Online Learning: Research and Next Steps

10/2/19
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Shifting Demand in Enrollment

	15-16	16-17	17-18	18-19
Total	115,342	111,973	112,250	105,501
Online	40,532	39,691	44,753	47,170
F2F + Hybrid	74,792	72,282	67,507	56,836

From 15-16 to 18-19
- F2F + Hybrid Enrollment ⇩ 24%
- Online enrollment ⇧ 16%

Hybrid enrollment = ~10,000 each year

Research Question

Will students report differences in learning, engagement, and course quality across F2F and online classes?

Sample Characteristics

Sample, N = 448

The survey was distributed in the following types of courses

Accounting	Economics
Allied Health	Engineering
Anthropology	English
Astronomy	Geography
Athletics	History
Biology	Humanities
Business	Math
Chemistry	Music
Child Development	Philsophy
Communication	Psychology
Computer Science	Sociology
Dental Hygeine	

Sample, N = 448

43. What type of class was it in which the survey was distributed?

		Percent
Valid	Online	41.7
	In-person	46.7
	Hybrid	10.9

34. What gender do you primarily identify as?

		Percent
Valid	Male	37.1
	Female	61.6
	Non-binary	.9
	Additional:	.4

Foothill-De Anza Community College District
Foothill College
Fall 2018 - End of Term Credit Headcount

Gender	Count	Percent
Male	5,823	44.3%
Female	7,155	54.4%
Unrecorded	179	1.4%

35. What Race/Ethnicity do you primarily identify with?

		Percent
Valid	American Indian or Alaska Native	.7
	Asian	39.7
	Latinx	14.5
	Black or African American	3.8
	Native Hawaiian or Other Pacific Islander	.4
	White non Hispanic origin	25.2
	Middle Eastern	2.5
	Filipinx	1.8
	More than once race/ethnicity	8.0
	Additional:	2.9

Foothill-De Anza Community College District
Foothill College
Fall 2018 - End of Term Credit Headcount

Ethnicity	Count	Percent
African American	659	5.0%
Asian	4,048	30.8%
Filipino/a	715	5.4%
Latino/a	3,407	25.9%
Native American	60	0.5%
Pacific Islander	136	1.0%
White	3,913	29.7%
Unrecorded	219	1.7%

Sample, N = 448

Age = 22.97, SD = 6.10

GPA = 3.49, SD = 1.50

About how many fully online classes have you taken at Foothill?

		Percent
Valid	1-3	52.7
	4-6	26.1
	6-9	14.1
	10.00	6.7

About how many in-person classes have you taken at Foothill?

		Percent
Valid	1-3	17.4
	4-6	19.6
	6-9	20.1
	10.00	42.6

67 Different majors are represented in the sample

Accountng	Computer Science	Molecular Biology
Aerospace	Continuing Education	Music Technology
Aerospace Eng	Dental Hygiene	Nursing
Animal Science	Design	Nutrition & Kinesiology
Anthropology	Economics	Paramedic
Art	EMS: Paramedic	Philosophy
AST Business	Engineering	Photography
aviation	English	Physics
Biochemistry	Enterprise Networking	Political Science
Bioengineering	Environmental Science	Pre-Med
Biological Sciences	Film	Psychology
Biology	Food Science	Public Health
Biology (Nutrition)	General Studies	Radiologic Technology
Business	Global Logistics Management	Radiology
Business Administration	Graphic Design	Respiratory Therapy
Chemical engineering	Health Science	Sociology
Chemistry	History	Statistics
Child Development	Kinesiology	Theatre Arts
Cinematography	Linguistics	Ultrasound tech
Civil Engineering	Marine Biology	Undeclared
Cognitive Science	Mathematics	Veterinary Technician
Communications	Mechanical Engineering	
Comparative Literature	Microbiology	

LEARNING & ENGAGEMENT

I feel like I learn more in online classes than in-person classes at Foothill.

		Percent
Valid	Strongly Disagree	12.3
	Disagree	27.9
	Neutral	44.9
	Agree	7.6
	Strongly Agree	7.4

40.4% Disagree

44.9% Neutral

15% Agree

25.4% difference between Disagree & Agree

In general, I would say that I am more engaged in online classes than in-person classes.

