 to 0 for face-to-face and 14 to 0 for hybrid. Per office visits, the range was 5 to 0 for face-to-face and 5 to 0 for hybrid.

# **Results of Instructor's Reflective Writing**

The instructor-of-record recorded transparent notes to document successes, challenges, or questions. Her entries were sometimes impressions, self-criticism, and questions that she wanted to investigate. She reflected in our final report how she perceived the value of the journal:

I would write [something] down, and it was surprising how often I have been able to come back to this because I've figured out the why. Sometimes this happened between the first lecture Tuesday morning and the fourth on Thursday afternoon—practice makes perfect.... I journaled about it [a discussion with my students], adjusted the lesson slightly, and proceeded with much more confidence on Thursday....

In her journal, she addressed

- surprises and frustrations related to time;
- observations related to attendance and missed class meetings;
- ideas on how to decrease paper and administrative tasks;
- frustrations with the online-learning portal and other technology challenges (e.g., speed of Wi-Fi);
- observed value of resources—videos (for makeup lectures), library visit, and the university writing center;
- pleasure over students' successes with the discussion-board posts;
- questions about methods and feelings she had about her work;
- student preferences for face-to-face (rather than online) conferences for their essays; and
- the instructor's growing confidence in what she was doing.

Because she documented her observations, reflections, and questions, the instructor was able to return to her journal as she moved through the semester of hybrid sections to consider challenges and ideas as she planned future hybrid sections.

# **Results of Student Surveys**

The instructor asked students to complete a survey at the end of the semester. Sixty-two of 75 face-to-face students and 35 of 74 hybrid students completed the survey, which consisted of three open-ended questions:

- 1. What did you find most helpful in the course?
- 2. What did you find less helpful? What would you change?
- 3. Is there anything else you want me... to know about the course?

We included these surveys in our analysis to determine parallels between the other two data sets. Table 5 provides the most frequent answers on the first question, "what did you find the most helpful in the course?" Answers given more than once by the face-to-face students were also given by the hybrid students, except the values of the peer reviews, the instructor and her teaching style, and relevance to other classes, work, and "real life."

Answers to the Survey Question "What Did You Find the Most Helpful in the Course?" from Students in the Face-to-Face and Hybrid Sections

Helpful Elements of the Class	Face-to-Face Students (62 Responses)*	Hybrid Students (35 Responses)
Learning about the writing process and working through drafts	12 (19.4%)	9 (25.7%)
Peer evaluations and one-on-one conference with instructor	12 (19.4%)	1 (2.9%)
In-class workshops and revision activities	10 (16.1%)	4 (11.4%)
Structure of the class (weekly draft deadlines)	6 (9.7%)	6 (17.1%)
Resources including handouts, readings, and in-class examples	5 (8.1%)	5 (14.3%)
Instructor and her teaching style	5 (8.1%)	0 (0.0%)
Relevance to other classes, professional work, and real life	4 (6.5%)	1 (2.9%)
Instruction on how to annotate sources, to integrate research and quotes into writing, and to cite sources	3 (4.8%)	2 (5.7%)
Other	5 (8.1%)	7 (20.0%)

\* Totals of percentages will not equal 100% because of rounding.

Table 6 provides the most frequent answers on the second question, "what did you find less helpful? What would you change?" The face-to-face students provided one answer each except that one student noted wanting more examples of essays and more conference time with the professor, but three hybrid students provided two answers each. We have included both answers in our charting to ensure that the students' voices are preserved.

Answers to the Survey Question "What Did You Find Less Helpful? What Would You Change?" from Students in the Face-to-Face and Hybrid Sections

What Did You Find Less Helpful? What Would You Change?	Face-to-Face Students (63 Responses)*	Hybrid Students (35 Responses)
Readings, discussion questions that we did not use in class, and the discussion boards were unnecessary	24 (38.7%)	8 (22.9%)
Do not change anything	12 (19.4%)	3 (8.6%)
Quizzes—too frequent, sometimes confusing questions, poor scheduling	5 (8.1%)	5 (14.3%)
Grammar videos—Discuss rules in class and use videos to reiterate instruction	4 (6.5%)	1 (2.9%)
Confusing or worthless textbook/textbook readings	3 (4.8%)	1 (2.9%)
Peer Reviews (more review or differently formatted) and more conference time	3 (4.8%)	3 (8.6%)
Political content of the class discussions	2 (3.2%)	0 (0.0%)
Amount of work (too much)	2 (3.2%)	3 (8.6%)
More examples of essays	1 (1.6%)	2 (5.7%)
Revision plan unnecessary	0 (0.0%)	2 (5.7%)
Do not require printed drafts	0 (0.0%)	2 (5.7%)
Other (individual answers)	7 (11.3%)	5 (14.3%)

\* Totals of percentages will not equal 100% because of rounding and students who provide more than one answer.

