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Instructor Presence and Student Satisfaction Across Modalities: Survey Data on Student Preferences in Online and On-Campus Courses

Rebecca A. Glazier and Heidi Skurat Harris
University of Arkansas at Little Rock

Abstract

Post-COVID-19, many, if not most, college and university instructors teach both online and face-to-face, and, given that online courses historically have higher attrition rates, designing and facilitating effective online courses is key to student retention. Students need online and on-campus courses that are well designed and facilitated, but even well-designed classes can be ineffective if students feel lost in the course or disengaged from the instructor. We surveyed 2,007 undergraduate students at a public, metropolitan university in the United States about the best and worst classes they had taken at the university. The resulting data revealed important consistencies across modalities—such as the importance of clear instructions and instructor availability. However, students responded that instructors matter more in face-to-face courses, where they can establish personal relationships with students, whereas assignments “stand in” for instructors in online classes. These findings support the need for increased faculty professional development in online course design and facilitation focused on student experience as well as faculty expertise.

Keywords: online education, survey research, online student, online instructor, online accessibility, face-to-face

Introduction

Some elements of good teaching are not modality-dependent. Effective communication and instructor availability are important for both face-to-face and online classes. Other factors, however, differ by modality: technology access, contact hours, amount and type of written communication, and student control of the learning process. Beyond instructor and student issues lie problems outside of anyone's control, such as the COVID-19 pandemic of 2020. But as research by Glazier et al. (2019) indicates, the more online courses a postsecondary student takes, the less likely they are to succeed (see also Shea & Bidjerano, 2018). Studies indicate that the most common factors impacting online student retention are student motivation and faculty/student interaction or engagement (Seery et. al., 2021). Our research questioned whether we could apply what we know of faculty/student interactions from face-to-face education to inform our online pedagogy and improve retention.

In order to explore the similarities and differences between face-to-face and online classes from a student perspective, we employed a multi-method approach to collect both qualitative and quantitative data via surveys of 2,007 students at the University of Arkansas at Little Rock (UA Little Rock), a major metropolitan university, to ask them about the “best” and “worst” classes they had taken at that university. With 58% of students at UA Little Rock taking at least one online class, the resulting data contained responses about both online and face-to-face best and worst classes. These data made it possible to answer the following questions:

1. What elements of the classroom, teacher, and learning experience contribute to students indicating that a class was the best or worst class?
2. In what ways are the best online classes different from the best face-to-face classes?
3. How can we recognize and translate good face-to-face teaching to online environments?

This study contributes to the growing literature in online and distance learning both by centering student voices comparing their online and face-to-face learning experiences and by taking a multi-method approach to understanding the best practices across modalities.

Retention in Online Classes

Online students may struggle to stay in school for a variety of personal and educational reasons. Fewer students persist in online courses than in face-to-face courses, with attrition in online classes reaching as high as 50% (Carr-Chellman & Duchastel, 2000; Levy, 2007; McLaren, 2004; Tello, 2007). Across differences in course and program type, students in online courses consistently fail or drop their classes at higher rates (Bolsen et al., 2016; Glazier, 2016; Jaggars, 2014; Patterson & McFadden, 2009). While overall retention and completion of college degrees can be improved by the availability of online courses (Glader, 2013), individual courses themselves still face lower retention rates than their face-to-face counterparts.

On the surface, technology is the most obvious difference between online and face-to-face courses. For those faculty teaching online with little or no preparation, technology can be a significant impediment to effective online teaching (Magda et al., 2015). When technology is used well, on the other hand, it can positively impact student engagement, making students more likely to respond positively to academic challenges, active and collaborative learning, and student-faculty interaction, generally making for a more supportive campus environment (Chen et al., 2009).

However, when technology is not just a tool, but the only way to communicate with the instructor and other students in the class, a very high level of transactional distance (TD) is created. Moore (2013) found that TD was the single biggest predictor of student satisfaction in online classes, a finding confirmed by more recent research as well (Weidlich & Bastiaens, 2018). Low online retention rates are explained, in part, by the potentially high barrier to contact and relationship-building between faculty and students in online courses. Online rapport has only recently begun to be defined (Murphy & Rodríguez-Manzanares, 2012), measured (Lammers & Gillaspay Jr., 2013), and evaluated (Kanasa, 2017; Kupczynski et al., 2010; Sher, 2009), but it appears to be more difficult to create rapport in online classes than in face-to-face classes. In a study of community college students, Jaggars (2014) found that face-to-face courses had better peer-to-peer and student-instructor interaction than online courses, and that the students preferred to take more important or difficult courses face-to-face.

