WHAT’S MISSING IN ONLINE TEACHING?

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- Online and hybrid teaching offers many advantages and new opportunities

- Unfortunately, many of us discover that lessons brought over from the physical classroom don’t survive first contact with the online learner

- For me, the key to improving the online learning experience for my students was to think deliberatively about what did not transfer over from the physical classroom, so I could fill those gaps in other ways.

- I’ll start by introducing what I found missing in the online environment, then discuss some ways I’ve found to respond
My background

Online MBA  Pre-session teaching  Executive MBA
Strategy capstone  One week of online before
Five weeks  four weeks of in-person
teaching
Entirely online  Asynchronous
Asynchronous
Digital education working
group, MBS

- May be helpful to know about my online experiences

- I’m also the parent of a young woman on the autism spectrum who has really struggled with online learning.
- From my observations and limited reading, I think that online learning poses extra challenges for many neurodiverse learners.
- As we expand the reach of online education, we’ll have more neurodiverse learners in our programs.
- We have legal and pedagogical obligations to be sure our programs serve their needs also. Fortunately, I think a lot of the lessons I’ve learned about how to maximise the online learning environment for neurotypical students also pay dividends for many neurodiverse students.
• In the physical classroom, it is easy to determine when students aren’t getting a lesson.
• In the online setting
  • It is much harder to detect this
  • We can’t respond meaningfully to confusion with pre-recorded materials

• Many online learners are often non-traditional students, meaning their time and energy is limited
• We are more likely to be competing with other stimuli (youtube, making dinner, etc.) in the online setting
• We can’t tell when the students are zoning out
• It is harder to counter loss of attention with our own energy, active learning exercises that get students moving and interacting, etc.
• Recognising the we won’t have class discussion to, say, work through a case, many of us rely on showing rather than telling.
• For example, we may record a video of how we would do a Five Forces analysis for a given industry
• That’s great and works well in the online setting, but...

• We may not realise the degree to which we scaffold in the physical classroom. That is, we launch students on a task and then step in as needed to redirect, support and challenge
• That type of help is much harder in the online, particularly the asynchronous, class.
• The result is that students often fall short in their first attempts to apply lessons on their own.

Homework
Time-consuming for student & instructor

• Homework often takes an outsized role in online settings as our main mechanism for gauging understanding, advancing learning by providing feedback and evaluating towards a grade. It often replaces the end-of-class debrief in the physical classroom.
• As a result, grading for online is often much more detailed and thorough.
• Of course, that means it can be more time-consuming for both students and professors. Both are aggravated when the online class is compacted, as many are. In my ASU experience, for example, assignments turned in Sunday really needed to be returned to students by Tuesday if they were to have time to integrating that feedback into their next assignment.
• To mitigate that challenge, we often use group assignments, which theoretically offer the added advantage of students learning from each other.
Successful completion doesn’t mean mastery

• Especially in group assignments, the fact that the group successfully completed an assignment doesn’t mean any individual student has really mastered the material.

Frustration can kick in

• Students can end up being frustrated with the limited mastery of the material
• Compounding that can be frustration with technical issues. Some technology is great, but we need to be honest that online learning system still have some rough edges
• It’s easy for the frustration to escape our notice until it reaches explosive levels
## Problems and solutions

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<th>Hard to gauge comprehension</th>
<th>Keep “lessons” short</th>
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- Next, let me discuss some lessons I’ve learned that help fill one or more of these gaps, allowing us to deliver on the promise of the online classroom.
- For each, I’ve flagged up the challenges it particular responds to

- Lessons, e.g., a video lecture, need to be short. Five to seven minutes at the outside.
- Makes it easy for student to review as needed.
- So, a 30 minute presentation on Five Forces will become a series of five minute videos—maybe one per force and an overview
### Problems and solutions

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<th>Create opportunities to gauge comprehension without evaluation</th>
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<td>In lecture quizzes</td>
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- Several technologies that make it easy to include “quizzes” within video that have to be completed before the student can continue, but don’t have to be connected to grades. Detailed feedback can be programmed into these.
- Discussion boards can be a good arena to probe students’ actual level of understanding
- “Office hours” are especially important
  - I have formal office hours, but also encourage students to just email me whenever they want to talk
  - Conferencing tools like Adobe Connect aren’t necessarily the best. If your students are already familiar with Zoom, Skype, Slack, etc., consider using those tools.
  - I usually get more students using office hours when I teach online, which I consider a good sign that I’ve built a relationship with them.

### Problems and solutions

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- Group work is great for consolidating teaching, but we need to do some individual work in order to ensure each student is mastering the material
- Individual work may be a good candidate for assignments that can be graded either automatically or by a TA.
Problems and solutions

Hard to gauge comprehension
Attention spans are limited
We can show, but helping is harder
Failure is likely on first attempt
Homework is time-consuming
Successful completion doesn’t mean mastery
Frustration with tools and material is likely

Use why questions to probe students mastery of the material. We can’t really apply the Socratic method (at least in the asynchronous setting), but pushing students to explain their reasoning is useful.

Feedback, feedback, feedback

This goes both ways

Seek feedback from the students to replace your ability to read faces and body language in the physical classroom
Give detailed feedback when grading
I’ve found it useful to provide a short, informal video after grading an assignment, revisiting points that were frequently misunderstood. Advantages include

A first screen for questions—ask students to start by watching the video and then coming to you with anything that still remains unclear
Better learning for the 1/3 to 1/2 of the students who watch. Some won’t watch because the did well on the assignment; others because they don’t care. I’m okay with supporting the dedicated ones
Gives the students a sense that you are actually involved, rather than having filmed the class 3 years ago and then not thought about it.
Problems and solutions

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- Something we probably do without thought in the physical classroom
- Give students multiple cuts at the material.
- For example, if I start a class with external analysis, every subsequent assignment will have at least some reference to external analysis.

- In the physical classroom, we can be pretty fluid. For example, we can rearrange material to meet the scheduling needs of guest speakers or decide to spend more time on a certain topic than originally planned.
- That doesn’t work in the online setting.
  - Partly this is the nature of the modal student and the demands on their time
  - Because material is often spread across multiple pages on a class’s site, it is already harder to grasp in its totality than it would otherwise be
  - This seems to be a particular pain point for many neurodiverse students
- I’ve developed a work flow that let’s me produce a PDF that mirrors almost all of the online material in a single document that students can print out, mark up, and use as an ongoing physical reference.
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- Don’t use any learning tools “just because”. Be clear how you expect it to improve the learning experience and then be sure that it does so well enough to merit its improvement.
- Remember that every new tool is a new tool that students have to learn and a new opportunity to discover technical problems.
Good luck!