The third question of the survey, "is there anything else you want me... to know about the course?," offered the students an additional opportunity to share their opinions about the course. Table 7 presents the most common and relevant responses.

Answers to	the Survey Question,	"Is There Anything	Else You	Want Me	to Know about the
Course?" fi	om Students in the I	Face-to-Face and Hy	brid Sect	ons	

What Else Do You Want Me to Know about the Course?	Face-to-Face Students (62 Responses)*	Hybrid Students (35 Responses)
Positive comments on the value, structure, and outcome of the course	35 (56.5%)	16 (45.7%)
Positive comments about the professor and her teaching style	16 (25.8%)	8 (22.9%)
Nothing else	5 (8.1%)	7 (20%)
Negative comments about the professor's teaching	4 (6.5%)	0 (0.0%)
Questions about grading and bonus points	2 (3.2%)	1 (2.9%)
Other	2 (3.2%)	0 (0.0%)
Negative comments on the structure of the course (numerous drafts, printed drafts, scheduling)	1 (1.6%)	3 (8.6%)

\* Totals of percentages will not equal 100% because not all students provided responses to this question. However, the percentages have been calculated per the number of responses to the survey rather than to each question.

### Discussion

The student population that we observed reflected the population of our university—per diverse majors and gender. We were surprised with the diversity of the classifications of the students; we note that 18.4% of face-to-face students and 30.3% of hybrid students were in their third, fourth, or post-baccalaureate years of their study (as shown in Table 2). In other words, many of our students have already established academic writing habits and completed upper-level courses, so they were taking the course to graduate rather than to learn writing as they move into college classes. In the future, we may ask a question related to timing of the course in students' academic plans to determine the timing of their first-year writing course.

## Lessons We Learned

Through this study, we learned several lessons:

- unexpected outcomes related to student performances,
- value of an instructor journal,
- design of the hybrid course and online tools, and
- successes experienced in the hybrid sections.

**Unexpected outcomes related to student performances.** Students in face-to-face and hybrid sections earned similar overall grades. Whereas grades were not the only method we use for assessment, the similarities indicated that our classes were equal in delivery and, without

tracking (because we did not analyze outcomes until after classes were complete), the two groups performed similarly.

Although most of the grade averages were within three points, the two grades that differed the most were means for the peer-review process and for the learning and writing process. For the peer-review process, the face-to-face students averaged 91.71 and the hybrid students averaged 79.48. The differences were evident in the grade averages but were not justified until we looked at the instructor's journal and the students' survey responses. The instructor journaled that hybrid students had problems with the technology; the randomization of drafts to students through turnitin.com complicated their peer-reviews. She wrote, "in retrospect..., I think that an optional orientation video would have been very helpful for some students. In particular, the peer-review process (inside turnitin.com) was VERY confusing for eight to 10 of the 76 [hybrid] students." She noted that two students had issues with the online-learning portal and had to reset their accounts and that several students were confused by the requirement to go through turnitin.com's submission steps to receive a confirmation receipt.

The students' responses in their surveys validate the instructor's concerns and the differences in the outcomes. The students in the face-to-face sections conducted peer reviews during their in-class workshops; they rotated with other students, reading print copies of each other's drafts and then commenting and discussing their reviews. The face-to-face students reflected satisfaction with this process in their surveys: 12 students (19.4% of 62 responses) stated that the peer evaluations and one-on-one conferences with the professor to review their papers were the most helpful part of the class, and 10 students (16.1%) reported that the in-class workshops and revision activities were the most helpful. Thus, 22 (35.5%) of face-to-face students noted that the in-class revisions, peer-reviews, and conferences—the feedback on essays—were of greatest value to them. Of hybrid students, four (11.4%) ranked the peer reviews and one-on-one conferences as the most helpful with six students (17.1%) listing the inclass workshops and revision activities, for a combined 10 students (28.5%). Additionally, in stating what to change in the course, three students (4.8%) in the face-to-face sections criticized the peer-review and conference process, and three students (8.65%) in the hybrid sections criticized the peer-review process. In particular, two students in the hybrid sections stated that the peer-review process was confusing and one hybrid student (2.9%) stated a desire for more inclass discussion.