Faculty recognize that building relationships with students in online classes is time-consuming (Aquila, 2017; Worley & Tesdell, 2009). Sometimes those efforts are not rewarded. For instance, Preisman (2014) demonstrated that the additional time spent in developing instructor presence through video lectures, audio feedback, and increased discussion board participation did not lead to significant gains in student grades or course evaluations. Skurat Harris et al. (2019) found that students lack understanding of how course tools and content, such as discussion boards and videos, connect to their instructor and instruction in online courses. They found that students were most satisfied when provided direct feedback from faculty compared to engaging in either discussion boards or peer review activities (see also Gaytan, 2015). In short, immediacy is simply harder to create in an online environment (Preisman 2014).

This study sought to further understand the benefits of and barriers to student satisfaction with online classes. While satisfaction is only one element in a complex web of factors related to online learning success (Gering et al., 2018), lower retention rates in online classes prompted us to try to understand how to teach online classes so that students will stay in them.

Building rapport in online classes to improve engagement and retention is challenging, given the TD of online modalities, so we expected that the most important difference between online and face-to-face classes was the distance between the instructor and the student. In face-to-face classes, students personally interact with the instructor and are more likely to develop a relationship with the instructor through both formal and informal opportunities for human connection. Specifically, given the key difference of distance between instructors and students in online classes, we posited three hypotheses:

- Hypothesis 1: Online courses will be less likely to be considered “best” courses.

- Hypothesis 2: Instructors will be more important for “best” course designation in face-to-face courses, compared to online courses.
- Hypothesis 3: Students who emphasize the instructor of the course will be more likely to designate the course as a “best” course.

Method

A Multi-Method Approach to Comparing Best and Worst Online and Face-to-Face Classes

In order to better understand students’ views of the differences between online and face-to-face classes, we surveyed graduate and undergraduate students at the University of Arkansas at Little Rock. UA Little Rock is a metropolitan university in the capital city of the state of Arkansas with an undergraduate and graduate student population of 8,473 at the time of the survey (spring 2018). UA Little Rock offers many online courses and 58% of the student body was enrolled in at least one online class in spring 2018, making the educational profile of UA Little Rock an excellent fit for an examination of the differences between online and face-to-face classes.

After gaining approval from the university’s Institutional Review Board (IRB# 18-001-R4) and access to the university’s list of student email addresses, every enrolled student received two email invitations: one to participate in a survey about the best class they had ever taken at UA Little Rock and one to participate in a survey about the worst class they had ever taken there. A total of 2,007 students responded: 1,070 completed the survey about the worst class (53.31% of our total sample) and 937 completed the survey about the best class (46.69% of our sample). The content of the two surveys was the same, with the best/worst language adjusted as needed. Students were allowed to complete both surveys but, due to confidentiality, we do not know how many did.

We were particularly interested in how student perceptions of the characteristics and actions of the instructor influenced their evaluations of a class. We measured these perceptions through a series of survey questions. Full question wording, summary statistics, and coding are available in Table A1 in the Appendix.

First, in order to measure student perceptions of instructor communication, we asked how much students agreed with the statement “The instructor communicates effectively with me” (coded on a Likert scale from 1=*strongly disagree* to 5=*strongly agree*). We also asked students what contributed the most to their evaluation of the course as the best/worst course and provided them with four forced-choice response options (interest in the subject; the instructor; the assignments, readings, and activities in the course; and, personal circumstances at the time they took the class). We created a binary variable for each of these response options. For instance, those students who picked the instructor as the factor that most influenced their evaluation of the course as the best/worst were coded one on the “instructor most important” binary variable, with all others coded zero.

In a separate question, we asked students to rank which was most important to their evaluation of a class as the best/worst: instructor relationship, instructor attitude, instructor engagement, or course organization. Students ordered the four options 1 to 4, with numbers closer to 1 indicating more importance.

We were also interested in how student perceptions of instructor availability might influence their evaluations of the class. We asked students how available their instructor was to them in person, in video conference, on the phone, and through email. These four communication methods were then summed up into a single measure of instructor availability. Thus, for example, a professor who was available through all four would have a score of 4 compared to a score of 1 for a professor who was only available through email.

We included a number of controls to account for the characteristics of the course. Most importantly, we asked students whether the course was taught face-to-face or online. We also asked students whether the class was in their major, whether the course was a university-required core course, the grade they earned (or expected to earn) in the course, and their interest in the subject of the course.

Beyond the course and the instructor, student characteristics could have influenced their selection of a class as best/worst. We considered the demographic variables of gender, age, and race/ethnicity. We also included two student academic variables: their year in college (sophomore, junior, etc.) and their GPA. Question wording and summary statistics are provided in Table A1 in the Appendix.

