

One Size Does Not Fit All: A Case Study on How to Teach and Lessons during COVID-19

Presenter: Jun Park

(Collaborative work with Dr. Johnny Chaung at Northwest Missouri State University)

2022 Teaching & Assessment Symposium

Tuesday, March 22, 2022, University Center, UNC



Short-Introduction of the Presenter



- Jun Park, Ph.D.
- Assistant Professor of Economics, University of Northern Colorado (UNC) since August 2018
- Teaching Philosophies:
 - Students learn efficiently when (1) they *feel comfortable* with their teachers, so they participate more freely in class, (2) the subject is *interesting* to them, thus, they are actively engaged in class activities, and (3) the teacher *encourages* them to learn, even if the topics seem intimidating.



Objectives of the Presentation

- Present a variety of teaching modalities and approaches given the ongoing COVID-19 pandemic
- Reveal the results of the student survey questionnaires (collected from 9 sections of Economics courses) regarding how they feel about their learning experience during the pandemic
- Provide different types of instructional strategies to provide students effective learning experience inside and outside of the classroom utilizing flipped learning and other teaching/learning software
- Share students' experiences and feedback for future improvements



Timeline on Transition to Online (March 2020)

- **The University Decided Classes to Move Online After Spring Break (March 2020):**

- ***A Message from the President on Wednesday, March 11, 2020:***

“Following our scheduled Spring Break (March 15 to March 22), students on campus will be taught remotely (not in person) for two weeks (March 23 to April 5). The University is planning to resume face-to-face teaching on Monday, April 6. However, it could change with the evolving situation.”

- ***An update from the President on Monday, March 16, 2020:***

“All University Classes will be Delivered Via Alternate Delivery for the Remainder of the Spring Semester (May 2020).”

- ***Responses (feelings and experiences) from Students due to “the Unexpected Transition to Online”:***

→ panicking, concerned, confusions, misunderstanding, decision-making with uncertainty, modifications, changed or altered, busy, unfamiliar, not accustomed, time differences, busy, unfamiliar, not accustomed, emergency, technical difficulties, online due dates, academic misconduct, internet issues, watching lectures on cellphones, unauthorized, health issues, car issues, and so on.



9 Econ Courses Taught in the previous 3 Semesters

- Spring 2020 (transition from in-person to online)

ECON 150: Principles of Macroeconomics

→ [53 students]: (17 Female and 36 Male) & (18 Freshmen, 25 Sophomore, 8 Junior, and 2 Senior students)

ECON 353: Microeconomic Theory

→ [29 students]: (12 Female and 17 Male) & (1 Freshman, 23 Sophomore, 3 Junior and 2 Senior students)

ECON 458: Forecasting Business Conditions

→ [22 students]: (6 Female and 16 Male) & (4 Junior and 18 Senior students)

- Fall 2020 (fully online)

ECON 352: Money, Credit, and Banking

→ [36 students]: (9 Female and 27 Male) & (1 Freshman, 25 Sophomore, 7 Junior, and 3 Senior students)

ECON 353: Microeconomic Theory

→ [31 students]: (9 Female and 22 Male) & (2 Freshmen, 23 Sophomore, 4 Junior, and 2 Senior students)

ECON 458: Forecasting Business Conditions

→ [18 students]: (7 Female and 11 Male) & (3 Junior and 15 Senior students)

- Spring 2021 (Flipped Learning and Hyflex)

ECON 353: Microeconomic Theory

→ [23 students]: (5 Female and 18 Male) & (5 Sophomore, 13 Junior, and 5 Senior students)

ECON 450: International Economics

→ [36 students]: (11 Female and 25 Male) & (5 Sophomore, 13 Junior, and 18 Senior students)

ECON 458: Forecasting Business Conditions

→ [25 students]: (8 Female and 17 Male) & (2 Junior and 23 Senior students)



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Challenges During the Pandemic:

- Lack of students' participation
- Lack of Communication
- Appropriate delivery methods of lecturing
- Difficulty level of tests/quizzes
- Extra time on tests/quizzes
- Test proctoring
- Online privacy, protection of personal info
- Changes to grading structure (e.g., pass/fail)

- How can I **encourage students to regularly participate** in online classes?
- How much more difficult is it to **develop relationships with students?**
- What are **the most engaging activities** that happen in this course with the online format?
- How concerned am I (as an instructor) about **students' academic growth?**
- What is working well with **the current Scholarly Teaching model that I would like to see continued?**
- How concerned am I (as an instructor) about **students' social-emotional well-being** right now?