We anticipate that the face-to-face students benefited from the in-class peer-reviews and interactions with the instructor, and the hybrid students struggled because of technology challenges related to turnitin.com and to the digital process of peer review in the course. In response, the instructor has already addressed these challenges and altered the structure of the peer-review process in her hybrid sections, sharing the "help" section of the online-learning portal, requiring students to practice peer review before the graded reviews, and emphasizing to students the importance of the peer review and mastery of the technology. Students who did not complete the practice peer review received an email from the instructor reiterating the importance of the writing process.

For the learning and writing process, the analysis of grade averages also indicates a difference, with the face-to-face students averaging 72.46 and hybrid students averaging 90.47. The grade averages differed by more than 18 points. Again, the differences for these grades were indirectly referenced in the instructor's journal and perhaps in some of the student survey responses. The instructor's journal reflects that she planned in advance and needed to plan and post promptly and be available online every weekday. We anticipate that the additional time that

she spent in planning online course content and in communicating with students resulted in students also being more readily available and working more consistently on the class work. Research tells us that online education takes more time than face-to-face education (Allen & Seaman, 2013; Bolliger & Wasilik, 2009; Fitzgerald, Anderson, & Thompson, 2015; Harber & Mills, 2008; Lee & Busch, 2005; Shaw & Young, 2003; Varvel, 2001). Our instructor's experience supports this; her online course took more time than her face-to-face sections. (We wish we had asked her to document her time for each type of class.) Granted, she has been teaching the face-to-face format for 10 years, so she is practiced with the face-to-face format. However, she noted that she had "less margin for error" and that "some days take far more time than others." She noted that grading and discussion-board responses took an incredible amount of her time. She also identified that the online maintenance was a challenge, even though she had used online elements every semester of her teaching.

The face-to-face students listed in-class workshops as valuable (10 students, or 16.1%, compared to four hybrid students, or 11.4%); the instructor and students recognized the value of the in-class writing workshops, and hybrid students noted that they would have liked more time working in class and with the instructor. The instructor also noted that, because she reviewed thesis writing via an online lesson, she taught the skill in almost every one-on-one conference with hybrid students; she would prefer to teach this skill in a face-to-face meeting and ensure that the students understand before they begin to draft their essays.

The students' survey responses in both face-to-face and hybrid sections reflected the students' dissatisfaction with the discussion-board posts and the requirements to read and participate in discussions. In contrast, the instructor's journal stated that she was delighted by the quality of discussions. However, her response to the surveys was telling:

My biggest post-semester surprise was the response in the anonymous surveys to the discussion boards. During the semester, I was highly impressed by what I perceived as the quality of the discussion and the writing that appeared on the discussion boards, especially when compared to the in-class discussion in the [face-to-face] classes (of the same readings). In survey after anonymous survey, students expressed their dislike for the discussion boards. There was a consistent complaint that others were regurgitating information, not putting what they [the students] perceived to be quality thought into the boards, or that it [the discussion board] was a waste of time all together. *I was honestly shocked and rather taken aback by these responses* [emphasis added].

After going through the students' survey responses, however, the instructor realized that the students identified flaws in the discussion-board assignment—particularly, that the structure did not require students to read *all* of the readings, that students could imitate earlier posts, and that students struggled to be original because each group posted more than 100 posts each week. She also guessed that the students disliked the difficulty of reading several works and synthesizing the information, something that did not allow them to "hide" in online discussions. (This characteristic is valuable because the online setting allows students time to think before they respond, something that is sometimes difficult in a face-to-face discussion.)

The instructor has made changes in the current semester: she has

- created smaller discussion boards by separating them per section of the course,
- shared a rubric as direction for this assignment,
- placed students in small cohorts for mini-communities within the course, and
- incentivized students to include all readings in their discussion.

She determined to continue to grade discussion boards more generously than paper drafts (Warnock, 2010) and to maintain the discussion board as an environment for low-stakes writing practice; however, she will provide more user-friendly means for comments to ensure that students continue to improve their work through the semester. Therefore, although the students' disapproval was a surprise, it provided valuable feedback for the instructor.