In both surveys, students were provided with space to write open-ended comments about the course and the vast majority did (92.2%; $n = 1,851$). We wanted to capture the data provided by each individual thought students wrote in the open-ended comments, so we used sentence fragments as the units of analysis ($n = 4,096$). The qualitative answers were open and axial coded by both authors (Strauss & Corbin, 1998) to develop categories with similar descriptive traits. Individual student comments were identified as being primarily about the course or about the instructor. Then, the comments were organized by phenomenon within those categories. Each unit was coded for both substance (e.g., enthusiasm, communication, etc.) as well as for tone (i.e., negative, neutral, or positive). A random subset of 75 responses was evaluated to determine inter-coder reliability (Cohen's Kappa = 0.857). Four codes from the open-ended data were used in the analysis: mentions of the instructor as caring, enthusiastic, engaged, and communicative. The full codebook is available from the authors upon request.

Results and Discussion

We turn first to quantitative data and difference of means tests to understand the variables that impact student satisfaction with their courses. About two thirds of respondents told us about a face-to-face class and about one-third told us about an online class. Of those who responded about a face-to-face class, 714 or about 52% said it was the best and 662 (about 48%) said it was the worst. For those describing an online class, only 223 or about 35% said it was a best class. The data indicate that fewer students chose online classes as the best classes they had ever taken, but there were fewer instances in which students talked about online classes. More detailed data are presented in Table 1.

Table 1

Student Respondent N by Course Designation and Modality

Course modality	Worst	Best	Total
Face-to-Face	662	714	1,376
Online	408	223	631
Total	1,070	937	2,007

These data indicate that online classes were significantly less likely than face-to-face classes—35% to 51%—to be categorized as a best class, a finding supportive of Hypothesis 1. Yet, about 24% of all best classes chosen were online classes, which is not an insignificant number: almost 1,000 students chose to tell us about their best class and nearly a quarter picked an online class.

How are the best face-to-face and the best online classes similar and different? For the variables presented in the following four tables, we first calculate the mean scores for each survey question and each modality. In the column furthest to the right, we display the difference between the online and face-to-face class means. An asterisk indicates whether these differences are significant (i.e., whether there is no overlap between the 95% confidence intervals of the two mean scores). The first set of comparisons is in terms of how the instructors of the courses are viewed (Table 2).

The means comparisons in Table 2 provided our first opportunity to evaluate Hypothesis 2 (H2)—that instructor characteristics matter more for face-to-face than online classes. We see only two variables that reach statistical significance in Table 2: students who selected a face-to-face class as the best were more likely to leave an open-ended comment mentioning the enthusiasm and caring of the instructor.

Table 2

Difference of Means Tests Comparing Best Face-to-Face and Online Classes: Instructor Characteristics

Instructor characteristic	Overall	Face-to-Face	Online	Difference
Open-ended responses				
Caring	0.18	0.2	0.12	0.08*
Engaged	0.28	0.28	0.28	0
Enthusiastic	0.09	0.11	0.03	0.08*
Communicative	0.11	0.11	0.14	0.03
Survey questions				
Availability	13.52	13.48	13.65	0.17
Communicates effectively	4.71	4.72	4.69	0.03

* $p < .05$

Engagement and communication—two behaviors that may be easier to convey electronically—were not significantly different. Additionally, and in the same vein, quantitative survey questions about the availability of the instructor and the instructor’s communication were indistinguishable across course mediums. These findings provide mixed support for H2. It seems as though *some* instructor characteristics were more important for face-to-face classes, but not all.

We saw stronger support for H2 when it came to the reasons why a student selected a course as the best. Those comparisons are presented in Table 3, where we see that those who chose a face-to-face class as the best were both more likely to say the instructor was the most important factor in that selection and more likely to rank their relationship with the instructor and the instructor’s attitude as important. Those students who selected an online class as the best, on the other hand, were significantly more likely to say that assignments were the most important factor, and they ranked course organization significantly higher than students who chose face-to-face classes.

Table 3

Difference of Means Tests Comparing Best Face-to-Face and Online Classes: Main Factor Influencing Selection

Factor	Overall	Face-to-Face	Online	Difference
Most important factor in selection				
Interest in the subject	0.16	0.15	0.19	0.04
Personal situation	0.02	0.02	0.05	0.03
Instructor	0.62	0.67	0.43	0.24*
Assignments	0.14	0.1	0.27	0.17*
Comparative rankings of influences on best class selection				
Instructor relationship	2.72	2.64	3.03	0.39*
Instructor attitude	1.94	1.83	2.34	0.51*
Instructor engagement	2.36	2.41	2.16	0.25
Course organization	2.97	3.1	2.45	0.65*
<i>n</i>	937	714	223	

* $p < .05$

In line with our theoretical expectations, these results indicate that instructors connected more often with students in face-to-face classes. Their students noticed that relationship, and the instructor’s attitude influenced their evaluation of the course. In online classes, on the other hand, personal interactions are less common by definition. Assignments and course organization thus become more important and weigh more heavily as students evaluate the course.

How are the *worst* face-to-face and online classes similar and different? We conducted the same difference of means tests to compare the worst face-to-face and online classes, shown in Tables 4 and 5. In Table 4, we can again evaluate H2 as we compare the importance of the instructor in the worst face-to-face classes and the worst online classes.

