Instructor Perspectives of Online versus Face-to-Face Education at a Jesuit

Institution: Instructor Factors

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WEB APPENDIX

Web Appendix A

Table 1. Instructor Perceptions: Online versus Face-to-Face

Metric	t-test	Online Instructors		Face-to-Face Instructors	
		Average	Std. Deviation	Average	Std. Deviation
Motivation	0.00*	2.88	1.00	4.2	.88
Discipline	0.03*	3.76	1.02	3.30	.88
Self-directed	0.00*	2.83	1.18	4.20	.97
Independence	0.04*	3.29	1.03	3.74	.94
Schedule flexibility	0.03*	3.73	1.05	3.18	1.11
Time investment	0.00*	3.80	1.1	3.05	.84
Cost investment	0.22	3.05	.70	3.28	.92
Opposite environment?	0.00*	1.85	.85	2.68	.61
Happiness with environment	0.00*	3.44	1.23	4.54	.64
Appropriateness	0.02*	1.34	.62	1.71	.78

*p ≤ .05

Table 2. Comparison of Instructors with Prior Online Training versus Instructors without Prior
Online Training

Metric	t-test	Average for Online Instructors	
		With Training	Without Training
Motivation	0.01*	2.57	3.54
Discipline	0.69	3.71	3.85
Self-directed	0.04*	2.54	3.46
Independence	0.22	3.14	3.62
Schedule flexibility	0.88	3.71	3.77
Time investment	0.36	3.71	4.00
Cost investment	0.35	2.96	3.23
Opposite environment?	0.03*	1.64	2.31
Happiness with environment	0.74	3.39	3.54
Appropriateness	0.44	1.39	1.23

*$p \leq .05$

Online Perspectives - Instructor Survey Spring 2017

> *Please note*: The coding is the number in parentheses following the response and will not be viewed by the participant.

Q1.   What school do you teach in?
- o School of Arts and Sciences (1)
- o School of Education and Human Services (2)
- o School of Business (3)

Q2.   How old are you?
- o Less than 26 (1)
- o 26-30 (2)
- o 31-35 (3)
- o 36-40 (4)
- o 41-45 (5)
- o 46-50 (6)
- o 51-55 (7)
- o 56-60 (8)
- o 61-65 (9)
- o 66-70 (10)
- o 71 or older (11)

Q3.   Are you:
- o Male (1)
- o Female (2)

Q4.   What is your rank at the University?
- o Lecturer/Adjunct Professor
- o Assistant Professor
- o Associate Professor
- o Professor
- o Other

Q5.   What is your highest education level?
- o Associates
- o Bachelors
- o Masters
- o Doctorate
- o Post-Doctorate

Q6.   Do you teach undergraduate courses only, graduate courses only or both levels?
- o Undergraduate courses only (1)
- o Graduate courses only (2)
- o Both undergraduate and graduate courses (3)

Q7.   Would you classify your technological integration in the classroom as:
- o   Do not use technology in the classroom as part of teaching or to communicate with students.
- o   Beginner/Novice (e.g. use Microsoft Office Powerpoint (or similar projection software) as part of teaching and email, but no other software to conduct class or communicate with students).
- o   Advanced Beginner (e.g. use 'some' Powerpoint (or similar projection software), some Desire2Learn features, Microsoft office or similar to conduct class and communicate with students).
- o   Intermediate (e.g. Use 'many' Desire2Learn features in class, Microsoft Office, and other computer applications to conduct class and communicate with students).
- o   Extensive (e.g extensive knowledge and use of various computer software programs to conduct class and communicate with students).

Q8.   How many years have you taught at the University?

Q9.   How many years have you taught at the university level (any school)?

Q10.   Have you ever taken an online course at the University?
- o   Yes (1)
- o   No (2)

Q11.   Have you ever taken an online course at a school other than the University?
- o   Yes (1)
- o   No (2)

Q12.   Have you taught an online course at the University?
- o   Yes (1)
- o   No (2)

Section A: Participants with online teaching experience are directed to the following questions, while participants with no online teaching experience are direct to Section B.

Q13.   How many online courses have you taught at the University?

Q14.   Have you taught an online course at a school other than the University?
- o   Yes (1)
- o   No (2)

Q15. How many online courses have you taught at a school other than the University?

