

'Catch You On the Flip Side':

Translating Online Learning into Hybrid Delivery

Paul Cowell, University of Stirling

Context

- March-June 2020
- Summer 2020
- September 2020 to June 2021
- Summer 2021
- September 2021 onwards

emergency online response

pedagogical reflection & exploration

pedagogically designed online teaching

pedagogical reflection & move back to classroom

evolution of a new pedagogy?*

*(assuming Covid-22 isn't a thing...)

Shameless plug: special EN session on Covid-19 on Friday at 11.10am

Aim of the workshop

- 'Catch you on the flip side' explore how flipped learning designs can help solve (some) of the key challenges in delivering hybrid sessions on the far side of the pandemic.
- Clarifying the taxonomy, and emphasising why hybrid delivery requires a pedagogy-first approach.
- Some case studies from my own experience of flipping online, and sharing simple, low-resource cost designs for hybrid delivery.
- An interactive demonstration of collaborative technology for learning (all you need is a web browser).

Roadmap

- 1. Taxonomy and Introduction
- 2. Flipping Online Delivery
- 3. Hybrid Principles and Challenges
- 4. Flipping Hybrid Delivery
- 5. Live Demonstration
- 6. Summary and Q&A

1. Taxonomy and Introduction

- Stigmatisation of 'online learning', keeping up with buzzwords, and improper use of terminology creates confusion around what we actually mean by *blended*, *hybrid*, *virtual*, and *online*.
- Helpful but not exhaustive guide by QAA (2020): https://www.qaa.ac.uk/docs/qaa/guidance/building-a-taxonomy-for-digital-learning.pdf

Blended = delivering online sessions, *blended* with some separate face-to-face (F2F) sessions

Hybrid = delivering a session *simultaneously* to both online and F2F participants (assumption is most are F2F)

Hyflex = delivering hybrid sessions where students have freedom to *choose* whether to engage online or F2F

(but definitions can be different when referring to delivery of programmes of study)

- Flipping typically involves asynchronous delivery of content to allow for active and interactive synchronous learning activities that promote deeper knowledge co-creation, higher-order thinking skills, collaboration, and synthesis.
- Flipping empowers students to take ownership of their own learning, and designing bespoke asynchronous delivery of content can de-escalate risk of understanding concepts in a live session and promotes accessibility (as opposed to simply re-watching a recording of a live lecture).
- Flipping not a new idea (e.g. Mazur, 1990s), but often perceived as high-risk strategy due to devolving responsibility for engagement to the individual learner.
- "...how can we trust our students to 'do the work' when we're asking them to do it outside of the classroom?(!)"

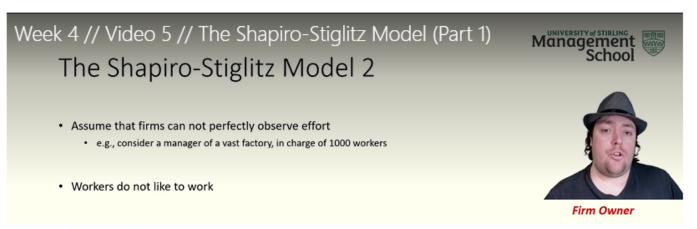
- For many, the move to pedagogically-underpinned online delivery was a move to flipped learning by stealth.
- Digital poverty, timezone issues, and caring responsibilities were all a mandate for asynchronicity and inclusion.
- Short videos more engaging, so not always sufficient space to explore concepts in depth in pre-recorded videos and constructively aligned activities, which is accidentally an excellent lead-in to the flipped live session!

- At Stirling during 20/21, all economics teaching was designed from the outset to be delivered entirely online.
- I taught 3 very different modules to 3 very different cohorts:
 - 1st Year UG introductory module (N=200) using CORE
 - 3rd Year UG macro module (N=60)
 - MBA/MSc Business short module (N=100) using CORE's ESPP
- All modules delivered using the same design:
 - Weekly release of asynchronous learning materials with short videos, asynchronous activities, scaffolded narrative, and end-of-week learning goals
 - Weekly live sessions for drop-ins where students could ask questions on that week's material
 - Weekly live reflection sessions (*aka* the flipped class) where asynchronous activities, discussions, and preparatory work from the previous week would be explored in more detail as a class

The Shapiro-Stiglitz Model (Part 1)

In this section, we will start to build the Shapiro-Stiglitz model, and again we will take care in setting out the ingredients and assumptions of the model. We will develop the model over three sections, with this being the first part.