Table 4

Difference of Means Tests Comparing Worst Face-to-Face and Online Classes: Instructor Characteristics

Characteristics	Overall	Face-to-Face	Online	Difference
Open-ended responses				
Caring	0.15	0.19	0.09	0.1*
Engaged	0.17	0.12	0.24	0.12*
Enthusiastic	0.05	0.07	0.01	0.06
Communication	0.18	0.18	0.17	0.01
Survey questions				
Instructor availability	8.81	8.816	8.818	0.002
Instructor communicates effectively	2.58	2.583	2.581	0.002

* $p < .05$

We see support for H2 once again as significantly more students in face-to-face classes mentioned instructor caring in their open-ended responses. Because we were talking about worst classes as opposed best classes, the word “caring” in an open-ended comment almost certainly carries a very different meaning. Thus, it appears the lack of a caring instructor contributes to worst class evaluations in face-to-face classes more than in online classes, just as the presence of a caring instructor contributes to best class evaluations in face-to-face classes more than in online classes. In both cases, the students noted caring (or lack of) more often when they had contact with instructors through face-to-face classes.

Thus, comparing Table 2 to Table 4 reveals an initial lack of support for Hypothesis 3 (H3). Instructors seemed to matter to students both when they were weighing the designation of a class as the best and when they were considering it to have been the worst.

Table 5 presents the factors that mattered most in student evaluations of the worst classes by modality. Students in the worst face-to-face classes were significantly more likely to say the instructor mattered the most in their evaluation of the course, whereas students in the worst online classes say assignments mattered most. Engagement is also significantly different across course delivery modes as shown in Table 5. Students in the worst online classes were more likely to mention instructor engagement (likely the lack of engagement) in their open-ended comments, which supports H2. We suspect that, just as students might be less likely to stay plugged into their online classes without the physical class meeting multiple times each week, instructors are likely to do the same. Importantly, students noticed when online instructors checked

out. Positive engagement did not help in the best online classes any more than the best face-to-face classes, but a *lack* of instructor engagement hurt the worst online classes more than it hurt the worst face-to-face classes.

In terms of rankings, we saw again that instructor attitude mattered more in face-to-face classes—perhaps because attitude is less easily communicated electronically. When it comes to the worst classes, however, course organization was not significantly different across modes as it was for the best classes.

Table 5

Difference of Means Tests Comparing Worst Face-to-Face and Online Classes: Main Factor Influencing Selection

Factor	Overall	Face-to-Face	Online	Difference
Most important factor in selection				
Interest in the subject	0.06	0.04	0.07	0.03
Personal situation	0.03	0.02	0.04	0.02
Instructor	0.57	0.63	0.46	0.17*
Assignments	0.27	0.21	0.36	0.15*
Comparative rankings of influences on worst class selection				
Instructor relationship	2.78	2.75	2.84	0.09
Instructor attitude	2.49	2.39	2.65	0.26*
Instructor engagement	2.34	2.45	2.16	0.29*
Course organization	2.37	2.33	2.39	0.06
<i>n</i>	1.070	662	408	

* $p < .05$

We ran a series of logit models with the binary best class designation as the dependent variable and including a number of independent variables as specified in the Method section of this paper. The logit models evaluated the relative influence of these variables simultaneously to assess all three hypotheses, providing a more nuanced picture of the relationships among variables and allowing researchers to see the influence of each, even when a study population was not representative. By including the online course modality variable, we could test H1 (online courses were less likely to be considered “best” classes by students). By including instructor variables, we could test H3 (students who emphasize the instructor will be more likely to designate a course as the “best” class). We also ran separate models for online and face-to-face classes so we could evaluate H2 (importance of instructors in “best” online and face-to-face courses). The full results of all models are included in the Appendix.

Five variables emerged as highly significant in determining whether a course was selected as the best course a student had taken at UA Little Rock, the odds ratios for which are presented in Figure 1. Odds ratios are