Q16.   Prior to teaching an online course, did you take a course to prepare you for the online environment?
- o   Yes (1)
- o   No (2)

Q17. If yes, was the course offered by the University or the book publisher or other method?
- o University (1)
- o Book publisher (2)
- o Other (3)

With respect to <u>teaching online</u> courses at the University compared to face-to-face (traditional classrooms), please rate the following responses:

Q18. I perceive online courses to be _____ in difficulty than face-to-face courses.
- o Significantly easier (1)
- o Easier (2)
- o The Same Difficulty (3)
- o Harder (4)
- o Significantly Harder (5)

Q19. I am _____ motivated in online courses than face-to-face courses.
- o Significantly less (1)
- o Less (2)
- o Equally (3)
- o More (4)
- o Significantly more (5)

Q20. I perceive the interaction between students in the online environment to be _____ compared to the face-to-face environment.
- o Significantly dislike (1)
- o Dislike (2)
- o Equate (3)
- o Like (4)
- o Significantly like (5)

Q21. I perceive the interaction between the instructor and students in the online environment to be __.compared to the face-to-face environment.
- o Significantly dislike (1)
- o Dislike (2)
- o Equate (3)
- o Like (4)
- o Significantly like (5)

Q22. I find the discipline required in taking online courses to be _____ than in face-to-face courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q23. I enjoy the schedule flexibility associated with the online learning environment _____ than the interaction in face-to-face courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q24. I find online courses require _____ time investment in the course than face-to-face courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q25. I find online courses total costs are _____ than face-to-face courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly More (5)

Q26. I perceive that it is ____ for students to cheat in the online environment than in face-to-face courses.
- o Significantly easier (1)
- o Easier (2)
- o The Same (3)
- o Harder (4)
- o Significantly harder (5)

Q27. I enjoy the self-directed online learning environment _____ than the interaction in face-to-face courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q28. I enjoy the independence associated with the online learning environment _____ than the interaction in face-to-face courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q29. In the online environment, I feel these activities increase my students' understanding of the course material. (Check all that apply.)
o Additional Readings (not including textbook) (1)
o Assignments/ Homework (2)
o Course Surveys (3)
o Discussion boards (4)
o In-class sessions (live sessions that are not lectures) (5)
o Instructor chat (6)
o Instructor (live or taped) lectures (7)
o Instructor Office Hours (8)
o Instructor Posted Notes (9)
o Laboratory / experiential activities (10)
o Other students (11)
o Problem Hints & Scaffolding Examples (12)
o Textbook (13)
o Videos of Relevant Course Material (not instructor-lead (14)
o Other (15)

Q30. In the online environment, I feel these activities decrease my students' understanding of the course material. (Check all that apply.)
o Additional Readings (not including textbook) (1)
o Assignments/ Homework (2)
o Course Surveys (3)
o Discussion boards (4)
o In-class sessions (live sessions that are not lectures) (5)
o Instructor chat (6)
o Instructor (live or taped) lectures (7)
o Instructor Office Hours (8)
o Instructor Posted Notes (9)
o Laboratory / experiential activities (10)
o Other students (11)
o Problem Hints & Scaffolding Examples (12)
o Textbook (13)
o Videos of Relevant Course Material (not instructor-lead (14)
o Other (15)

Q31. Would you prefer to teach the class in a traditional face-to-face environment?
o Yes (1)
o Undecided (2)
o No (3)

Q32. I am ____ with the online course environment for learning.
   o Not very happy (1)
   o Not happy (2)
   o Okay (3)
   o Happy (4)
   o Very happy (5)

Q33. Given this institution, do you think online courses are appropriate?
   o Yes (1)
   o Undecided (2)
   o No (3)

Q34. Why did you choose to teach the course online?

> **Section B: Participants with no online teaching experience are directed to the following questions, while participants with online teaching experience are direct to Section A.**

With respect to <u>teaching</u> face-to-face courses (traditional) at the University compared to teaching online, please rate the following responses:

Q35. I perceive face-to-face courses to be _____ in difficulty than online courses.
   o Significantly Easier (1)
   o Easier (2)
   o The Same Difficulty (3)
   o Harder (4)
   o Significantly Harder (5)

Q36. I would be ____ motivated in face-to-face courses than online courses.
   o Significantly less (1)
   o Less (2)
   o Equally (3)
   o More (4)
   o Significantly more (5)

Q37. I perceive the interaction between students in the face-to-face environment to be ____ compared to the online environment.
   o Significantly worse (1)
   o Worse (2)
   o Equal (3)
   o Better (4)
   o Significantly better (5)

Q38. I perceive the interaction with the instructor in the face-to-face environment to be _____ compared to the online course environment.
- o Significantly worse (1)
- o Worse (2)
- o Equal (3)
- o Better (4)
- o Significantly better (5)

Q39 I perceive the discipline required in taking face-to-face courses to be _____ than in online courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q40. I perceive that it would be _____ to cheat in the face-to-face environment than in online courses.
- o Significantly easier (1)
- o Easier (2)
- o The Same (3)
- o Harder (4)
- o Significantly harder (5)

