Balancing Synchronous and Asynchronous Teaching: Effective Strategies for Enhancing Flexibility without Losing Student Engagement

Overview
Since the onset of COVID, there has been a huge shift in teaching and learning practice that has taken place for faculty and students, and emerging feedback suggests that effectiveness of teaching can be enhanced by using a combination of synchronous and asynchronous approaches. This document is intended as a source of professional development and guidance for instructors as they continue to shift to this new teaching environment. In particular, this document outlines effective asynchronous and synchronous methods for teaching and learning activities, including content delivery, strategies to support student engagement and learning, and strategies to build community. Its goal is to support instructors with incorporating both synchronous and asynchronous methods of delivery in their course design. The final page of this document lists programs and resources offered by the Office of Teaching and Learning to support instructors with adapting their courses for the remote environment.

Synchronous and Asynchronous Teaching
The effectiveness of remote teaching can be enhanced by a combination of synchronous and asynchronous learning opportunities. The appropriate balance of synchronous and asynchronous strategies is specific to the context and content of the course being delivered and can be adjusted throughout the course by the instructor. In the remote context, synchronous learning opportunities allow for real-time interactions and responsiveness, and provide structure for both students and instructors. Asynchronous learning opportunities, when thoughtfully structured and delivered, provide greater flexibility for learners to digest the material, to engage in deeper reflection, and to work around any unanticipated challenges such as illness or emergencies.

Creating and delivering content in asynchronous and synchronous formats can be additional upfront work for instructors. However, there are several benefits in the short and long term to consider:
- Providing content asynchronously can free up your synchronous time (or face-to-face class time) for students to engage in more active learning, practice, problem solving, and collaborative work.
- The videos, screencasts, podcasts, or guest lecture recordings you create and curate for your remote course can be used in future remote and face-to-face courses as primary content, supplementary content, or as preparatory work before a class session. By moving some of your lecture content to asynchronous delivery, you will have more time during synchronous and face-to-face sessions to adjust your lecture pace, respond to student questions, and offer real-time support and immediate feedback.
- Compared to an in-person or synchronous lecture, students can pause, rewind, rewatch, or reread asynchronous content. You may receive fewer requests from students for support with content because they can learn more flexibly and at their own pace.

Intentional Balance of Synchronous and Asynchronous Activities
Your balance of synchronous and asynchronous activities within the design of your overall course will depend on your course learning outcomes, the content of your course, the course level, and your students’ needs. Consider what aspects of your course require students to receive immediate feedback or build connections with you or other students. These components of your course might benefit from
synchronous sessions. Think about how you can use asynchronous activities to prepare students for synchronous sessions, encourage students to extend or reflect on synchronous sessions, and teach students new content and skills. Consider that incoming first year students may need more initial real-time support and feedback as they transition to the university learning environment.

## Deciding between Synchronous and Asynchronous Methods

<table>
<thead>
<tr>
<th></th>
<th>Synchronous</th>
<th>Asynchronous</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What is it</strong></td>
<td>Instructors and students gather at the same time</td>
<td>Students access course materials and activities and interact with others at different times, within a time frame specified by the instructor</td>
</tr>
<tr>
<td><strong>Ideal for</strong></td>
<td>- Activities requiring real-time feedback or clarification to keep students on track&lt;br&gt;- Building community through real-time interaction&lt;br&gt;- Support and feedback, such as through office hours and check-in meetings with student groups</td>
<td>- Most content delivery&lt;br&gt;- Independent learning activities requiring critical thinking, analysis, reflection, or practice&lt;br&gt;- Collaborative learning activities that require students to work and interact over a period of time</td>
</tr>
<tr>
<td><strong>Advantages</strong></td>
<td>- Real-time interaction between students and instructors, which can create a sense of community and social support&lt;br&gt;- Immediate exchanges of information, questions, and feedback between students and instructors&lt;br&gt;- Instructor can clarify misconceptions in real-time</td>
<td>- Flexibility, making learning experiences more accessible to students&lt;br&gt;- Self-paced learning, allowing students to re-read or re-watch content to clarify their understanding&lt;br&gt;- Time for students to engage in critical thinking, reflection, practice, and refining their contributions to class activities&lt;br&gt;- Generates an archive of information that students can return to throughout the semester</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td>- Technical and connectivity challenges&lt;br&gt;- Students’ other responsibilities and circumstances may prevent them from attending or engaging&lt;br&gt;- Difficult to maintain student attention if effective opportunities for active engagement and participation are not integrated</td>
<td>- Potential for feelings of isolation if there is a lack of opportunity to interact with the instructor and peers&lt;br&gt;- Requires more self-directed learning skills from students, and more guidance, structure, and support from instructors</td>
</tr>
</tbody>
</table>

For additional support with designing your course, see our [Adapting your Teaching and Learning Activities planning guide](#) or register for a [Course Redesign Institute](#).