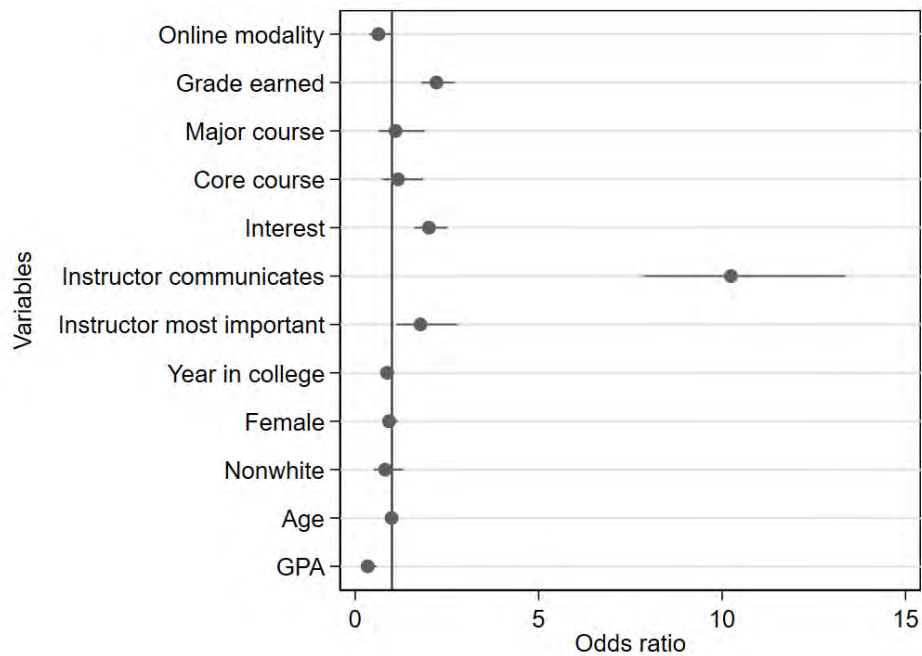
a standardized measure of the impact of each variable in a logit model. First, the grade earned and interest in the subject were deemed significant in influencing whether a course would be selected as best. Students liked classes in which they were interested and achieved good grades. Additionally, students with high GPAs were less likely to designate a course as a best course. We can only speculate, but high-achieving students may have higher standards for teaching excellence.

Contrary to the expectations of H1, online courses were not less likely to be named by students as the best classes they had taken. Although fewer of the aggregate best classes were online classes, the statistical models take more factors into account and do not show that course modality was a significant factor. Online classes were not inherently worse than face-to-face classes for this sample.

The instructor as the most important factor is also a significant predictor of best class designation. As the odds ratios in Figure 1 indicate, far and away the most important variable in the model of best course selection was effective communication from the instructor. The strong impact of this variable was partially due to the question wording and the construction of the models. Instructor importance could have applied to either good or bad courses, but effective communication was likely to only be associated with good classes, so a stronger relationship in the model makes sense. This result also indicates how important effective communication is to students, which is a message reinforced by the qualitative data below. These findings support H3: instructors matter a great deal in best and worst classes.

Figure 1

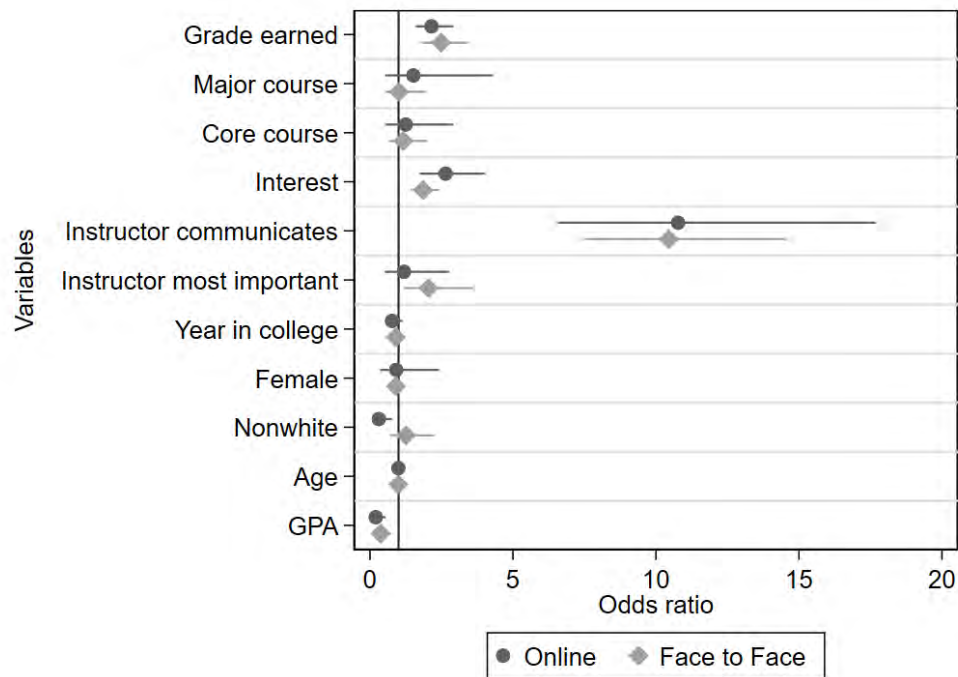
Odds Ratios of Best Class Logit Results



In order to directly compare those factors that influenced the selection of a class as the best online or face-to-face, we ran the same logit models for both modalities separately (full model results are available in the Appendix). The results are presented in Figure 2.