Q41 I believe that I would enjoy the self-directed face-to-face learning environment _____ than the interaction in online courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q42. I believe that I would enjoy the independence associated with the face-to-face environment _____ than the interaction in online courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q43. I believe that I would enjoy the schedule flexibility associated with the face-to-face learning environment _____ than in online courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q44. I believe that face-to-face courses require _____ time investment in the course than online courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q45. I believe face-to-face courses total costs are _____ than online courses.
- o Significantly less (1)
- o Less (2)
- o The Same (3)
- o More (4)
- o Significantly more (5)

Q46. In the face-to-face environment, I feel these activities increase my students' understanding of the course material. (Check all that apply.)
- o Additional Readings (not including textbook) (1)
- o Assignments/ Homework (2)
- o Course Surveys (3)
- o Discussion boards (4)
- o In-class sessions (live sessions that are not lectures) (5)
- o Instructor chat (6)
- o Instructor (live or taped) lectures (7)
- o Instructor Office Hours (8)
- o Instructor Posted Notes (9)
- o Laboratory / experiential activities (10)
- o Other students (11)
- o Problem Hints & Scaffolding Examples (12)
- o Textbook (13)
- o Videos of Relevant Course Material (not instructor-lead (14)
- o Other (15)

Q47   In the face-to-face environment, I feel these activities decrease the students' understanding of the course material. (Check all that apply.)
o   Additional Readings (not including textbook) (1)
o   Assignments/ Homework (2)
o   Course Surveys (3)
o   Discussion boards (4)
o   In-class sessions (live sessions that are not lectures) (5)
o   Instructor chat (6)
o   Instructor (live or taped) lectures (7)
o   Instructor Office Hours (8)
o   Instructor Posted Notes (9)
o   Laboratory / experiential activities (10)
o   Other students (11)
o   Problem Hints & Scaffolding Examples (12)
o   Textbook (13)
o   Videos of Relevant Course Material (not instructor-lead (14)
o   Other (15)

Q48   Would you prefer to teach the class in an online environment?
o   Yes (1)
o   Undecided (2)
o   No (3)

Q49. If not, why not?

Q50. I am _____ with the face-to-face environment for learning.
o   Not very happy (1)
o   Not happy (2)
o   Okay (3)
o   Happy (4)
o   Very happy (5)

Q51. Given this institution, do you think online courses are appropriate?
o   Yes (1)
o   Undecided (2)
o   No (3)

Appendix B
Individual Responses to 'Why did you choose to teach the course online?'

I really feel that students benefit from the schedule and location flexibility in an online environment. In my division, this is crucial. Also, in a face-to-face environment, some students rarely participate in class discussions, whereas in an online environment, everybody does. Students learn from the instructor and from each other, and especially in multidisciplinary classes, the sharing of experiences and the application of course material in different contexts is amazing. I actually suspect that the students learn more.

I just really enjoy getting to know the students as individuals, and I love the face-to-face interaction before and after a traditional face-to-face course where you talk about life and things outside of the classroom in addition to course-related material. That is the part that is difficult to replicate in an online environment, and that makes me prefer face-to-face teaching.

I was going to go abroad for a semester and I had completed the BlackBoard training for a winter intersession course so in the Spring 2016 I taught all my classes online. I like the flexibility, just like everybody else (I think?) but I dislike the quantity of emails online courses generate. In the end, I often have the impression that I spend more time administering than teaching the course, especially in the first two weeks of the semester.

At another University, a recent decision of the Full Time faculty in Social Science has limited the course offering per adjunct to one course a semester. Full Time faculty consider online teaching as more desirable than face-to-face. One concerning consequence of this is that one rarely sees a full time faculty on campus anymore.

A few reasons: one class was designed for recent graduates who moved beyond the area - as a professional development course necessary for certification. Thus the online environment offered the availability from the University, an environment for ongoing supervision and a help to our alumni. Other classes, an online class offered scheduling ease for both the students and faculty.

My prior institution needed online courses for students who had work schedules that made it difficult for them to attend class on a scheduled basis.

This is the type of learning environment that graduate students are looking for. It is important to take into account the MARKET for our programs and tailor programs to meet MARKET DEMAND. As business professors, wouldn't you agree?!

program requirement

Like with most options, there are both positive and negative elements. In some circumstances, students prefer online environments and I feel they deserve to have this viable option. As an instructor, I feel a responsibility to learn how to teach online as well as I do in the classroom. I am pleasantly surprised to realize, when done well, online teaching is both rewarding and effective for both my students and myself.

