Blended Classes (Parts 1 and 2)

The blended class has a foot in the traditional class and a foot in the digital space.

Many people struggle to find the balance between in-class and screen time when designing a blended course. What works best in class and what works best online? And given the current situation, if need be, how can I migrate my blended class to a completely online one with the least amount of disruption?

Reading the literature and from my own experience there are some pretty clear dos and don'ts for blended classes.

If you take nothing else away from this video, **Do Not Zoom Your Lectures**.

Don't expect to simply zoom your lectures and things won't be very much different than your traditional version of the course.

In large zoom lectures, invariably, what happens is that someone will be badly buffering, while others can't get access to the zoom meeting because of poor internet reception or they have the wrong meeting number.

Meanwhile, one student will spill their drink on their computer and everyone will watch that. Then another student will have their cat jump up in front of their camera. All eyes will be on the cat, not you. And a third will be interrupted by their child and all eyes will be on the child.

As they say in show business, never follow children or animals.

The students will not remember what you talked about. They will remember the coffee spill, the cat and the child. But opting for not showing the students the other students is a bad way to go too. They will zone out with the first seven minutes.

What does work well for blended classes is reserving the online asynchranous portion for lectures, reading material and set up for in class activities. And reserving the in class portion for high impact, interactive learning.

There are a number of specific benefits to this style of teaching:

1. Efficient use of class time - Lecture content, in the form of videos of manageable length, can be provided outside of the classroom. Shorter videos have the benefit of distilling a given topic, and topics can be broken up into subtopics. As this happens, traditional passive learning takes place outside of the classroom, and class time can be freed up to increase meaningful engagement with the students. Faculty members have more time to interact with students to clarify learning point, and additional learning objectives can be incorporated, as can active learning.

2. Active learning opportunities - When the traditionally passive lecture component is taken out of the classroom, the classroom has the potential to turn into a workshop that incorporates and focuses on active, hands on learning. This approach becomes a core component rather than a supplement to the lecture.

3. Increased one-on-one opportunities - Class time freed up of lectures allows for increased faculty to student, and student to student interactions. There is also more time for extended classroom discussion and exercises. This allows students to engage with concepts, learning materials, and peers in the classroom. Thus, increased student support is an implicit result of this method.

4. Student accountability for learning - Students are charged with coming prepared to class, and as such, their own responsibility and accountability for their own learning is increased. This also allows the student to direct their own learning.

5. Addressing multiple learning styles - This technique supports diversity in student learning, and allows students additional time an access for reviewing materials, if necessary. In addition to the lecture, students may reflect on materials through questions and discussion with the faculty member who functions as a facilitator. They also learn by working with peers to solve problems, and by demonstrating and arguing their own solutions, class experimentation and work.

6. Easy conversion to entirely online. This type of class is the easiest to move fully online of any type of class.

Best Practices for Designing Blended Courses

Course design is key

- Start by writing student-centred learning outcomes -- these can influence the environment of the content delivery and learning activities and how these are connected together and assessed (online or face-to-face).
- Align the learning outcomes, learning activities and assessments.
- Create a syllabus with a course schedule that clearly communicates when and where students will engage with content and learning activities. Blended learning requires the development of self-directed learning and time management skills so students need to know what the expectations and deadlines are.

Employ "thoughtful integration"

- Consider what you will do, and what your students will do. Blended courses are most effective when online and face-to-face activities are engaging and challenging and complement each other.
- Avoid the temptation of creating a course and half. Just adding online activities to a traditional course will increase the workload for students.

Choose instructional strategies and learning activities carefully

- Instructional strategies and learning activities contribute to the achievement of the desired learning outcomes so they should be chosen to support the learning outcomes and engage learners.
- Student-student, student-instructor, and student-content interactions are all important components in learning. Varied interactions and prompt feedback from both the instructor and peers can help keep students engaged both in the classroom and online.
- Active learning has been shown to be more effective for promoting deep understanding and retention of concepts. Instructional strategies such as flipping the classroom can help your students learn more effectively.
- Discussions, laboratory work, field trips, group work, online activities and lectures -- these can all be part of blended learning.

Use learning technologies

- Consider what is to be accomplished by using learning technologies in the classroom or online: for example, dissemination of course content, group work, peer assessment, question facilitation, fostering community.

Next let's look at the different elements of in the planning of a flipped class.

In a flipped classroom students engage with lectures or other materials outside of class to prepare for an active learning experience in the classroom.

