

# EXPLORING DIFFERENCES IN ONLINE AND FACE-TO-FACE STUDENT ENGAGEMENT AND PERFORMANCE IN BUSINESS WRITING

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## ABSTRACT

*Disengagement and burnout are hot button topics in business around the world in 2023. Students and faculty are not immune to these challenges. This paper reports on a data-driven exploration of student engagement and academic performance in a business writing course across two semesters. This course was historically taught only face-to-face (F2F) but evolved to F2F, hybrid, and online offerings as a result of the pandemic. The professor's intuition was that the online students were not as engaged and were not performing as well as the students in the F2F sections, and a closer look at the engagement and performance data verified that suspicion. The paper summarizes the data and findings and proposes future research to help others who might be curious about the outcomes of online versus F2F teaching.*

## INTRODUCTION

The debate about the quality of online course delivery compared to face-to-face delivery has resumed now that universities have found some normalcy following the COVID-19 pandemic. While universities adapted and found ways to transition almost all of their courses to the internet, once the pandemic ended, many resumed operational functioning the way things had been done. Some universities implemented elements of the changes on a permanent basis, such as more course offerings in hybrid and live synchronous courses via Teams or Zoom (Garrett, et al. 2023).

One example of a change that was adopted comes from a business writing course at a regional state university in the southeast. Before the pandemic, most of the course sections were face-to-face (F2F) with only one or two sections per year being online. These courses were distinct while sharing student learning outcomes. During the pandemic, the course was fully online or live/synchronous. As the pandemic was waning, while universities were still wary of requiring students to attend class in-person, the students who were enrolled in the F2F sections were not required to attend class for a participation grade. They were given access to the same online course as the online students and were required to submit their work online just like the online students. Thus, the F2F students could attend class and get instruction and coaching from the professor in real time, or they could complete the assignments online from their preferred location. Incentives for coming to class were incorporated, like games, bonus points and rework opportunities. Exams were still completed during class time, while online students completed exams proctored through Proctorio.

This model has become the new normal. Business writing students may take the fully online course and never come to class, or they may take the F2F course with optional class attendance. After a few semesters of this new model, the professor started wondering about the student outcomes. The students who came to class appeared to be more engaged and motivated to learn. Anecdotally, it seemed that they performed better on the course assignments, too. Were these hunches accurate, though? The purpose of this paper is to explore the data across 2 semesters and 8 sections to determine if F2F students were more engaged and higher performing than their online counterparts as expected.

## LITERATURE REVIEW

Business writing courses are commonly found in business schools around the world today as a result of the Association to Advance Collegiate Schools of Business (AACSB) emphasis on student communication skills (Martinez & Weinstock, 2023). However, the business writing subdiscipline of English has existed for 100+ years; the oldest relevant source we could find was from 1914. In recommending that an English course for vocational students should encompass business and be practical, Cody (1914) wrote the following for the National Council of Teachers of English: "A literary training makes the writer humanize and soften, gives little touches here and there that cannot be recognized as business, but which pull business nevertheless" (p. 371). Being persuasive and practical are still cornerstones of business writing in 2023.

The COVID-19 pandemic changed the way business writing, along with many other courses, were delivered. Many courses had never been taught online. Some professors had never used their university's learning management system! Boot camps

were offered to get everyone up to speed. Afterward, some schools continued to utilize both online and F2F delivery methods for business writing. This course, in particular, is challenging for students to complete online successfully. Students usually expect detailed markups on their graded assignments, but that level of detailed word-by-word explanation is just not possible for any writing teacher to do, especially in a writing-intensive course that requires a specific and high word count by the end of the semester for each student. Writing is more complex to teach in an online environment because it is similar to any physical activity such as yoga or tennis. Reading about it and memorizing facts will not help anyone play tennis or do yoga poses; writers cannot improve writing by memorizing and repeating facts. In addition, there is no right “answer” for a student to memorize when it comes to writing; there are millions of right possibilities. However, there are also millions of wrong ways to write as well. Writing classes work better when there is verbal engagement with an instructor, just as that verbal engagement would be essential in a yoga or tennis class. Online writing classes can work well if the student is willing to “talk” to the instructor. However, many online students either do not have time to talk to the instructor (overloaded schedules, unrealistic expectations regarding work/family/school balance, etc.) or are unwilling (anxiety, lack of interest, etc.).

Sapp and Simon (2005) noted alarming differences in student withdrawal rates and grades across F2F and online delivery in first-year composition and business writing courses. They termed the U-shaped grade curve typically found in their online courses as “thrive or dive” in reflection of student performance; students either did well, earning high grades, or they withdrew or made a D or F. Conversely, F2F students typically thrived or “survived,” with none of the students receiving grades of D or F. This example shows the reality of teaching writing online.