Students requested it. Also, it draws from a larger pool of students.

Learn new teaching techniques appropriate for this generation. Thought I'd try it to see what it was like.

Because the institution has been promoting it. I am skeptical, however, and think that Center of Learning and Instruction and such things are overly resourced to try and propel us to a mode of teaching that will not benefit the college in the long run.

Try something new, glad I did.

We offer summer courses online. Although it is not mentioned, we also offer courses in a hybrid format

Our graduate program is online only

I teach in a post-masters program and the candidates are high quality, busy professionals. The convenience is necessary for this population to juggle personal, professional, and academic responsibilities. Ground and online courses were offered for a time but students gravitated to the online

courses. It became difficult to secure enough students to run the ground classes.

Bricks and mortar are coming to a swift end in this new age of technology and learning. I chose to teach online because it is the only teaching that will be done in upcoming years.

It is a way to offer special, interdisciplinary topics; it is a recruitment tool for students who do not live in the city or whose work schedule does not allow them to take f2f courses.

To reach out to non-traditional and professional students who can not attend face to face courses. Online education therefore serves the community as well as completes the University's primary mission. Research has shown online education to be more effective than traditional face to face in select populations.

Needed revenue for the University. To help the University stay regionally relevant, as an academic institute, by utilizing all proven state-of-the-art teaching tools and methods.   Why are we even discussing the need or relevance of online education or its place at the University? It makes academic sense, mission-sense, fiscal sense, and with all the available research is just plain common sense.

Didn't - was told it must be taught online.

It was required.

1) An online course seemed challenging. 2) The Dean and the Department were interested in members of the Department teaching a course in the Core online.

No choice

No other option - only way it was offered by my department

Flexibility

At the time I started teaching online, the administration said that we should offer something to satisfy every core requirement as an online class ever term [ie one section of each of the foundations and then at least one course for RST field, etc. and attributes, etc.]. Given my department's role in the core, this meant that every term (and sometimes in the summer) we needed to offer one or two online courses. I was initially very resistant but came to see some advantages - particularly in offering flexibility and options for degree completion for transfer / part-time / commuter students

Initially was paid a stipend to develop an online course.

More effective and appropriate for the non-traditional and adult populations.

I don't like to be restrained by the time available in a face-to-face course, even if it's taught one per week (i.e., approx. 2 1/2 hrs per session). When I was teaching face-to-face, my presentations (not lectures, but presentations) were limited to about 1 1/2 hours. Now I can make the presentation much longer and more involved because time is not a factor. As long as the presentation is engaging, students don't complain. I also have far more interaction with students as an online instructor than previously.

It was a good solution for a personal problem. I knew it was challenging since I had to develop material and that I will not use that material again (because the class would not be taught online again)

flexibility for students to learn new skills

The Logic course I regularly teach online is based entirely on evaluating a student's ability to solve problems. These problems are formal syntactic problems and can be best accomplished via software. The software is available online just as easily as in a f-to-f class. If students need assistance, they can schedule a zoom session with me at their convenience.

I taught online mostly as an experiment, and also in response to administration's pleas for more online core course opportunities in the summer.

I offer online courses in order to offer students more flexibility when taking 100 and 200-level courses, increase enrollment in those courses (we offer two sections now), and I teach a 200-level course online that is much more efficient and much more popular than when I taught it as a face-to-face course. Some material translates into the online format very well.

It was easier for our students to take the course that I teach online because of scheduling conflicts since it was a grad course. I also had students take it online during the summer and they could take it from the University even though they were home. I had a student take it from Jamaica one summer when they were home. I find that time is more efficiently used since each student learns differently and has different effort levels.

The program is fully online. The program was once offered with an on-campus or online option. The on-campus courses did not fill and typically were cancelled. The online courses are typically filled to capacity. Online instruction is the only option currently available for my area of expertise at the University

Allow more access; reach more students; investigate appropriate/effective teaching methods and learning practices in an online environment.

Appendix C
Individual Responses to 'If not, why not? (Following 'Would you prefer to teach the class in an online environment?')

I like the energy in a classroom. I also like the in-depth discussions that emerge spontaneously on key issues.

Students learn from each other - and live/immediate feedback is important. I also give a lot of in class discussion and team assignments that I feel would be way harder to facilitate in an online environment.

Stuck on the word prefer. Since I've never experienced an online environment as a student or teacher I don't know enough about it to say it would be better than everything I know about being a teacher and student for my whole life.

I enjoy the direct interpersonal interaction.

My courses are based on real-time discussion. There is no way to have the same situation, the same chemistry with other students/the prof, in online courses.