Survey Questionnaires Regarding Students' Learning Experience during the Pandemic

- To understand and serve better students, the instructor decided to conduct an *anonymous* student survey using Canvas (with an incentive of 1% extra credit on the total grade) before they received their final grade(s):

- **Do you like to be learning during COVID-19?** (1: *Extremely Disagree*, 3: *Neither Agree nor Disagree*, 5: *Extremely Agree*)
- **Have you been satisfied with the instructor's response to the coronavirus crisis?** (1: *Extremely Dissatisfied*, 3: *Neither Satisfied nor Dissatisfied*, 5: *Extremely Satisfied*)
- **Do you have the necessary support/resources you need from the University during the coronavirus crisis?** (1: *Extremely Disagree*, 3: *Neither Agree nor Disagree*, 5: *Extremely Agree*)
- **How difficult or easy is it to use technology for distance learning?** (1: *Extremely Difficult*, 3: *Neither Difficult nor Easy*, 5: *Extremely Easy*)
- **What is the most challenging aspect of online learning?** [*Written comments*]
- **What could be done to improve your virtual learning experience?** [*Written comments*]
- **What did you miss most about attending class in-person?** [*Written comments*]



Survey Results Regarding Students' Learning Experience during the Pandemic

- Spring 2020 (transition from in-person to online)

ECON 353: Microeconomic Theory (29 students: 12 female and 17 male students) & (1 Freshman, 23 Sophomore, 3 Junior, and 2 Senior students):

Response Rate: 22/29 = 75.8 percent

Questionnaires	Mean	Standard Dev.	Min	Max
Do you like to be learning during COVID-19? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	2.78	1.02	1	5
Have you been satisfied with the instructor's response to the coronavirus crisis? (1: Extremely Dissatisfied, 3: Neither Satisfied nor Dissatisfied, 5: Extremely Satisfied)	3.94	.84	1	5
Do you have the necessary support/resources you need from the University during the coronavirus crisis? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	3.10	.92	1	5
How difficult or easy is it to use technology for distance learning? (1: Extremely Difficult, 3: Neither Difficult nor Easy, 5: Extremely Easy)	3.37	1.14	1	5

- **What is the most challenging aspect of online learning?** [Written comments]

→ Technical difficulties, Confusions, Teaching myself, I am not a fan of online learning

- **What could be done to improve your virtual learning experience?** [Written comments]

→ Complete the homework on time, feedback from teachers

- **What did you miss most about attending class in-person?** [Written comments]

→ Asking questions to understand the concepts, some of my classes are unstructured and figuring things out as they go is pretty stressful



Survey Results Regarding Students' Learning Experience during the Pandemic

- Spring 2020 (transition from in-person to online)

ECON 458: Forecasting Business Conditions (22 students: 6 female and 16 male students) & (4 Junior and 18 Senior students):

Response Rate: 12/22 = 54.55 percent

Questionnaires	Mean	Standard Dev.	Min	Max
Do you like to be learning during COVID-19? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	3.02	.97	1	5
Have you been satisfied with the instructor's response to the coronavirus crisis? (1: Extremely Dissatisfied, 3: Neither Satisfied nor Dissatisfied, 5: Extremely Satisfied)	3.73	.89	1	5
Do you have the necessary support/resources you need from the University during the coronavirus crisis? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	2.82	1.19	1	5
How difficult or easy is it to use technology for distance learning? (1: Extremely Difficult, 3: Neither Difficult nor Easy, 5: Extremely Easy)	2.99	1.37	1	5

- **What is the most challenging aspect of online learning?** [Written comments]

→ Communication with my research partner, vague instruction, time management

- **What could be done to improve your virtual learning experience?** [Written comments]

→ Make the lecture videos less dry, Deadlines on assignment/quiz to be consistent, more examples, technology, get help from the instructor

- **What did you miss most about attending class in-person?** [Written comments]

→ Interaction with classmates, open discussions



Survey Results Regarding Students' Learning Experience during the Pandemic

- Fall 2020 (fully-online): pre-recorded lecture videos using Panopto and lecture notes provided

ECON 353: Microeconomic Theory (31 students: 9 female and 22 male students) & (2 Freshmen, 23 Sophomore, 4 Junior, and 2 Senior students):