Another angle is the engagement levels of instructors compared to students. Chua et al. (2022) reported that while there was no significant difference in the engagement of instructors in online and in-person courses, there was a significantly higher percentage of time of “no engagement” for online students versus in-person. Even for students who attended online Zoom lectures, presenteeism (pretending to engage but not really engaged due to distractions or multitasking) was a problem. These issues may affect faculty dissatisfaction and burnout, and the engagement gap needs to be addressed in online teaching (Chua et al., 2022).

## **BUSINESS WRITING COURSE**

Before the pandemic, the business writing course (GEB3213) at one southeastern university was offered primarily F2F with the few online sections being distinctly separate. As the pandemic resolved, the course was offered F2F and online routinely. However, most students signed up for online classes instead of F2F classes, leading to the cancelation of F2F classes that did not have the minimum number of students signed up weeks prior to the semester. When a F2F section was cancelled, an online alternative was created and posted immediately. The new online classes almost always filled up to the maximum capacity within a very short time, sometimes within days of posting the new class. Although many students verbally stated that they preferred F2F classes, they indicated the opposite by signing up for the online version instead. Anecdotally, the online classes from the time of the pandemic shutdown to the present time typically had higher failure rates and more problems (lack of participation, missed assignments, etc.) than the F2F classes, solidifying what we know about college students not always being prepared for learning in an online delivery environment.

By 2022, GEB3213 was being offered as hybrid, F2F, and online. Two of the classes were a combination, with some in the hybrid segment and the others in the F2F segment, although it was the same class. A third class was all hybrid and a fourth class was fully online. This inclusion of hybrid got more students to sign up, and the classes filled to capacity by the first day; therefore, none were cancelled this time. Since two of the classes were a blend of F2F students and hybrid students, attendance was optional except for exam days. Students were required to take the exams in person in the classroom during the scheduled class time. Classes met twice a week as scheduled, and students were encouraged to attend classes through bonus work done during class sessions on some of those meeting times. The bonus work got more students to attend on those days, but some students still chose to study on their own and do their weekly assignments online. The hybrid class met occasionally; students could follow the full-semester schedule to see which days we would meet. As with the other two classes, attendance was mandatory for exam days only. Students could work fully online for their weekly assignments if they chose to. There were no changes to the fully online class.

CANVAS has been used at this particular institution since right before the pandemic and continues to be the learning management system (LMS). All classes do their work online in CANVAS, even the F2F and hybrid classes. As of the date of this writing, the Fall 2023 semester is still in progress, and the CANVAS gradebook already shows higher grades for the F2F and hybrid sections than for the online section.

Hybrid classes may be a good alternative that offers the best of both worlds: students can do their work online but must occasionally have interactions with teachers and other students. Even before the Covid shutdowns, some schools were

exploring the hybrid class setting. Browning and Leffe (2004) noted that a blended learning strategy incorporating an online writing lab was an effective way to teach business writing. Some of the challenges they faced were replacing the fill-in-the-blank questions with multiple-choice questions. The complexity of the potential answers students could fill in made the task of grading too labor intensive. While multiple-choice questions do not reflect student writing skills as well as written responses do, standardized answers were necessary; so, the team incorporated more writing exercises into the modules to compensate (Browning & Leffe, 2004). With hybrid classes, challenges like these can be overcome with additional assessments that require more engagement with the instructor.

## RESEARCH STUDY

As friendly colleagues do, the coauthors were discussing student engagement, a topic professors commiserate over regularly, when they realized that the first author had data from online and F2F students for a couple of semesters. Thus, the genesis of this paper was that conversation. While the two professors assumed that F2F students would be more engaged and would perform better than their average online counterparts, data was needed to support any conclusions.

The research questions guiding this study were:

1. Does student engagement differ between the F2F and online versions of this business writing course?
2. Does student academic performance differ between the F2F and online versions of this business writing course?

We relied on the literature review conducted by Ahmadi et al. (2023) on indicators of student engagement across a range of learning management systems for guidance on which measures to consider using for engagement.

Basu, Heckman, and Maher (2021) conducted a similar study on engagement and learning in a web-development course. They used total page views and on time submission percentage in Canvas as indicators for course engagement, and our study adopts that framework. We added participations as an independent variable to add another variable related to Ahmadi et al.'s (2023) log-in and usage category, which was the most commonly used indicator of engagement found in their research. The Canvas learning management system records participations when students comment on an announcement, submit an assignment, participates in a discussion, starts taking or submits a quiz, etc.