		Percent
Valid	Strongly Disagree	13.8
	Disagree	34.8
	Neutral	30.6
	Agree	13.8
	Strongly Agree	6.9

48.6% Disagree

30.6% Neutral

20.7% Agree

27.9% difference between Disagree & Agree

POSITIVE EXPERIENCES

I have had high-quality learning experiences in online classes at Foothill

		Percent
Valid	Strongly Disagree	2.0
	Disagree	10.7
	Neutral	24.1
	Agree	43.3
	Strongly Agree	19.9

12.7% Disagree

24.1% Neutral

63.2% Agree

When online classes are done well, I think they can be great learning experiences.

		Percent
Valid	Strongly Disagree	.2
	Disagree	2.0
	Neutral	9.4
	Agree	40.8
	Strongly Agree	47.5

2.2% Disagree

9.4% Neutral

88.3% Agree

I think it is possible for online classes to offer equally good learning experiences to in-person classes.

		Percent
Valid	Strongly Disagree	3.6
	Disagree	11.8
	Neutral	11.8
	Agree	40.2
	Strongly Agree	32.6

15.4% Disagree

11.8% Neutral

72.8% Agree

INSTRUCTOR FEEDBACK

I have had online class(es) where I received very little feedback on my work from the instructor.

		Percent
Valid	Strongly Disagree	4.2
	Disagree	22.5
	Neutral	17.9
	Agree	38.2
	Strongly Agree	17.2

26.7% Disagree

17.9% Neutral

55.4% Agree

28.7% difference between Disagree & Agree

I have had online classes where I have received frequent feedback on my work from the instructor.

	Percent
Valid Strongly Disagree	1.1
Disagree	10.5
Neutral	14.5
Agree	45.5
Strongly Agree	28.3

11.6% Disagree

14.5% Neutral

73.8% Agree

62.2% difference between Disagree & Agree

Receiving personal feedback in online classes motivates me to do well in the course.

		Percent
Valid	Strongly Disagree	.7
	Disagree	2.7
	Neutral	10.7
	Agree	43.8
	Strongly Agree	42.2

3.4% Disagree

10.7% Neutral

86% Agree

If I do not receive feedback from instructors in online classes, I tend to lose motivation in the class.

		Percent
Valid	Strongly Disagree	4.7
	Disagree	18.5
	Neutral	25.7
	Agree	34.6
	Strongly Agree	16.5

23.2% Disagree

25.7% Neutral

51.1% Agree

About how much personal contact (in the form of personal messages or individual feedback on work) would you like from instructors in online classes?

		Percent
Valid	Twice per week or more	29.9
	Once per week	54.2
	Once every two weeks	12.9
	Less than once every two weeks	2.0
	Less than once per month	.9

On average, about how much contact (in the form of personal messages or written feedback on work) have you received from instructors in your online classes?

		Percent
Valid	Twice per week or more	17.4
	Once per week	48.9
	Once every two weeks	22.3
	Less than once per month	11.4

ANSWER KEYS

When taking multiple choice quizzes and exams online, I've been able to find many answer keys to the questions on websites.

		Percent
Valid	Strongly Disagree	13.4
	Disagree	32.4
	Neutral	29.5
	Agree	19.2
	Strongly Agree	5.6

45.8% Disagree

29.5% Neutral

24.8% Agree

CONTENT ENGAGEMENT

Generally, in an online class if something is not required to complete I won't complete, read, or watch it.

		Percent
Valid	Strongly Disagree	4.7
	Disagree	24.6
	Neutral	23.7
	Agree	35.9
	Strongly Agree	11.2

29.3% Disagree

23.7% Neutral

46.1% Agree

OVERALL QUALITY

__ Of the online classes I've taken at Foothill have been high-quality learning experiences.

	Percent
Valid All	15.8
Most	45.5
Some	26.6
Very few	7.8
None	4.2

61.3% All/Most

26.6% Some

12% Few/None

__of the in-person classes I've taken at Foothill have been high-quality learning experiences.

		Percent
Valid	All	24.8
	Most	56.0
	Some	15.6
	Very few	2.7
	None	.9

80.8% All/Most

15.6% Some

3.6% Few/None

From my personal experience, I think that online classes at Foothill are:

		Percent
Valid	Much higher quality than in-person classes	3.8
	Higher quality than in-person classes	8.9
	Equal quality to in-person classes	42.4
	Lower quality than in-person classes	36.4
	Much lower quality than in-person classes	8.5

12.7% Higher

42.4% Neutral

44.9% Lower

What do you think could have improved your online classes at Foothill? Check all that apply.