I don't think online learning can meet the needs of students. If it can, then what are we doing here (i.e., replace universities with coursera)?

I think that interaction, questions, and input are more timely and personal connection enhanced face to face.

Most on line courses are basically independent studies. I enjoy conducting independent studies in a one on one setting where I can gauge the student's strengths and weaknesses and compensate accordingly. Trying to conduct independent studies with 17 students simultaneously would be very difficult because not every student is capable of successfully completing an independent study. It takes strong academic skills, discipline, and intellectual maturity to complete an independent study. Not every college student has this skill set. Also, what tutoring support is available for on line students? I understand how an occasional on line course could be helpful to fill in a gap or help a student graduate, but designing a curriculum around on line courses would be counterproductive to the strengths of Jesuit higher education.

I enjoy the face-to-face interaction with students and feel that they take advantage of our in-person discussions more than they do online. While I acknowledge my own bias is informed by my own educational background and lack of familiarity with online education, I believe there's still value in meeting in person.

The intricacy of the historical development of concepts and ideas in my discipline requires that I can "check in" with students each step of the way. Primary texts in my discipline are obtuse and thus require a close and careful reading, which I am able to do with students in the classroom to advance their ability for

critical reading.

No matter proponents of online education argue, it is a cheap and impersonal mode of instruction and interaction. It should only be used at the margins in higher education. It has a more useful role in continuing education. Its main purpose is to deliver education on the cheap and make up for financial shortfalls on campus. How many students who receive online degrees give back to their alma mater? I have heard a number of students say that they dislike online education because they don't get to interact face-to-face with their professors and classmates. Any serious student looks to avoid this form of delivery.

I believe in empathy, compassion, eye contact, spontaneity, humor, the dramatic value of outbursts and of silence, group dynamics, and genuine human connection. These are integral to face-to-face teaching and learning. They are far more difficult to achieve in an online-only environment.

the amount of work that would need to go into setting up an online course is not of interest

It would be difficult to check that a student's work in a math problem is really his or her own. There is a certain amount of mentoring involved with solving word problems.

I would have to generate entirely new courses, and this is a huge amount of up-front work.

In class, problem solving can be done interactively with many students, so that each student sees how the others think. Collaborative work projects can be done with the teacher present to help.

"The class"? What class?

Teaching online is not an embodied activity.

I want real people who can actively ask questions, I like the schedule, and it feels right

I like personal interaction with students. I believe students can cheat easily in on-line environment. I think f2f teaching is more effective, if organized properly (for example frequent problem solving in teams. I am not familiar with all the software available for on-line teaching. I tried to take on-line course on how to teach on-line, but I quit b/c not enough information was given by the instructor how to use the software. Courses "How to teach on-line" should not be given on-line.

I am not a good typist.

My exposure to online courses is limited. I think they can be a good forum for learning but as a teacher I would need to adapt my skills to that forum. It would take time to learn the possibilities and have not been in adept interested in cultivating that skill.

Very technical material, many questions can't be answered in an email, requires face to face examination of complex computer code with students, having them help discover errors, etc.

I enjoy the subtle spontaneous discussions that occur in the classroom and with small groups of students.

I cannot answer any of the above questions because I have not taught an online course

I would like to teach online, while continuing to teach in the classroom. Despite all the ink spilled for or against online coursework, I don't believe we've sufficiently explored the potential for online teaching and learning. We have plenty of opinions but not enough development. Online courses might develop into effective courses when faculty acquire greater individual and collaborative experience teaching them, and are offered appropriate incentive to do so.

There is already a lot of data on this (I encourage this committee to seek it out). Students have the most profound learning experiences with they are in a human relation with a teacher. Learning is not about the transference of material from one object to another object. Learning requires the presence of the whole body ("cura personalis" we might say). In the classroom, students not only learn *material,* they also learn how to be focused, they learn how to be respectful of other students in the classroom, they learn to

listen and engage with other students in the room (and not not to "scowl" "roll their eyes" or any other unpleasant & disrespectful body language), they learn how to pull away from technology and be PRESENT in the world, they learn how to think on their feet in the midst of a debate, and so forth. Also, many studies have recently shown how even relatively low-level technology like creating Power Point slides for a class LESSENS students' learning. When professors write on the chalkboard, and students have to *hand-write* out their own notes, the amount that students learn in class skyrockets. Again, I suggest that this committee look into that data.

I believe there is no substitute for the simultaneous one-on-group and one-on-one interactions that are present in the face-to-face environment. Such that I can get both a sense of gestalt if the whole class is generally keeping up and understanding, and if individual students are having difficulties with the material.

I have never seen an effective on-line course in my discipline.

Prefer face to face interactions