

# Synchronous Instruction: Meeting In Real Time

Rachell Booth, PhD  
Professor of Biochemistry



## What platform will be used for synchronous instruction?

- Zoom
- GoToMeeting (Free)
- Blackboard Collaborate
- Skype
- Google Hangouts
- Adobe Connect
- Ring Central Video (Free)
- Live YouTube (privacy concerns)

## Poll

Which of the following have you used in a course using synchronous format?

- a) Lectures Only
- b) Group Work Only
- c) Practice Problems/Review Session Only
- d) Office Hours Only
- e) Lectures and Office Hours
- f) Lectures, Office Hours, and Group Work
- g) None of the above

*“The thing is, there is nothing inherently wrong with asynchronous learning, nor with synchronous learning. Each is suited to solve different instructional problems, under specific conditions, depending on the goal of the learning, the characteristics of the learners, and the course format.”*

- Zach Groshell

## Why choose to use synchronous instruction in your course?

- raises **student satisfaction**
- provides for the **'social' side** of education
- provides **immediate feedback**
- encourages the **exchange of multiple perspectives**
- enhances **dynamic interactions**

Students believed that they **learned more, earned higher grades**, and had **increased opportunities** to connect with faculty and other students.

- Cao, Q., Griffin, T. E., & Bai, X. (2009). The importance of synchronous interaction for student satisfaction with course web sites. *Journal of Information Systems Education*, 20(3), 331-338
- Motteram, G. (2001). The role of synchronous communication in fully distance education. *Australian Journal of Educational Technology*, 17(2), 131-149. Retrieved from <http://www.ascilite.org.au/ajet/ajet17/motteram.html>
- Park, Y. J., & Bonk, C. J. (2007). Is online life a breeze? A case study for promoting synchronous learning in a blended graduate course. *MERLOT Journal of Online Learning and Teaching*, 3(3), 307-323.
- Lietzau, J. A., & Mann, B. J. (2009). Breaking out of the asynchronous box: Using web conferencing in distance learning. *Journal of Library & Information Services in Distance Learning*, 3(3-4), 108-119. doi:10.1080/15332900903375291

## When is synchronous instruction not ideal?

- Unavailable or unstable technology
- Environment is not suitable
- Timing is not flexible

# Synchronous Course Design

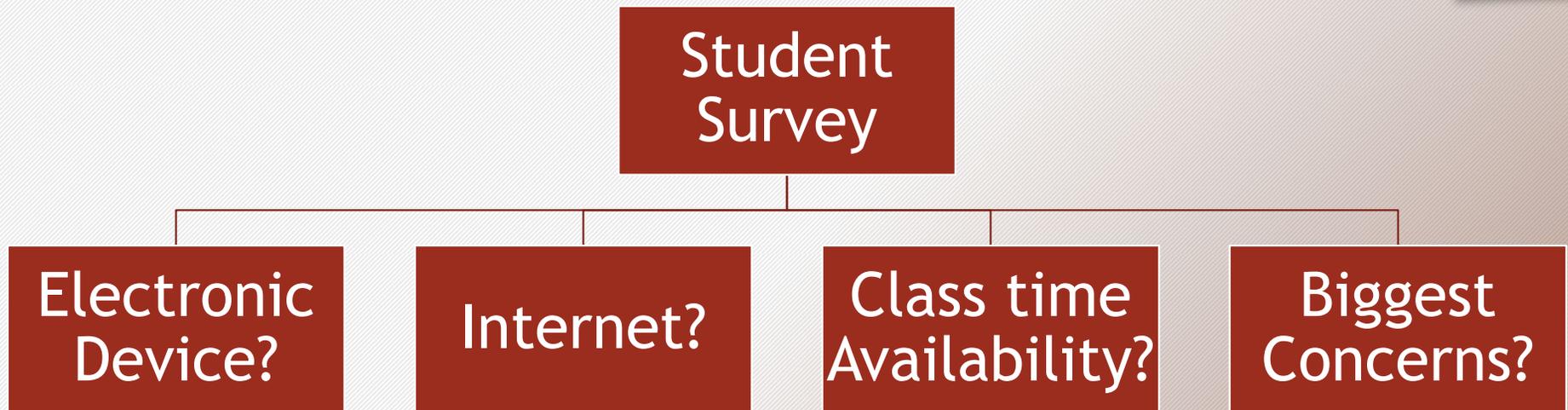
Step 1 - Understand your students' limitations.

Step 2 - Know your limitations.

Step 3 - Outline the design of your face to face course and assign each item in the outline as synchronous or asynchronous.

Step 4 - Plan the synchronous delivery to engage students.

## STEP 1: Understand your Students



# Polls

What types of electronic devices do all your students typically have?

- a) Cell Phone
- b) Computer with no camera
- c) Computer with camera
- d) iPad
- e) Cell Phone and Computer
- f) Cell Phone and iPad
- g) None of the above

## Polls

Typically, what percentage of your students have internet at home?