**Additional Resource**

- [How do I Balance Synchronous and Asynchronous Learning](#)
Asynchronous Strategies for Sharing Content and Engaging Students

Asynchronous learning opportunities are effective for activities where:
- You want students to access materials, readings, assignments, and assessments at their own pace (with clear deadlines and check-in points, specified by the instructor)
- Students are learning new content or skills, and you want to give students time to process the information, check their understanding, reflect on their learning, and practice their skills before engaging in activities or assessments (e.g., discussion forums, quizzes, assessments)
- Students are collaborating with peers or reviewing each other’s work

Share Content
Consider various options for sharing content that align with your learning outcomes, the type of content you’re teaching, and the needs of your students. The following questions will help guide your decision making about effective asynchronous methods to share your content:
- **Text, audio, or video:** What’s the best way for students to learn the content? Do students need visual aids (e.g., whiteboard demonstrations, images, animations, narrated demonstrations)? Do students need audio aids (e.g., narration, music)? You can present your content using a single method, a combination of two, or all three.
- **Curate vs. create:** What can be curated from existing digital content? What content is unique to your particular course and needs to be created?

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Information and Resources</th>
</tr>
</thead>
</table>
| Curate existing resources (readings, videos, audio) | Creating content can be time-consuming. Make the process more manageable by curating high-quality videos, podcasts, or readings.  
- UofG Library’s resource for finding [Open Educational Resources](https://library.uoguelph.ca/edc) for your course  
- UofG Library’s collection of [video and audio files](https://library.uoguelph.ca/edc) for classroom use  
- eCampusOntario also has an OER [Open Library](https://library.uoguelph.ca/edc) and resources on [Creating and sharing content for remote teaching](https://library.uoguelph.ca/edc) |
| Create video lectures, podcasts, screencasts | - [Effective educational videos](https://library.uoguelph.ca/edc) from Vanderbilt’s Center for Teaching  
- See page 15 of our [Adapting your Teaching and Learning Activities planning guide](https://library.uoguelph.ca/edc) for evidence-based practices for creating effective videos, including chunking information to create short videos, using signaling and cueing to highlight important information, and using audio/verbal and visual elements in complementary ways. |
| Readings                          | - May include course textbooks, articles, readings, as well as other [Open Educational Resource](https://library.uoguelph.ca/edc) readings, articles, websites, etc.  
- To engage students in the readings, see strategies for collaborative notetaking and annotation below |
| Students build or extend content  | - Students curate content (e.g., TED talks, YouTube videos, websites, readings, images) and post to a class discussion board/forum or collaborative document  
- Students create content that relates to the course topics (e.g., videos, screencasts, podcasts, concept maps, memes, images, etc.) and post |
Engage Students in their Learning

In your face-to-face course, how did you ensure that students were engaging with and understanding the content? For example, did you pause to ask questions, use quizzes, ask students to talk about their ideas with a neighbour, or facilitate class discussions? How can you adjust these strategies for the remote environment? The following suggestions can support student engagement and learning with the content.

Before students engage with the content
- Provide a framework or set of prompts that help students focus on what they should learn from the content. Students can reflect on their answers, or submit them through a poll, survey, collaborative document, or discussion forum. For example:
  - Key questions (e.g., “After watching this video, you should be able to answer the following questions…”; “Questions to consider while reading…”)
  - Provide a series of true/false statements that students respond to before and after reading or viewing the content