47%	**Better course organization**
55%	**Clearer instructions on assignments**
58%	**More engaging video lecture content, where instructors generate their own video lectures**
30%	More use of supplementary film and video (not instructor-generated video lectures)
45%	**More engaging teacher-generated content in general**
30%	Better assignments
9%	Fewer multiple-choice questions
19%	More multiple-choice questions
50%	**More feedback from instructors**

For what reasons do you take online classes? Check all that apply to you.

88%	They are convenient for my schedule
22%	They are generally easier and less work than in-person classes
40%	Classes I need are only offered online
10%	They provide better learning experiences than in-person classes
17%	I prefer to learn from an online class over an in-person class.
22%	I feel more comfortable learning in an online class than an in-person class.
42%	Without online classes, it would be a challenge to be able to be a student due to obligations outside of school.

QUALITATIVE DATA

Feedback about High-Quality Learning Experiences

If you've had a high-quality learning experience in an online class at Foothill, what was it about the class that made it high-quality? (N = 322)

- Feedback/instructor engagement

- Engaging instructor-generated content

- Course organization

- Meaningful assignments

- Video lectures

- Clear instructions

- Practice problems

- Clear schedule

- Positive student interactions

If you've had a high-quality learning experience in an online class at Foothill, what was it about the class that made it high-quality? (N = 322)

"The best online classes I took were ones where subjects and modules were accompanied by explanations from teachers, with their own way to explain the subject. Textbooks and video contents are okay and helpful, however when I excel in the class, it tends to be because the teacher is active and engaging even in an online class. Additionally, modules created by the teacher…the teacher is still clearly explaining it to you, almost as if talking! Another great bonus is when assignments are clearly highlighted and organized so I am able to plan ahead!"

"I have enjoyed the online classes that have assignments that are not just multiple choice questions from the textbooks. I have had assignments where I had to go to a museum, and other outside activities. I also enjoy the class discussions. I like the classes that the instructor offers a lecture. The professors should have some personal touch in the material they are teaching."

If you've had a high-quality learning experience in an online class at Foothill, what was it about the class that made it high-quality? (N = 322)

"The teacher had a lot of interactions with their students and they had their own generated lectures."

"Engaging assignments that made me think and solve problems rather than just look up answers."

"Clear deadline and proper homework for each week."

"One professor conducted weekly live online lecture videos. These allowed students to gain a clearer understanding of the content by hearing it from the professor rather than reading it. We were able to ask questions through the live chat and get clarification on any assignments."

Feedback about Low-Quality Learning Experiences

If you've had low-quality learning experiences in online classes, what is it about the class(es) that lead to that experience? (N = 294)

- Lack of instructor feedback and presence

- Little instructor generated content

- Textbook only/text heavy classes

- Busy Work

- Poor quality assignments or too many assignments

- Answer keys are found online

- Copy and pasted feedback

- Lack of consistent schedule

- Unclear instructions on assignments

- Poor organization

If you've had low-quality learning experiences in online classes, what is it about the class(es) that lead to that experience? (N = 294)

"A lack of consistency about how assignments and expectations are communicated. I.E. I feel there is a lack of standardization that makes it difficult as a student to keep track of information."

"Lectures" are pretty much copy and pasted from textbook. There isn't much interaction between students and with the teacher."

"All the answers are online."

"It just involves reading the textbook and learning from that, there is no lecture of some sort. Lectures help because I can find out what the most important information is."

If you've had low-quality learning experiences in online classes, what is it about the class(es) that lead to that experience? (N = 294)

"I took the same online class as a friend, and realizing that we were receiving the exact same copy-pasted feedback accompanying full scored essays was a bit disappointing because we were not sure if the instructor even read our essays or what exactly we did well."

"My friend and I took the same online professor and my friend and I had the exact same feedback in EVERY SINGLE assignment (word for word). The professor took a month before grading the assignments. The instructions were not clear."

If you've had low-quality learning experiences in online classes, what is it about the class(es) that lead to that experience? (N = 294)

"In one online class the teacher was pretty much silent for the entire quarter, gave almost no feedback and did not grade any of the assignments until maybe 3 weeks before the end of the quarter. In another online class the teacher was extremely disorganized (there were three different assignment schedules and he never reconciled them, despite my pointing out the discrepancies twice, which resulted in my not completing certain assignments at the correct time) and gave extremely poor instructions on assignments."