Considering the time required for the hybrid course, the instructor explained that one-onone conferences, which (as noted) students ranked as valuable, were a challenge per time. The instructor met with each student once per essay: that is, at least three times each semester. For the face-to-face classes, she canceled a week of classes (six class meetings during the semester) for conferences and met with students during their class times. However, she could not cancel six classes with her hybrid students, and she found it difficult to schedule 38 hours across the semester. (Next semester, she will work with the university writing center and the library to present workshops and allow other valuable instruction during conference weeks so she can focus on her students' conferences and so she can still meet with students during the scheduled class time if they struggle to schedule a conference at other times.) In scheduling conferences, she was flexible, using online meeting programs to meet with students if they could not come to campus, but she found that the students preferred meeting with her in person.

We also note the similarities of the numbers of emails and in-person visits (see Table 4) that students made to connect with the instructor. We anticipated that hybrid students would communicate more frequently with the instructor because they were not meeting in person as frequently as were face-to-face students; however, we were incorrect. We are unsure if the similarities in the email and visit rates are because students are consistent in their tendencies to contact or visit their professors and to ask questions when they meet in class or if students received answers to their questions through emailed announcements. We consider this a topic for future research.

Value of an instructor's journal. We advise instructors to journal as they create classes and go through the semester so they can document successes and challenges and empower themselves to assess the design, order, content, and process of their courses. The instructor's journal was of great value to her: it helped her to revisit questions that she had about students' behaviors and responses. The journal also benefited the researchers, as it helped us to gain insight into her experiences through the semester. The journal can be a simple Word document in which the instructor dates entries and records reflections and, by saving an electronic journal, the instructor can search the journal more easily for content and questions using keywords.

We encourage our instructors to maintain journals and to share their reflections during the semester. By sharing, these instructors learn from each other and are able to diversify experiences and perspectives, making them more effective in the classroom. One of our investigators currently teaches a pedagogy class for new instructors, and he begins each class by asking what challenges they have face and what lessons they have learned; however, we see a tendency to stop that community of discourse about pedagogy after we complete our training and teach full-time. This discourse should continue.

Finally, we used the journal exercise for the instructor to maintain her freedom as an instructor and to help her note when she had concerns. In this way, the instructor was able to design the course per her teaching style—as she thought best. By journaling, she documented her concerns, and we met when she had challenges or when we had questions about the process, the data, or the design. We met and emailed throughout both semesters, so the project became about

sharing our pooled knowledge and experience in addition to designing a hybrid version of our class that allowed a gifted instructor to shift her teaching style to use the tools with colleague support. We believe this is one of the successes of this project.

**Design of the online course**. The structure or consistent design of a course is valuable (Moore, 1993), but that structure must also make sense to the students. The instructor originally organized course content for hybrid students per the type of content or media (e.g., a file for readings), but she determined that the students would do better if she structured the course per the week of the semester. The other investigators do that in their online courses, and we recommend that change.

Additionally, she only provides links to course content in the first week to encourage students to navigate around the course content. In the second week, she provides links to the folders where the items rest. And in the third week, students know where to look for content. The instructor seeks to nest items and files with fewer than three "clicks" for the students.

Our instructors work closely with the office of student accessibility and accommodations, and this instructor worked tirelessly to ensure that her design and format were consistent with accessibility standards. In doing so, she overcame some of the potential challenges in online learning and ensured that all students could access the course content.

**Successes in the hybrid sections**. Students in both classes appreciated that the instructor assigned a weekly draft process and in-class revision workshops and that she reviewed drafts through the process. In fact, one-fourth of the students commented in their surveys that they saw value in drafting documents and that they appreciated the instructor's personal comments on their drafts as they worked toward their final essays.

The instructor video-recorded numerous workshops for students to use outside the class, but she was glad to have those when students came down with the flu and had to miss classes. She will continue to record instruction and maintain a repository of lectures so she can mix them up as she proceeds with hybrid courses and so she can provide those to students who miss class or need the instruction to reiterate in-class instruction. She also found that educational videos on YouTube were a valuable resource, and she was able to link those through our online-learning portal to respect copyright requirements.

### **Limitations of our Study**

Our study has limitations. First, the courses were conducted at one university, and the researchers were not all in the classroom to observe student performances. In addition, the instructor's observations were biased because she was reflecting on her own teaching and thus did not have the benefit of an objective report on what happened in her courses. (Although we recognize this as a limitation, we also note that the instructor has taught for 10 years and consistently reassesses her courses to improve her design and content.)

To establish online and hybrid courses at our university, we have the support of curriculum designers. We did use the designers' services; thus, many of the design elements in the instructor's hybrid course were encouraged by distance learning experts who know the research and have tested different methods to know what design elements are best. Therefore, although we were comparing face-to-face and hybrid sections, the design was influenced by research and design standards.