Figure 2

Best Class Logit Results, by Modality



In support of H2, the variable for the instructor as the most important factor was significant for the face-to-face model but not for the online model, indicating that instructors were more important for face-to-face classes. This finding reinforced the major difference we noted as key to lower retention rates in online classes—the distance between instructor and student created by the electronic barrier. A second, unanticipated difference was that non-white students were significantly less likely to designate an online class as their best classes, but ethnicity was not significant in the face-to-face model. Minority students, who comprise 45% of the student population at the UA Little Rock (University of Arkansas at Little Rock, 2019), may not be as well-served by online classes, a finding seen elsewhere in the literature (Jaggars, 2014).

Qualitative Data About Best and Worst Classes

We can better understand the student experience in both online and face-to-face classes by looking at the open-ended responses to the question “What makes this class the [best/worst] one you have taken at UA Little Rock?” Approximately 92% of survey respondents answered this open-ended question ($n = 1,851$), and we coded sentence fragments to capture each unique idea communicated about the class ($n = 4,096$).

Students emphasized the importance of different elements in online and face-to-face classes (summarized in Table 6).

Table 6

Prevalence of Open-Ended Comments Regarding What Makes a Class the Best, by Modality

Online		Face-to-Face	
Response	%	Response	%
The online modality was less distracting or better.	15	The class included interactive or project-based learning.	14
The instructor provided clear instructions and expectations.	14	The class included interesting discussions	11
The class included interactive or project-based learning	11	Instructor was engaged and enthusiastic.	11
The instructor was available.	11	The course provided real-world experience.	10
The instructor/class was organized.	11	The instructor was caring.	9
Instructor replied to inquiries promptly.	10	The instructor provided clear instructions and expectations.	9
The course provided real-world experience.	9	The instructor is knowledgeable.	8
The information was useful and/or interesting.	9		
The course included consistent deadlines.	8		

Note. the % indicates the percent of total student respondents completing the best survey (n=937).

Students found relevant, clearly communicated content important in both face-to-face and online courses. Students wanted information that was beneficial to their careers and lives, and faculty who explained it well and assessed it fairly. Regardless of modality, students found clear instructional communication and relevant and well-designed courses (aligned course outcomes, lectures, assignments, and tests) key to their satisfaction with courses. Students wanted faculty to explain materials and take time to talk them through course assignments. In the best face-to-face classes, students indicated that a variety of engaging, interactive assignments were an important feature (i.e., “project-based learning,” “in-class practice,” “hands-on assignments,” “guest speakers,” “field trips,” “labs,” and/or “writing assignments”).

Instructor and classroom organization was more important in online classes than face-to-face classes, as were instructors who responded in a timely manner, particularly to student email requests. The best online courses allowed students to work around their schedules and stayed on schedule consistently.

Instructor enthusiasm and caring were more important in face-to-face than online classes. In face-to-face classes, students described the instructors of the best classes using words such as “kind,” “caring,” “nice,” “friendly,” and “polite.” Students’ instructors in their best face-to-face classes were enthusiastic, dynamic, energetic, and passionate. Instructor attitude was not as important online as was attentiveness, timeliness, and clarity of communication. Students in the best online classes were more likely to describe their instructors as available rather than caring.

Sixty-two percent of students completing the worst class survey identified a face-to-face class as their worst class, and 38% identified an online class as their worst class. Instructor availability in online and face-to-face classes showed a much greater gap than any other area. Thirty-five percent of open-ended responses in the worst online classes and 10% of open-ended responses in the worst face-to-face classes mentioned instructor availability. Poor instructor responsiveness was the single most important factor for either a best or worst class. In the worst classes, students described faculty as unapproachable, unwilling to be questioned, absent, and unresponsive.

In many ways, the qualitative results of student-identified worst classes mirrored those of the student-identified best classes. Regardless of modality, students wanted classes to provide a worthwhile learning experience. Students expressed frustration with what they perceived as lack of instruction regarding unrelated content. Some students remarked that instructors in their worst classes expected them to already know content or assumed relevant content would be covered later in the program (see Table 7).

Table 7

Prevalence of Open-Ended Comments Regarding What Makes a Class the Worst, by Modality

Online		Face-to-Face	
Response	%	Response	%
The instructor was unavailable or unresponsive.	35	The instructor provided little instruction on assignments and activities.	14
The instructor was unclear about expectations and the purpose of assignments.	14	The class did not teach anything worthwhile and/or was a waste of time and money.	13
The class was too difficult and/or the workload was too demanding.	14	The instructor was belittling and/or talked down to students in the class.	13
The instructor graded unfairly or subjectively.	10	The instructor gave lectures that were boring and/or lectures were the primary instruction in the class.	13
The class did not teach anything worthwhile and/or was a waste of time and money.	9	The instructor was unavailable or unresponsive.	10

The class assignments and exams did not align or cover the same content as the instructional materials for the course.	8	The instructor was unfair or inflexible.	10
		The class assignments and exams did not align with or cover the same content as the instructional materials for the course.	9
		The instructor was unorganized.	8

Note. the % indicates the percent of total student respondents completing the worst survey (n=1070).