While students engage with the content
- Embed opportunities for engagement in your videos/podcasts/readings (e.g., questions that students should answer or skills that students should practice before moving forward)
- Encourage students to collaboratively annotate the readings (e.g., using a tool like hypothes.is, see this overview of Hypothes.is with possible uses in different disciplines)
- Encourage students to make collaborative notes. Create notetaking teams (groups of 3-5 students) and provide a structure for the week’s notes in a shared Google Doc. Ask student groups to assign sections of the notes to each member (Example from a history course)
- Incorporate asynchronous active learning techniques, including polling, minute papers, and concept mapping (see p. 18-28 of our Adapting your Teaching and Learning Activities guide)

After students engage with the content
- Provide opportunities for students to:
  - check their understanding (e.g., low-stakes practice quizzes at the end of a video/module/week)
  - reflect on their learning (e.g., learning journals/logs, reflections, student responses to the key question prompts given before engaging with the content)
  - apply or extend their understanding
    - apply the content to a scenario or case study
    - curate effective online resources that teach or extend the topic (e.g., images, GIFs, memes, TED talks, YouTube videos, websites)
    - develop materials to teach the content to their peers (text, audio, video)

Build Community and Connection
- Have students introduce themselves in a discussion forum using a short video, text, and/or images, and including an audio pronunciation of their name. Also post your own introduction.
- Clearly explain to students how they can contact you and when you will hold office hours. Reach out to students who are not participating.
- Use discussion forums effectively (see p. 27-28 of our Adapting your Teaching and Learning Activities guide)

Additional Resources
Actively Engaging Students in Asynchronous Online Classes
Asynchronous Strategies for Inclusive Teaching

otl.uoguelph.ca
otl@uoguelph.ca
Day Hall, 99 Trent Ln, Guelph, ON N1G 1Y4
Synchronous Strategies for Sharing Content and Engaging Students

Synchronous learning opportunities are effective for activities where:
- Students are learning content that requires a live discussion or real-time debate
- Students need to work through problems, questions, or content together in real time with the instructor present to provide support and respond to questions (otherwise students would not be able to progress to the next stages of their learning)
- Students are engaging in active learning that requires immediate feedback or clarification to keep them on track
- You are building community in a way that requires real-time interaction between students
- You are offering real-time support, such as through office hours and check-in meetings with student groups

Share Content
If you have decided that a synchronous session is the most effective approach for sharing particular content with your students, ask yourself:
- How will I build in appropriate contingencies to address the barriers caused by this approach (e.g., internet connectivity, technology issues, students’ responsibilities outside of my course)?
- What asynchronous alternative will I offer to students who are unable to attend?
- How will I incorporate active learning throughout the session to keep students engaged?
- How will I gauge student engagement and learning? How will I ensure that students are understanding the content, engaging with the content, and reflecting on their understanding?
- How will students signal if they have a question? (e.g., raise hand, type in chat)
- How long is the session? Can it be shortened?
- What technologies, tools, or resources will I use to effectively facilitate the event? What support do I need? What support will students need?

Many of the principles of effective video creation (see p. 15 of our Adapting your Teaching and Learning Activities guide) apply to synchronous lectures. In particular, create short lecture/presentation segments (no longer than 6-9 minutes in length), use signaling to highlight important information, segment and chunk information, and use complementary rather than redundant audio/verbal and visual elements.

Engage Students in their Learning
In your face-to-face class sessions, how did you ensure that students were engaging with and understanding the content? How can you adjust these strategies for the remote environment? The following suggestions can support student engagement and learning during synchronous sessions.

Before the synchronous session
- Encourage students to come prepared by providing an activity to complete before the session (e.g., writing prompts, a poll/survey, submit a question, find a relevant image/video, etc.)
- Communicate your plan for the session and your expectations for student participation

Office of Teaching and Learning
Day Hall, 99 Trent Ln, Guelph, ON N1G 1Y4
otl.uoguelph.ca
otl@uoguelph.ca
During the synchronous session
- Use tools embedded in your synchronous platform to support active engagement
  ○ Zoom has tools to encourage individual feedback and engagement (e.g., nonverbal feedback, polling, annotation, and chat) and for small group discussions and sharing (e.g., breakout rooms, sharing screens, and whiteboard)
  ○ Microsoft Teams has several tools, including live reactions, chat, breakout rooms,
- Use active learning strategies to encourage students to check their understanding, engage with their peers, ask questions, and brainstorm ideas (see page 16-28 of our Adapting your Teaching and Learning Activities guide for more information about these strategies and other suggestions)
  ○ Use breakout rooms combined with collaborative documents (e.g., Google Docs, Google Slides) for students to share and deepen their learning, and to easily monitor students’ progress during the activity
  ○ Use polling to gather responses quickly from all students (within your synchronous platform, or using another software, such as Poll Everywhere or Mentimeter)
  ○ Ask students to respond to key questions or writing prompts in the Chat
  ○ Use Think-Pair-Share or Think-Group-Share to spark discussion and sharing

After the synchronous session
- Use the same strategies from the Asynchronous Strategies section to encourage students to check their understanding, reflect on their learning, and apply or extend their understanding.