For future research, we would like to investigate the improved plans for discussion boards and for the peer-review process in class (which we addressed in the Discussion section). We would like to learn why students are taking a foundational first-year writing course in their third and fourth years of college. We want to follow up with students to see how they use the writing skills they learned in our first-year writing class in upper-level writing, research, and communication courses. We would like to investigate students' preferences related to face-toface versus virtual conferences and also find out if students email and visit during office hours with the same frequency for hybrid and online courses as they do for face-to-face courses.

As we move forward, we will be applying our learned lessons to our hybrid and online courses—not only in first-year writing but also in media, communication, and literature courses that the investigators teach.

#### **Inclusions for Future Classes**

In the future, the instructor hopes to add a few surprise elements to her course to better motivate students (Moore, 1993) and to add some game elements to her course structure. In particular, she has considered adding bonus codes in videos or Monday emails or providing secret achievements that students can unlock online as they investigate topics related to the course. She is using a tracking tool in our online-learning portal to follow individual students; she is encouraging the top students to "Keep up the good work!" and she is contacting those students who are not logging in or completing all assignments to say, "What is going on? Do you need any help?" She continues to seek to investigate ways to use this retention tool and the performance dashboard. The instructor is also seeking to master the "achievements" area of our online-learning portal so she can incorporate that tool into her course design.

We all learned from this experience. We are eager to share more about what we learned and to apply these lessons to our future hybrid and online courses.

### References

- Akyol, Z., & Garrison, D. R. (2008). The development of a community of inquiry over time in an online course. *Journal of Asynchronous Learning Networks*, *12*, 3–4. Retrieved from http://olc.onlinelearningconsortium.org/sites/default/files/v12n3\_akyol\_0.pdf
- Allen, I. E., & Seaman, J. (2013). Changing course: Ten years of tracking online education in the United States. Babson Survey Research Group and Quahog Research Group. Retrieved from http://www.onlinelearningsurvey.com/reports/changingcourse.pdf
- Allen, D., & Tanner, K. (2005). Infusing active learning into a large-enrollment biology class: Seven strategies from the simple to complex. *Cell Biology Education*, *4*, 262–268.
- Anderson, K., & Deel, R. B. (2013). Drawing connections: Exploring the role of learner-tolearner immediacy in online classrooms. *International Journal of Technologies in Learning*, 19, 47–60.
- Bailey, S., Hendricks, S., & Applewhite, S. (2015). Student perspectives of assessment strategies in online courses. *Journal of Interactive Online Learning*, *13*(3), 112–125.
- Bannier, B. J. (2014). The Trellis theory of adult online learning. *International Journal of Information and Education Technology*, 4(1), 12–15.
- Benson, R. C. (2016). *Draft: UTD strategic plan*. Richardson, TX: The University of Texas at Dallas. Retrieved from https://www.utdallas.edu/president/strategic-plan/docs/draft-strategic-plan.pdf
- Berry, G. R. (2006). Can computer-mediated asynchronous communication improve team processes and decision making? Learning from the management literature. *Journal of Business Communication*, 43(4), 344–366.
- Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education*, *30*, 103–116.
- Bryant, J., & Bates, A. J. (2015). Creating a constructivist online instructional environment. *TechTrends*, 17–24.
- Chak, S. C., & Fung, H. (2014). Exploring the effectiveness of blended eLearning in cost and management accounting: An empirical study. *New Media, Knowledge Practices and Multiliteracies*, 189–203.
- Choi, M.-Y., & Han, T.-I. (2015). A comparison of learning effectiveness in face-to-face versus blended learning of TOEIC. *Journal of Digital Convergence*, 13(10), 517–525. doi:10.14400/JDC.2015.13.10.517
- Colorado, J. T., & Eberle, J. (2010). Student demographics and success in online learning environments. *Emporia State Research Studies*, 46(1), 4–10.
- Dutkiewicz, K., Holder, L., & Sneath, W. D. (2013). Creativity and consistency in online courses: Finding the appropriate balance. In K. Cargile Cook & K. Grant-Davie, Eds. Online education 2.0: Evolving, adapting, and reinventing online technical communication (pp. 45– 72). Amityville, NY: Baywood Publishing Company, Inc.
- Fitzgerald, R., Anderson, M., & Thompson, R. (2015). Adding value: Open online learning and the MBA. *Electronic Journal of e-Learning*, *13*(4), 250–259.
- Harber, J., & Mills, M. (2008). Perceptions of barriers concerning effective online teaching and policies: Florida community college faculty. *Community College Journal of Research and Practice*, 3, 266–283.
- Hathaway, D. (2009). Assessing quality dimensions and elements of online learning enacted in a higher education setting (doctoral dissertation). Retrieved from

http://mars.gmu.edu/bitstream/handle/1920/4593/Hathaway\_Dawn.pdf?sequence=1&isAllow ed=y