Poor course design was also a frequent concern of students regardless of modality. Students commented that worst classes included assignments and exams that did not align with course objectives. They did not feel adequately prepared for assessments and felt like the instructor was unfair or inflexible. In the worst classes, the grading systems did not make sense to the students, and the tests felt “impossible.”

The most striking qualitative answers for the worst classes reinforced quantitative survey responses. Students in the worst face-to-face classes indicated that their instructors would neither let students ask questions nor answer them. These instructors were unavailable, did not answer emails, and were “unresponsive” or “unapproachable.” In the worst online classes, students indicated that there was no instructor interaction; the instructor uploaded textbooks and tests, and then “disappeared.”

The negative personal interactions in the worst face-to-face classes came through in the open-ended comments as well, where students described the instructors as openly offensive, using terms such as “sarcastic,” “rude,” “belittling,” “defensive,” “bigoted,” and “racist.” Students claimed that bad instructors talked down to the class or were openly hostile. Open-ended responses told us that the instructors in these classes were “boring,” and lectures went “by the book.” There was little discussion, poor organization, and lectures, if any, were perfunctory.

Students in the worst online classes emphasized assignments and organization as important to their experiences in these classes. Students said the worst online classes had instructors who were unclear or confusing about expectations and assignments. Students in the worst online classes were also more likely to say that the class was difficult or that the workload was too hard. Assignments were seen as online busywork not associated to class hours.

Conclusion

Face-to-face students respond positively to instructors who demonstrate engagement and caring. This is much harder to do online, but research indicates that building rapport and relationships with students in online classes can improve their retention and success (Glader, 2013; Glazier, 2016, 2021). Instructors and instruction matter for both online and face-to-face classes, and instructors have an opportunity to make a positive impact on student retention and success by being available and communicating clearly with their students.

Instructors who teach the best online and face-to-face classes have many things in common. They are engaged and available. However, students more often note caring (or lack of) when they have personal contact with instructors through face-to-face classes. Both the statistically significant findings in our quantitative analyses and additional insights provided by the qualitative data indicate that instructors in both online and face-to-face classes can improve their courses by being available and supportive, and by communicating clearly with their students. In either modality, students wanted information beneficial to their careers and lives, and they wanted instructors to explain it well and assess it fairly.

There are some key points of difference across formats, which are instructive to note. Students in the worst face-to-face classes were more likely to say the instructors mattered the most in their evaluation of the course, whereas students in the worst online classes said assignments mattered the most. However, both the quantitative and qualitative data indicated that effective communication was key to the best courses. While student retention and success in any class is the result of a variety of factors, effective instructors and clearly delivered instruction matter a great deal to student success.

In line with our theoretical expectations regarding transactional distance, students connected more easily with instructors in face-to-face classes. In online classes, on the other hand, synchronous personal interactions are often limited, and assignments and course organization may become more important. In some ways, the instruction *is* the instructor in an online course, making clear and consistent course materials even more important. If online instructors are more purposeful in reaching out to and connecting with students, and if they pay particular attention to their communication with students, they may increase online student retention.

Further research should identify how instructors can close the transactional distance and build rapport in online classes, and how doing so relates to student retention. Our research here was limited in that it took place on a single campus. Future studies could examine other student populations, in addition to identifying whether institutions can train their online instructors in effective strategies to mitigate transactional distance and improve rapport (Bok, 2017; Lichoro, 2015).

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Appendix

Table A1

Survey Question Wording and Descriptive Statistics

Question wording	Coding	Descriptive statistics
Please rank the following four factors on their contribution to making this the [BEST/WORST] class.		
Your instructor's relationship with you (for example: respect, understanding, annoyance)	Responses coded 1 to 4 with numbers closer to 1 indicating that the factor is ranked as more important.	Range: 0 to 4 <i>M</i> : 2.75 <i>SD</i> : 1.06 <i>N</i> : 1,615
Your instructor's attitude about the course (for example: enthusiasm, positivity, the way teaching responsibilities were prioritized)	Responses coded 1 to 4 with numbers closer to 1 indicating that the factor is ranked as more important.	Range: 0 to 4 <i>M</i> : 2.23 <i>SD</i> : 1.08 <i>N</i> : 1,615
Your instructor's engagement with you (for example: response time, feedback, participation in class)	Responses coded 1 to 4 with numbers closer to 1 indicating that the factor is ranked as more important.	Range: 0 to 4 <i>M</i> : 2.35 <i>SD</i> : 0.98 <i>N</i> : 1,615
Course organization (for example: syllabus, due dates, assignments)	Responses coded 1 to 4 with numbers closer to 1 indicating that the factor is ranked as more important.	Range: 0 to 4 <i>M</i> : 2.65 <i>SD</i> : 1.24 <i>N</i> : 1,615
Whenever you have an issue, how often is the instructor available to you? Questions asked for in-person, in video conference, on the phone, and through email availability.	Response options are <i>always</i> , <i>sometimes</i> , <i>rarely</i> , and <i>never</i> , with higher numbers indicating more availability. All 4 are summed into a single measure of availability.	Range: 4 to 16 <i>M</i> : 11.92 <i>SD</i> : 3.59 <i>N</i> : 339
To what extent does the instructor effectively communicate with you?	Response options from 1 to 5 with higher numbers indicating more effective communication.	Range: 1 to 5 <i>M</i> : 3.65 <i>SD</i> : 1.34 <i>N</i> : 1800
What reason contributed the MOST to this course being the [BEST/WORST] class you have taken at the University of Arkansas at Little Rock?		
My interest in the subject	Each option is treated as a dummy variable and coded 1 if it is selected and 0 if it is not.	Range: 0 to 1 <i>M</i> : 0.109 <i>SD</i> : 0.312 <i>N</i> : 2,007