Build Community and Connection
- Use the active learning techniques suggested above to encourage connection, sharing, discussion, collaboration, and to help students get to know each other
- Pre-load a first slide to display as students are entering your session and waiting to get started. This slide can contain a question prompt to respond to in the chat, an icebreaker question, a poll, or an activity for students to do collaboratively (e.g., a paint-by-number colouring page, puzzle - see this Twitter thread for lots of ideas!), or an icebreaker question (see our webinar on cultivating community in remote courses, forward to 43:53 for information on icebreakers)
- Build a collaborative playlist with your students of music to play before the synchronous session begins, during breaks, and at the end of the class session

Additional Resources
Engaging Students Synchronously and corresponding presentation slides
Facilitating and Promoting Student Engagement in the Online, Synchronous Classroom
Zoom Questioning Strategies to Increase Engagement
Active Learning for Your Online Classroom: Five Strategies Using Zoom
Community Building Activities
To support you with adapting your course to balance synchronous and asynchronous opportunities for students, we are offering the following programs and resources.

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Offerings and Info</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Redesign Institute: Adapting your Assessments for Remote Teaching</strong></td>
<td>A structured 2-day experience that will guide you through developing an assessment plan for your remote course. The institute includes synchronous small group conversations with peers, one-on-one consultations, and asynchronous learning.</td>
<td>November 9-10&lt;br&gt;November 17-18&lt;br&gt;&lt;br&gt;Learn more and register on our <a href="https://example.com">CRDI site</a>.&lt;br&gt;Download the <a href="https://example.com">Assessments instructor planning guide</a>.</td>
</tr>
<tr>
<td><strong>Course Redesign Institute: Adapting your Teaching &amp; Learning Activities for Remote Teaching</strong></td>
<td>A structured 2-day experience that will guide you through planning strategies for sharing content and incorporating active learning in your remote course. The institute includes synchronous small group conversations with peers, one-on-one consultations, and asynchronous learning.</td>
<td>November 11-12&lt;br&gt;November 24-25&lt;br&gt;&lt;br&gt;Learn more and register on our <a href="https://example.com">CRDI site</a>.&lt;br&gt;Download the <a href="https://example.com">Teaching &amp; Learning Activities instructor planning guide</a>.</td>
</tr>
<tr>
<td><strong>Teaching Talks Webinar Series</strong></td>
<td>A series of webinars featuring faculty and staff discussing a wide range of topics related to remote teaching. Recordings of our Summer 2020 webinars are available on our <a href="https://example.com">Teaching Talks site</a>.</td>
<td>Visit our <a href="https://example.com">Teaching Talks site</a> to see upcoming webinars.</td>
</tr>
<tr>
<td><strong>Online Course Visits</strong></td>
<td>Seeing others teach is a valuable way to help us grow our own teaching practice. This program is designed to allow faculty to “visit” others’ courses to see how instructors organize their courses, communicate with their students, and foster student interaction. Some hosts will discuss their course design choices via a synchronous meeting.</td>
<td>Sessions to be announced.&lt;br&gt;Visit <a href="https://otl.uoguelph.ca">otl.uoguelph.ca</a> for updates.</td>
</tr>
<tr>
<td><strong>Small Teaching Online Book Club</strong></td>
<td>Virtual book club to discuss <em>Small Teaching Online: Applying Learning Science in Online Classes</em> (Darby &amp; Lang, 2019). At each meeting, book club members take part in a facilitated discussion of assigned chapters and discuss approaches they might consider or share experiences from their own classes.</td>
<td>The book club is currently running. We will offer another if there is sufficient interest - contact <a href="mailto:otl@uoguelph.ca">otl@uoguelph.ca</a>.</td>
</tr>
</tbody>
</table>