

Teaching Statistics Online: Synchronous, Asynchronous, and Hybrid Modes



ARKADY SHEMYAKIN

UNIVERSITY OF ST. THOMAS

Outline

Statistics Program at UST

New Reality of 2020

Hybrid Course Modalities

In-person Component

Synchronous Online

Asynchronous Online Component

Back to Normal or New Normal?

Statistics Program at UST

Teaching basic classes (1xx, 2xx): lectures and labs.

Teaching advanced classes (3xx, 4xx): small classes, 10-30 students, 2-3 meetings per week.

Software and data orientation: computer labs, projection, own laptops.

Accent on classroom presentations and written reports.

Multiple small group (3-5 students) assignments.

Course projects: communication in statistical research.

New Reality of 2020

Traditional in-person student/instructor and student/student communication are complicated by new requirements of social distancing.

Synchronous online component (e.g., *Zoom* or *MSTeams*) becomes prevalent.

Asynchronous online component (posted files, videos in *Panopto*, audios and hyperlinks in *Canvas* serves to supplement the other two modes). Not that it is new...

Directing Flows



Instructional Methods		
In Person	Mixed Mode	Online
<p>In Person (INP) Classes meet 100% in person in the classroom.</p> <p>All students are taught at the same time and complete other coursework outside of class meetings.</p> <p>In-person classes are contingent on having adequate classroom capacity. These courses will have a Canvas presence that allows for online delivery as needed.</p>	<p>Blended (BLEN) (aka Hybrid courses) This model accommodates both in-person and online learning based on a predetermined schedule that indicates when students are required to be in the classroom and when they are not. When not in the classroom, students engage in synchronous learning during the scheduled class time or asynchronous learning.</p> <p>If more than 75% of your instruction is online, you should select the WWW online option (see Online method options).</p>	<p>Online: Asynchronous (WWA) 100% of instruction is delivered online. Course has no required scheduled meeting times, and students control when they complete their course requirements. Instructor can require deadlines for activities and/or assignments throughout the term as well as offer optional online synchronous opportunities where appropriate.</p>
	<p>CoFlex: In-Person & Online Sync (CFXW) Students choose between two participation models each class period with classroom participation limited by classroom size capacity. In CFXW, in addition to the in-person option, the instructor offers simulcast web conferencing participation. Synchronous sessions are scheduled at the same time as the in-person option.</p>	<p>Online: Some Synchronous (WWW) 75% to 100% of instruction is delivered online. Course has some synchronous class participation (daily/weekly/bi-weekly) at scheduled times throughout the course with the option for additional asynchronous work. All students are taught at the same time and complete other coursework outside of class meetings.</p>
<p>Additional information on Banner codes can be found on the Registrar website: https://one.stthomas.edu/sites/its/student-data-registrar-office/SitePage/74985/course-coding-standards</p>	<p>CoFlex: In Person & Online Async (CFXA) Students choose between two participation models each class period with classroom participation limited by classroom size capacity. In CFXA, in addition to the in-person option, the instructor records the in-person session for asynchronous learning or designs an equivalent asynchronous option for instruction.</p>	<p>Online: Synchronous Distributed (WWD) 100% of instruction is delivered online. Course has all synchronous class participation (all sessions) via web conferencing at scheduled times throughout the course. All students are taught at the same time and complete other coursework outside of class meetings.</p> <p>The WWD mode is the equivalent of the in-person (INP) model but instruction is delivered in a fully online setting.</p>
	<p>HyFlex (HFX) Students choose between three participation models each class period with classroom participation limited by classroom capacity. In HFX, in addition to the in-person option, the instructor offers simulcast web conferencing participation and also either records the in-person session for asynchronous participation or designs an equivalent asynchronous option.</p>	<p>Online: Flex (WWF) 100% of instruction is delivered online. Students choose between two fully online participation models each class period, with an opportunity for either synchronous class participation via web conferencing or participation via an equivalent asynchronous option.</p>

In-person Component (once a week)

Cons:

- social distancing requirements and room capacity
- personal protection (masks, screens, glasses, cleaning)
- fixed seating (detrimental for small group work and classroom activities)

Pros:

- classroom setting
- board/projection, recording
- exchange of paper materials

Synchronous Online (special cases)

Cons:

- uneven and intermittent connection
- video/audio on/off modes (privacy and
- rules of engagement (who is going to talk?)
- attention span

Pros:

- scheduled time online
- host/participants sharing the screen
- use of breakout rooms/recording

Asynchronous Online (most of the time)

Cons:

- detachment from instructors and classmates
- lack of control and accountability
- lack of human interaction

Pros:

- well planned and edited lecture notes
- pre-recorded videos and voice-overs
- hypertext mode with multiple links
- established homework platforms (*Webassign*)

Back to Normal or New Normal?

Are we ever going to go back to predominantly classroom mode? Not likely.

Technology allows for new modalities: once used, they will stay.

Good news for us, teachers: personal contact with instructor is valued.

Some programs may like residing online, some programs might not.

Questions?