- Hewett, B. L., & Powers, C. E. (2007). Guest editors' introduction—Online teaching and learning: Preparation, development, and organizational communication. *Technical Communication Quarterly*, 16(1), 1–11.
- Ilic, D., Nordin, R. B., Glasziou, P., Tilson, J. K., & Villanueva, E. (2015). A randomised controlled trial of a blended learning education intervention for teaching evidence-based medicine. *BMC Medical Education*, 15, 39. doi:10.1186/s12909-015-0321-6
- Khan, A., Egbue, O., Palkie, B., & Madden, J. (2017). Active learning: Engaging students to maximize learning in an online course. *The Electronic Journal of e-Learning*, *15*(2), 108–117.
- Lee, J. A., & Busch, P. E. (2005). Factors related to instructors' willingness to participate in distance education. *Journal of Education Research*, 99(2), 109–115.
- Lui, Q., Peng, W., Zhang, F., Hu, R., Li, Y., & Yan, W. (2016). The effectiveness of blended learning in health professions: Systematic review and meta-analysis. *Journal of Medical Internet Research*, 18(1), e2. doi:10.2196/jmir.4807
- Maid, B., & D'Angelo, B. J. (2013). What do you do when the ground beneath your feet shifts? In K. Cargile Cook & K. Grant-Davie, Eds. Online education 2.0: Evolving, adapting, and reinventing online technical communication (pp. 11–24). Amityville, NY: Baywood Publishing Company, Inc.
- Melonçon, L., & Arduser, L. (2013). Communities of practice approach: A new model for online course development and sustainability. In K. Cargile Cook & K. Grant-Davie, Eds. Online education 2.0: Evolving, adapting, and reinventing online technical communication (pp. 73– 90). Amityville, NY: Baywood Publishing Company, Inc.
- Moore, M. G. (1993). Theory of transactional distance. In D. Keegan (Ed.), *Theoretical principles of distance education* (pp. 22–39). New York, NY: Routledge.
- Moreillon, J. (2015). Increasing interactivity in the online learning environment: Using digital tools to support students in social constructed meaning-making. *TechTrends*, 59(3), 40–48.
- Our history—Creating the future. (n.d.). *The University of Texas at Dallas Website*. Retrieved from https://www.utdallas.edu/create/history.html
- Shaw, D., & Young, S. (2003). Costs of instructors in delivering equated online and on-campus courses. *Journal of Interactive Online Learning*, 1(4), 1–8. Retrieved from https://www.ncolr.org/jiol/issues/pdf/1.4.2.pdf
- St. Amant, K. (2017). Of friction points and infrastructures: Rethinking the dynamics of offering online education in technical communication in global contexts. *Technical Communication Quarterly*, 26(3), 223–241.
- The University of Texas at Dallas. (n.d.). *UT Dallas awards*. Retrieved from https://alumni.utdallas.edu/honorees
- U.S. Department of Education. (2010). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. Office of Planning, Evaluation, and Policy Development, Policy and Program Studies Service. Washington, DC: Department of Education. Retrieved from

www.ed.gov/about/offices/listopepd/ppss/reports.html

Varvel, V. E. (2001). Facilitating every student in an online course. *Illinois Online Network*. Retrieved from

http://www.ion.uillinois.edu/resources/pointersclickers/2001\_03/ionpointers0301.pdf

Warnock, S. (2010, March 29). Updated message board participation guidelines [Web log]. *Online Writing Teacher*. Retrieved from http://onlinewritingteacher.bloggnet.com/2010\_02\_01\_enchive.html

 $http://onlinewriting teacher.blogspot.com/2010\_03\_01\_archive.html$ 

- Xin, H., Kemplan, M., & Blankson, F. H. (2015). Adaptability and replicability of webfacilitated, hybrid, and online learning in an undergraduate exercise psychology course. *Turkish Online Journal of Educational Technology*, 14(1), 19–30.
- Young, A., & Norgard, C. (2006). Assessing the quality of online courses from the students' perspective. *Internet and Higher Education*, 9(2), 107–115.

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