Step 1: Watch the recording below & take notes





Week 8 Discussion Activity - Labour Discipline Model

43 45

Post your comments here in response to Activity 1 of Page 8.7 (Putting the Model to Work).

Like the previous weeks' discussion board tasks, you won't be able to see others' posts until you have posted your own comments first.

Once you have posted your comments, read others' posts, and comment on at least one contribution from another member of the class (preferably one that doesn't yet have a comment).

I will also pitch in with reading and commenting!

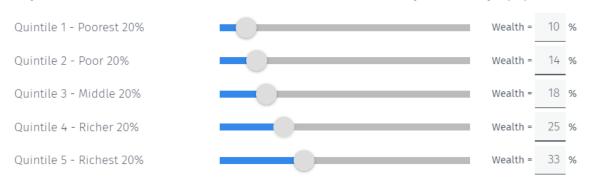
Step 2: Activity 1

Read the following article and watch the following video:

Article: https://www.theguardian.com/world/2020/sep/27/shirking-from-home-staff-feel-the-heat-as-bosses-ramp-up-remote-surveillance



In your ideal scenario, how would wealth be distributed across your country's population?



My experiences:

- more work but deeper learning, with students often racing ahead of where I was in previous years
- robust grade distribution despite more challenging nature of assessment that emphasised critical evaluation and application, demonstrated in an authentic manner (e.g. policy briefing papers, public engagement digital posters, case studies)
- pride! students demonstrated peer-instruction and peer-learning

Student feedback:

- more work (but not for conscientious and high-ability students)
- flexible asynchronous structure with bespoke resources highly valued
- spending time with me exploring and strengthening, not acquiring and clarifying

3. Hybrid Principles and Challenges



3. Hybrid Principles and Challenges

• First thing I should say: I'm not anti-hybrid, just pro-pedagogy! As economists, we naturally use experiments for inference, but experimental design is important.

What are the challenges of hybrid?

- isolation and side-lining of online participants (inferiority to F2F)
- technology issues
- staffing input (high cognitive load)
- some aspects of inclusivity and accessibility can be a concern (if you're online, how do you know who's speaking in class if off camera?)

Simply put, a hybrid session has the potential to deliver unsatisfactory learning experiences both to the students in the room and the students online, and being detrimental to the sense of belonging and learning community

3. Hybrid Principles and Challenges

Benefits of hybrid?

- done well, two different cohorts can be brought together, encouraging peer learning and fostering community
- efficiency of teaching resources
- the ability to remain engaged with a pre-existing group despite absence from classroom
- some aspects of inclusivity improved, particularly for commuting students or those with caring responsibilities (compared to being required to attend on campus)

3. Guiding Principles of Good Hybrid

- 1. Bring everyone into the same space (the online space)
- 2. Equality of learning opportunity (value contributions equally from F2F and online)
- 3. Clear communication and regular checks throughout
- 4. Test the technology, and build in time during the lesson for it to go wrong
- 5. Have 2 instructors (either both in the room, or one online)
- 6. Scaffold the session for active and collaborative learning using asynchronous flipped design

1-5 are the foundation for a good hybrid session, but 6 is the bricks and mortar

3. A Model for Hybrid Delivery (Bower et al., 2015)

	Pedagogy	Technology	Logistics/set up
Presage (Design)	Clearly define learning outcomes Design for active learning Determine whether to group remote with F2F students Utilise general design principles	Match technologies to lesson requirements Set up and test the technology in advance	Be highly organised in advance Solicit the right institutional support Prepare students Prepare self Establish a learning community
Process (Implementation)	Encourage regular student contribution Distribute attention between remote and F2F students Identify the focus of learning and discussion Avoid duplication of explanations Circulate among groups Draw upon existing pedagogical knowledge Be flexible, adaptive, and composed	Know how to use (and troubleshoot) the technologies Appropriately utilise audio/visual modalities Advise students on how to use the technology Ensure students have correct permissions Use tablet or other mobile/handheld devices to facilitate visual input if required	Start lessons 10 min early for technology testing Log in to a second computer (to see student view) Apply tactics to work with text chat contributions Seek teaching assistance where possible and desirable
	More active learning (remote and F2F)		