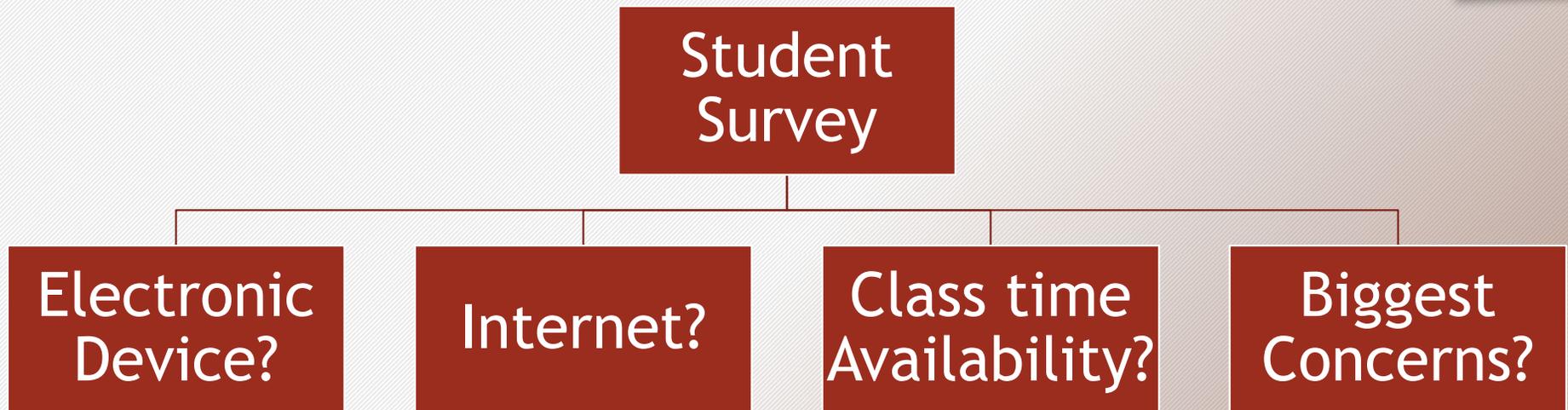
- a) 100%
- b) 90-99%
- c) 70-89%
- d) 51-69%
- e) <50%

## Polls

Typically, what percentage of your students can attend course sessions during the regularly scheduled class time?

- a) 100%
- b) 90-99%
- c) 70-89%
- d) 51-69%
- e) <50%

## STEP 1: Understand your Students



# Student concerns before remote instruction began...

*Asking questions may be difficult.*

*Timely communication between the professor and student.*

*My biggest concern is how we are going to be able to have a one on one setting if we need help on certain content/questions.*

*Not being able to interact fully like with in-class lecture. Also, I greatly benefit from asking questions after class and during office hours.*

*Not being able to get face to face help and learning a difficult course online while not being in a educational environment.*

*That it will be more complicated to understand and clear doubts and it require more effort from our part to spent with the class content.*

*My biggest concern moving forward is the one on one interaction specifically when it comes to office hours and having the ability to ask questions over concepts, homework, and etc.*

## Step 2: Know your limitations and what is reasonable!

Scheduling class  
time

Accommodating  
office hours

How much time do  
you have to develop  
online materials?

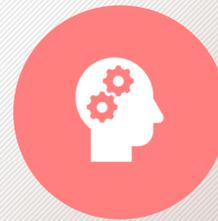
# What can synchronous instruction be used for?



LECTURES



GROUP WORK



PRACTICE/REVIEW  
SESSION



OFFICE HOURS

## Step 3: Outline Face-to-Face Course

Monday	Pre-Lecture Video Quiz	Asynchronous
	5 min of answer questions from homework/pre-lecture video quiz	Synchronous
	30 min of lecture and demonstrations introducing new concepts	Synchronous
	30 min of practice activity in groups	Synchronous
	10 min of activity review	Synchronous
Tuesday	On-line homework DUE	Asynchronous
	Office Hours	Synchronous
Wednesday	15 min quiz	Asynchronous
	10 min quiz review and answer questions from homework	Synchronous
	30 min of lecture and demonstrations introducing	Synchronous
	15 min of practice activity in groups	Synchronous
	5 min of activity review	Synchronous
Thursday	Office Hours	Synchronous

# Synchronous Features

-  Audio
-  Video
-  Text chat
-  Interactive whiteboard
-  Application sharing
-  Instant polling
-  Emoticons
-  Breakout rooms
-  Recording Session

## More effective synchronous instruction uses...

1. Content review before the class session
2. Introduction to the session plan
3. Limiting access to class session
4. Good network connection
5. Recording sessions
6. PowerPoint slides to guide
7. Interactions between students and instructor
8. Establishing class rules

## Step 4: Plan to engage students during synchronous instruction

- Annotate slides
- Chalk talks
- Flash cards for quick informal assessments
- Embed polls
- Wait for audio responses
- Students asking and answering questions in chat
- Break-out Groups with well defined tasks
- Student screen share/presentation

## Student “best part” comments after synchronous instruction...

*Recorded video lectures*

*Encouragement of discussion during lecture is honestly really helpful during online learning*

*I wasn't falling asleep or losing my focus during the class*

*I still feel like I learned the material just as well as I would have if we had been having class normally*

*Staying at the same pace as our course schedule helped because I always had a reference to know what to prepare for the next class*

*Having zoom on a normal schedule and exercise to help with the learning*

## TIPS and Take-Homes from my experience...

- Students have a difficult time staying organized with out class time reminders from instructors or peers...weekly reminders were VERY helpful.
- Consider student's workload.
- Record synchronous sessions is necessary and in chunks is better (stop recording and restart saves into different files in zoom).
- Scheduled class-time made assessment easier. Time-limits were easier to impose.
- Students need to be forced to engage in some aspect of course or they will often opt out.

**Chat Comments/Questions...**