"In some of my online classes, I have had instructors give really easy, laidback feedback on my work. While I enjoy the praise, at the same time I feel like I am not growing as a student because I am not receiving constructive criticism. I would prefer constructive criticism over praise."

"Lots of multiple-choice questions that were searchable online and little actual feedback on anything, I don't remember anything from the course."

If you've had low-quality learning experiences in online classes, what is it about the class(es) that lead to that experience? (N = 294)

"Little to no feedback from instructors."

"The instructor did not give any quality feedback. The instructor did not clearly explain assignments."

"The instructor had no presence in the class and just took material off the internet."

"The instructor not being present"

"The instructor was difficult to get a hold of and was a very hard grader without providing detailed explanations on what he wanted."

"The instructor was not fully engaged."

ONLINE/IN-PERSON DEMAND

About how many fully online classes have you taken at Foothill?

		Percent
Valid	1-3	52.7
	4-6	26.1
	6-9	14.1
	10.00	6.7

About how many in-person classes have you taken at Foothill?

		Percent
Valid	1-3	17.4
	4-6	19.6
	6-9	20.1
	10.00	42.6

Fall Quarter 2019
34% Online Only
47% In-Person Only
19% Both Online & In-Person

Having you completed both a fully online and fully in-person class at Foothill? (Total N = 724)	
No (261)	36%
Yes (464)	64%

% Online	% In-Person	% Students of students selecting ratio
0	100	7.5%
10	90	12%
20	80	13.3%
25	75	8.2%
30	70	10.9%
40	60	8%
50	50	19.3%
60	40	3.3%
70	30	3.1%
75	25	3.3%
80	20	4.4%
90	10	2.7%
100	0	4%

Ideally, I would like to take _____ % of my college classes online and _____ % of my college classes in-person.

60% of students want less than 50% of their classes to be online

19% of students want 50/50

21% of students want more than 50% of their classes to be online

Equity

Equity Issue
Success Rates: Online Classes (2018-2019)

	Success	Non-Success	Withdrawal
African American	57%	25%	18%
Asian	84%	8%	8%
Filipinx	73%	13%	13%
Latinx	66%	17%	17%
Native American	70%	11%	19%
Pacific Islander	60%	20%	2%
White	80%	10%	10%
Low Income	65%	17%	17%
Not Low income	78%	10%	11%
TOTAL	**78%**	**11%**	**11%**

Equity Issue
Success Rates: F2F Classes (2018-2019)

	Success	**Non-Success**	**Withdrawal**
African American	78%	13%	9%
Asian	85%	9%	6%
Filipinx	83%	10%	6%
Latinx	78%	13%	9%
Native American	82%	5%	12%
Pacific Islander	76%	14%	9%
White	87%	7%	6%
Low Income	79%	11%	10%
Not Low income	85%	9%	6%
TOTAL	**84%**	**9%**	**7%**

Conclusions

Conclusions

1. A substantial percentage of students report there is a disparity in quality between online classes and face-to-face classes they've taken at Foothill.

2. The achievement gap is exacerbated in online classes.

3. Student report that when online classes are done well, they are great learning experiences.

Working Toward A Solution: Increasing Online Course Quality

1. This is an institutional problem that demands institutional, systemic solutions

2. Willingness among individual faculty to further develop their online courses

Working Toward A Solution: <u>Possible</u> Prongs (nothing has been decided). Any decisions about policies will be made through shared governance processes. Ideas welcome from all.

1. Develop a homegrown, sustainable peer online course-review process.

2. Revise Canvas Orientation Training to include training in online pedagogy and equity.

3. Require training in online pedagogy for faculty who conduct J1 for online courses.

4. Further revise the J1 for online classes to ensure that it more comprehensively addresses criteria relevant to online instruction

5. Provide a suite of professional development to faculty

6. How can we address lack of instructor feedback?

Ways to be involved:

1. Submit a course(s) for peer-review

2. Become a peer-reviewer
   - Complete 4-week online OEI Peer Online Course Review Course (POCR Course)
   - Lead Peer-reviewers compensated $300 per course reviewed

3. Join COOL and contribute to the conversation. We are looking for representation from each division.