Product (Outcomes)

Enhanced sense of community (through co-presence)

More flexible access to learning

...leads to:

Increased student satisfaction

4. Flipping Hybrid Delivery

Any flipped session designed for purely online delivery has the potential to be a great flipped hybrid session:

- Step 1: asynchronous delivery of content and knowledge acquisition
- Step 2: asynchronous lead-in tasks and activities that can harvest points of discussion in the flipped session
- Step 3: synchronous flipped hybrid session

Activities that promote active, deep learning during the flipped hybrid session:

- class experiments (ClassEx, Experiencing Economics, Economics Network list of resources: https://www.economicsnetwork.ac.uk/themes/games#Computerised Games and Experiments)
- polling/audience response (PollEverywhere, Padlet, Answergarden, Kahoot, Socrative)
- collaborative note-taking and groupwork (e.g. online participants working in small groups with participants in the classroom on a task in a shared document)
 - OneNote Class Notebook

4. Flipping Hybrid Delivery

OneNote Class Notebook: https://www.onenote.com/classnotebook

- free to all staff and students with institutional O365 subscription
- a digital note-taking app with excellent graphing tools, an infinite whiteboard, equation editor, and drag-and-drop from other sources (YouTube, tables, images, audio recordings)
- Class Notebook function allows you add students/teachers to a shared notebook, with separate sections for collaboration, distribution, and private annotations (students also get their own private section)
- Direct integration with some VLEs (Canvas) and videoconferencing (Teams) but can be used standalone.
- Alternatively, any collaborative document such as Word, Google Docs, etc. could be used to similar effect in a flipped hybrid session

Using OneNote (or similar), everyone is brought into the same space, there is equality of learning opportunity and contribution (all you need is a web-enabled device, whether in the room or online) contribution, collaboration is promoted, and students can take ownership of their learning since groups co-create, take-away, and can then reflect on 'their' work.

5. Live Demonstration

https://bit.ly/cowell2021

Note: this is a sample OneNote Class Notebook (access normally restricted to specific students and teachers), so the student view and permissions would be slightly different

6. Summary and Q&A

- Flipping is not a new idea, and nor is hybrid!
- The same guiding pedagogical principles apply for hybrid teaching as they do for purely online delivery during a pandemic, or for teaching a F2F cohort and an online cohort on the same module: equality of learning opportunity, inclusion and accessibility, foster community, and active engagement scaffolded by appropriate lead-in tasks.
- So, catch you on the flip side good luck for an interesting year, everyone!

Some Useful Resources

- Tips for engaging students in a hybrid session: https://www.youtube.com/watch?v=GRcOOkonj8s
- 7 Things You Should Know About the HyFlex Course Model: https://library.educause.edu/-/media/files/library/2020/7/eli7173.pdf
- Beatty on HyFlex: https://edtechbooks.org/hyflex/hyflex-values
- Columbia CTL's tips on hybrid and HyFlex: https://ctl.columbia.edu/resources-and-technology/teaching-with-technology/teaching-online/five-tips-hybrid/
- Active Learning in Hybrid and Physically Distanced Classrooms (Vanderbilt University):
 https://cft.vanderbilt.edu/2020/06/active-learning-in-hybrid-and-socially-distanced-classrooms/
- Bower, M., Dalgarno, B., Kennedy, G. E., Lee, M. J. W., Kenney, J. (2015) Design and implementation factors in blended synchronous learning environments: Outcomes from a cross-case analysis, Computers & Education, vol.86, pp 1-17.
 DOI: https://doi.org/10.1016/j.compedu.2015.03.006
- Raes, A., Detienne, L., Windey, I. et al. A systematic literature review on synchronous hybrid learning: gaps identified. Learning Environ Res 23, 269–290 (2020) https://link.springer.com/article/10.1007/s10984-019-09303-z