The instructor	Each option is treated as a dummy variable and coded 1 if it is selected and 0 if it is not.	Range: 0 to 1 <i>M</i> : 0.593 <i>SD</i> : 0.491 <i>N</i> : 2,007
Assignments/readings/activities	Each option is treated as a dummy variable and coded 1 if it is selected and 0 if it is not.	Range: 0 to 1 <i>M</i> : 0.213 <i>SD</i> : 0.409 <i>N</i> : 2,007
My personal circumstances at the time I took the class	Each option is treated as a dummy variable and coded 1 if it is selected and 0 if it is not.	Range: 0 to 1 <i>M</i> : 0.032 <i>SD</i> : 0.177 <i>N</i> : 2007
GPA		Range: 1.3 to 4 <i>M</i> : 3.464 <i>SD</i> : 0.466 <i>N</i> : 1758
Year in college		First year: 190 Sophomore: 279 Junior: 425 Senior: 553 Graduate: 433
Year born		Range: 1920 to 2000 <i>M</i> : 1988 <i>SD</i> : 11.04 <i>N</i> : 1,762
Race/Ethnicity		White: 1,205 (63.6%) Black: 389 (20.5%) Hispanic or Latino/a: 100 (5.3%) Asian: 116 (6.1%) Native American or Pacific Islander: 19 (1%) Other: 64 (3.4%)
Gender		Female: 1,335 (70.1%) Male: 551 (28.9%) Other: 18 (0.09%)

Table A2

Logit Model of Best Class Designation

Variable	Coefficient	Odds Ratio
Online course	-0.462 (0.253)	
Grade earned	0.795*** (0.105)	2.214
Course is in major	-0.095 (0.276)	
Course is in the core	0.115 (0.112)	
Interest in course	0.698*** (0.112)	2.010
Instructor communicates effectively	2.326*** (0.136)	10.241
Instructor is the most important factor	0.575** (0.232)	1.778
Year in college	-0.141 (0.101)	
Female	-0.079 (0.115)	
Nonwhite	-0.203 (0.242)	
Age	-0.009 (0.011)	
GPA	-1.078*** (0.273)	0.339
Constant	-10.641 (0.810)	
<i>N</i>	1,403	
Pseudo <i>R</i> ²	0.71	

Note. Standard errors are in parentheses.

p* < .05, *p* < .01, ****p* < .001

Table A3

Logit Models of Best Class Designation by Course Modality

Face-to-Face			Online		
Variable	Coefficient	Odds ratio	Variable	Coefficient	Odds ratio
Grade earned	0.991*** (0.163)	2.488	Grade earned	0.766*** (0.153)	2.152
Course is in major	0.016 (0.333)		Course is in major	0.417 (0.529)	
Course is in the core	0.151 (0.280)		Course is in the core	0.222 (0.432)	
Interest in course	0.619*** (0.136)	1.857	Interest in course	0.972*** (0.214)	2.645
Instructor communicates effectively	2.346*** (0.169)	10.449	Instructor communicates effectively	2.377*** (0.252)	10.774
Instructor is the most important factor	0.717** (0.283)	2.049	Instructor is the most important factor	0.173 (0.431)	
Year in college	-0.100 (0.122)		Year in college	-0.255 (0.196)	
Female	-0.093 (0.121)		Female	-0.086 (0.494)	
Nonwhite	-0.229 (0.297)		Nonwhite	-1.168* (0.464)	0.311
Age	-0.011 (0.014)		Age	-0.006 (0.018)	
GPA	-0.983*** (0.344)	0.374	GPA	-1.059*** (0.510)	0.202
Constant	-11.553 (1.422)		Constant	-9.904 (1.886)	
<i>N</i>	967		<i>N</i>	436	
Pseudo <i>R</i> ²	0.711		Pseudo <i>R</i> ²	0.706	

Note. standard errors are in parentheses.

p* < .05, *p* < .01, ****p* < .001.