Response Rate: 25/31 = 80.6 percent

Questionnaires	Mean	Standard Dev.	Min	Max
Do you like to be learning during COVID-19? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	3.64	.58	1	5
Have you been satisfied with the instructor's response to the coronavirus crisis? (1: Extremely Dissatisfied, 3: Neither Satisfied nor Dissatisfied, 5: Extremely Satisfied)	4.23	.62	3	5
Do you have the necessary support/resources you need from the University during the coronavirus crisis? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	4.04	.92	3	5
How difficult or easy is it to use technology for distance learning? (1: Extremely Difficult, 3: Neither Difficult nor Easy, 5: Extremely Easy)	2.97	.71	2	5

- **What is the most challenging aspect of online learning?** [Written comments]

→ Technology: I am only able to use my cellphone to access content, My access to reliable internet, Learning Experience and Social Interactions, Family

- **What could be done to improve your virtual learning experience?** [Written comments]

→ Prefer hands-on learning experience, Develop discussion board on Canvas, Hard to focus on study due to quarantine, Lack of desire to learn

- **What did you miss most about attending class in-person?** [Written comments]

→ Face-to-face learning, Opportunities to ask questions, Zoom lessons were not happening live



Survey Results Regarding Students' Learning Experience during the Pandemic

- Fall 2020 (fully-online): pre-recorded lecture videos using Panopto and lecture notes provided

ECON 458: Forecasting Business Conditions (18 students: 7 female and 11 male students) & (3 Junior and 15 Senior students):

Response Rate: 17/18 = 94.12 percent

Questionnaires	Mean	Standard Dev.	Min	Max
Do you like to be learning during COVID-19? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	3.42	1.01	1	5
Have you been satisfied with the instructor's response to the coronavirus crisis? (1: Extremely Dissatisfied, 3: Neither Satisfied nor Dissatisfied, 5: Extremely Satisfied)	4.11	1.06	1	5
Do you have the necessary support/resources you need from the University during the coronavirus crisis? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	3.74	.84	2	5
How difficult or easy is it to use technology for distance learning? (1: Extremely Difficult, 3: Neither Difficult nor Easy, 5: Extremely Easy)	3.13	1.09	1	5

- **What is the most challenging aspect of online learning?** [Written comments]
→ Level of difficulty, Unhappy with having to move online, Conflict with work schedule
- **What could be done to improve your virtual learning experience?** [Written comments]
→ This class should have been delivered in-person, Heavy coursework, Paying attention to remote activities
- **What did you miss most about attending class in-person?** [Written comments]
→ One-on-one step by the instructor, No instant interactions between students and the teacher



Survey Results Regarding Students' Learning Experience during the Pandemic

- Spring 2021 (Flipped Learning + Hyflex): Students were expected to watch the pre-recorded videos before attending class + online participation including Q&As and discussions

ECON 353: Microeconomic Theory (23 students: 5 female and 18 male) & (5 Sophomore, 12 Junior, and 5 Senior students): Response Rate: 21/23 = 91.3 percent

Questionnaires	Mean	Standard Dev.	Min	Max
Do you like to be learning during COVID-19? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	4.32	.51	2	5
Have you been satisfied with the instructor's response to the coronavirus crisis? (1: Extremely Dissatisfied, 3: Neither Satisfied nor Dissatisfied, 5: Extremely Satisfied)	4.67	.48	3	5
Do you have the necessary support/resources you need from the University during the coronavirus crisis? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	4.48	.75	3	5
How difficult or easy is it to use technology for distance learning? (1: Extremely Difficult, 3: Neither Difficult nor Easy, 5: Extremely Easy)	4.33	.80	2	5

- **What is the most challenging aspect of online learning?** [Written comments]
 - Complete lecture videos and assignments before the due dates, limited attempts on lecture quizzes
- **What could be done to improve your virtual learning experience?** [Written comments]
 - Reviews on assignments and quizzes, More hands-on activities, the videos disappeared after the time
- **What did you miss most about attending class in-person?** [Written comments]
 - More discussions instead of lecturing, variety of topics and more interesting examples



Survey Results Regarding Students' Learning Experience during the Pandemic

- Spring 2021 (Flipped Learning + Hyflex): Students were expected to watch the pre-recorded videos before attending class + online participation including Q&As and discussions

ECON 458: Forecasting Business Conditions (25 students, 8 female and 17 male students) & (2 Junior and 23 Senior students): Response Rate: 23/25 = 92 percent