## DATA AND DISCUSSION

We used data from the Fall 2022 and Spring 2023 semesters taught by one instructor and 191 students who completed the course and received a final course grade. A total of 5 F2F sections with 132 student records were included along with 3 online sections containing 59 student records. The average engagement and performance items for each delivery method are summarized in Table 1.

**TABLE 1**  
**Summary of Engagement and Performance Items**

Variables	F2F Mean (SD)	Online Mean (SD)
<i>N</i>	132	59
Page Views	1520.49 (580.01)	1513.53 (656.68)
Participations	46.28 (12.29)	21.14 (9.48)
On-time Percentage	95.32 (8.81)	89.6 (16.88)
Course Grades	78.97 (12.48)	68.86 (15.13)

We used Spearman's correlation, which does not assume a linear relationship, to explore the relationships between the dependent and independent variables. As shown in Table 2, the page views, on-time percentage, and participations all were significantly related to course grade for both the F2F and online sections. The correlation co-efficients ( $\rho$ ) ranged from 0.274-0.729 with strong  $p$  values. All of the engagement items were associated with course grade at statistically significant levels, which replicates Basu, Heckman, and Maher's (2021) findings. Participations had the strongest association with course grade for F2F students while page views had the strongest association for online students.

**TABLE 2**  
**Correlations between Engagement Items and Course Grades**

Engagement Items	F2F Course Grade Spearman's $\rho$ ( $p$ value)	Online Course Grade Spearman's $\rho$ ( $p$ value)
Page Views	0.447 ( $p < .001$ )	0.729 ( $p < .001$ )
Participations	0.566 ( $p < .001$ )	0.551 ( $p < .001$ )
On-time Percentage	0.274 ( $p = .001$ )	0.355 ( $p = .006$ )

To address the second research question, which related to differences between the academic performance of F2F and online students, we performed a two-sample t-test. The results, shown in Table 3, show that there is a statistically significant difference in the students' academic performance. This result is different than Basu, Heckman, and Maher's (2021) findings.

**TABLE 3**  
**T-test for F2F and Online Course Grades**

	F2F	Online
Mean	78.97	68.86
Variance	155.61	228.85
Observations	132	59
Pooled Variance	178.09	
df	189	
t Stat	4.835	
p value	<.001	

## FUTURE RESEARCH AND CONCLUSIONS

Recommendations for future research include exploring when students drop the course (online and F2F) to analyze what is happening in the course at those crucial points in the semester to evaluate what might be done to retain the students longer and to help the students who stay in the course because dropping is not an option. As a required course, the students have to face the course eventually. Understanding when to take focused actions to help them get over the hump might be beneficial. A related idea is to conduct surveys with the students at crucial points in the semester (before/after difficult assignments and/or assessments) to gauge their confidence and engagement levels and to assess the impact of those grades. This idea mirrors the notion of stay interviews, which have become popular retention tools for management professionals in companies or industries with high turnover.

From a methods standpoint, we are curious if on-time submission is more of a mediator or moderator of some of the engagement to academic performance items. With a larger data set, this question could be addressed more fully. These studies should incorporate student and faculty perceptions along with other grades, not just final course grades, to fully explore the precise relationships between online course components, engagement, and performance.

Another consideration is the possibility that lower potential students are enrolling in online courses. Driscoll et al. (2012) noted that students might perceive online courses as easier, which leads to an "...increased presence of lower performing students in online sections..." (p. 324). Future studies could incorporate independent variables related to student potential, like ACT/SAT scores or GPAs, to explain the differences in engagement and academic performance.

Even before COVID, there were other noticeable differences between online classes and F2F classes. Student evaluations of instruction are one example. Most universities use them to rate teaching, and the switch to online evaluations before COVID saw a decrease in response rates compared to when paper evaluations were administered during class time. A study in a university in Turkey noted that not only was the completion rate lower in online classes, but the ratings on the evaluations were also lower for the online classes (Capa-Aydin, 2016). Universities have resorted to withholding student access to important information, like grades and transcripts, until a course's response rate exceeds a certain number. This approach raises further concerns about the accuracy and utility of the evaluations. In courses that are challenging online, like business writing, the student evaluations warrant careful administration if the information they yield is to be helpful. Future research on the differences in online and F2F course offerings should consider addressing how the student evaluations are used and how to increase completion rates to ensure that valuable information can be obtained from the evaluation.

Ultimately, any course that is challenging when delivered F2F will be even more difficult to teach or to complete in an online delivery environment. Extra awareness and caution should be conveyed to both the professors and the students.

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