Questionnaires	Mean	Standard Dev.	Min	Max
Do you like to be learning during COVID-19? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	4.51	.88	2	5
Have you been satisfied with the instructor's response to the coronavirus crisis? (1: Extremely Dissatisfied, 3: Neither Satisfied nor Dissatisfied, 5: Extremely Satisfied)	4.74	.45	3	5
Do you have the necessary support/resources you need from the University during the coronavirus crisis? (1: Extremely Disagree, 3: Neither Agree nor Disagree, 5: Extremely Agree)	4.74	.54	3	5
How difficult or easy is it to use technology for distance learning? (1: Extremely Difficult, 3: Neither Difficult nor Easy, 5: Extremely Easy)	3.37	.89	3	5

- **What is the most challenging aspect of online learning?** [Written comments]

→ Taking the final exam online, Connection with classmates,

- **What could be done to improve your virtual learning experience?** [Written comments]

→ Synchronous Zoom video call, Microphone volume, technical difficulties,

- **What did you miss most about attending class in-person?** [Written comments]

→ Spending time on assignments to get help



Lessons learned from the survey results

- Spring 2020 (transition from in-person to online)

- Most students experienced a hard time to get adjusted in an online format
- Due to the unexpected transition to online, students shared their concerns, confusion, unfamiliarity, struggles, stress, misunderstanding, and/or technology issues
- They really missed the interaction in class between peers

- Fall 2020 (fully-online)

- They expressed their desire for in-person class, live sessions such as zoom meetings, more office hours, and active online discussion
- Students showed lack of participation
 - Little or no effort on learning
 - Fatigue from the prolonged pandemic
 - Family & health issues

- Spring 2021 (Flipped Learning + Hyflex)

- Survey results provided evidence that students were more satisfied with the (optional) diverse course delivery modes
- Most comments were based off the course content and assessment, not the course delivery modes
- Students appreciated flexibility, availability, friendly reminders, clear organization & communication, and a safe learning environment provided by the CDC's guidance for schools



Future Improvements

- More in-depth survey questionnaires
- Incentives to attending in-person class vs. Student preference/motivation
- Facilitating effective discussions vs. Implementing scheduled content deliveries (with flexibility)
- Suggested safety guidelines vs. Safety guidelines in practice



A few more things...

- **Interim Evaluation**
- **Panopto and other teaching software/tools**
- **Overhead projector(s)**

“Relationship is the value and importance of human connection” by Rita Pierson.

- Should you be interested, please check out her TED Talk on “Every kid needs a champion.”

I look forward to hearing your feedback on my presentation!

Thank you 😊



DO NOT PUT YOUR NAME.

Circle on your response (1: strongly disagree 3: Neutral 5: strongly agree)
 Leave it blank if not applicable.

Lecture notes are useful	1	2	3	4	5
Lecture notes are difficult to understand	1	2	3	4	5
Textbook is useful	1	2	3	4	5
Textbook is difficult to understand	1	2	3	4	5
In-class handouts are useful to understand concepts	1	2	3	4	5
Assignments (or quizzes) are difficult	1	2	3	4	<u>5</u>
Class time is used appropriately	1	2	3	4	5
Appropriate teaching methods are utilized in class	1	2	3	4	<u>5</u>
Students' experiences or examples are used well	1	2	3	4	5
Ideas and concepts are communicated fairly	1	2	3	4	5
Free exchange of ideas is encouraged	1	2	3	4	5
Feedback is provided timely	1	2	3	4	5
Topics are stimulating and thought provoking	1	2	3	4	5
Topics are useful in my professional development	1	2	3	4	5

Continued.

1

DO NOT PUT YOUR NAME.

Circle on your response (1: strongly disagree 3: Neutral 5: strongly agree)
 Leave it blank if not applicable.

Instructor is available outside of class if needed	1	2	3	4	5
Instructor is sensitive to student needs and backgrounds	1	2	3	4	5
Instructor is passionate about teaching	1	2	3	4	5
You feel encouraged to participate in class	1	2	3	4	5
You are usually well-prepared for class	1	2	3	4	<u>5</u>
You review class materials	1	2	3	4	5
Had enough time to complete the exam	1	2	3	4	<u>5</u>
Midterm exam was difficult	1	2	3	4	<u>5</u>

1. What are the instructor's strengths?

2. What suggestions do you have to improve the instructor's teaching?

3. How could you have done differently to perform better in class and on HW/QUIZ?

I appreciate your feedback.

2