1. Introduce the task

The goal of this stage of the class is to maximize student participation/readiness for the activities they will be doing online and in-class. Instructors should introduce the tasks by clearly explaining their expectations for what the students will be doing and the amount of time the students will need to invest to be ready for the class activity. Explaining what they will be doing and why being prepared for the in-class activities is also important. For some students, active learning in the classroom will be a new experience so a "no surprises" approach can reduce possible anxiety about a more participatory approach to learning.

2. Out-of-class task

Carefully consider the choice of media for the online activities and materials. Instructors can create their own materials such as narrated PowerPoints, screencasts and podcasts, or reuse online content such as websites, readings and videos. Video content should be concise -- no more than 10-15 minute segments -- and it can be helpful to students if there are guiding questions or prompts to help them recognize the keys objectives of the preparatory work. If instructors include an online means for students to submit questions about difficult concepts or other questions, they can use some class time to discuss these issues.

3. Assess the learning

Before the in-class session both the instructor and the students can benefit from knowing if the students are adequately prepared for the in-class activity. Self-assessment quizzes or low-stakes online quizzes can be a good way to assess if students are adequately prepared. Ideally these assessments are short, and include questions that provide an opportunity for students to apply what they have learned rather than questions that merely test factual knowledge. Formative feedback on the assessment questions and an opportunity for students to pose their own questions to the instructor can also be included. Evidence of preparation can also be provided through a short assignment or assessment at the beginning of the in-class portion of the flipped class. Learning and assessment are interconnected: low stakes or formative assessment is a valuable learning tool for students.

4. In-class activities

The most effective activities for promoting deep learning are those that create opportunities for peer-to-peer learning, student-instructor dialogue, and opportunities for active learning. The objectives of an activity should be clearly linked to course objectives and assessments; the in-class activity time can be used to encourage students to be creative and make discoveries (and errors) in a relaxed, low-risk environment.

5. Motivation

Student motivation, which underlies the whole learning process, can be affected by the design of the activity. An enthusiastic instructor who has good rapport with students and creates an open and positive atmosphere in class can motivate student participation and learning. Activities that are designed to be challenging, but achievable, can help motivate students. Also students will be more motivated if they find personal meaning and value in the material and see that the course is relevant and linked to their future success. Providing frequent feedback to students as they complete their learning can also increase motivation.

[Part 2]

In-class activities and assessment for the flipped classroom

So, what would you do in the classroom?

In a flipped classroom students engage with lectures or other materials outside of class to prepare for an active learning experience in the classroom.

After the preparation and design of activities for the in-class portion of your class, your primary role will be to monitor, guide, and support the learning process of your students. Students will have varied levels of understanding and comprehension after having completed the out-of-class work. After assessing their understanding in the online environment, you may approach the in-class activities in one of two ways: individual or group-based activities.

Let’s go through some activities you can do in-class.

Individual activities

Individual activities can be most beneficial and relevant if your students have demonstrated difficulty with understanding the content or material introduced to them out of class. Individual

exercises can be used in advance of group ones to help students navigate a "higher-risk" group activity and can be helpful for students who need more individual reflective time to learn.

Word webs/concept maps

Time on task: 30 to 45 minutes; *Group size*: 1 to 4

- Done either individually or collaboratively, concept maps can reinforce concepts learned out of class and build connections between various topics
- Students map out how concepts, ideas, or theories are thematically related in a visual manner
- Any gaps can be useful inspiration for discussions either at a group or class level

Individual problem solving

Time on task: 5 to 10 minutes; *Group size*: 1 to 4

- In-class problem solving activities allow students to tackle problems during class with their peers and the instructor on hand to discuss challenges
- Ideally used to increase practice time on problem solving and provide immediate feedback to students about misconceptions

Group activities

Group activities are often the goal of the in-class portion of the flipped classroom. Each student will bring their own individual understanding of the content to the lesson, and together, in small groups, they will be able to draw on each other's knowledge and understanding of the material to forge new understandings and better recall the content.

Group activities for larger class sizes

Think-Pair-Share

Time on task: 5 to 15 minutes; *Group size*: 2

- Take a central concept presented in the out-of-class material, or a particularly controversial quiz question from a prior assessment, and have students reflect on it individually and then discuss it further
- Think phase: students work independently and flesh out their thoughts/arguments and may write their thoughts down
- Pair phase: students discuss their response with a partner
- Share phase: the instructor elicits responses from all members of the class and begins to engage students in a wider discussion demonstrating the many different perspectives

Team matrix

Time on task: 10 to 20 minutes; *Group size*: 2

- When new concepts have been introduced that are quite similar to one another, a team matrix can help parse the most salient features of each concept while differentiating between each

- Present pairs of students with a list of characteristics that may or may not be shared between concepts and have the students determine which characteristics belong to each (or both) concept(s)
- Discuss answers with the entire class afterwards to check comprehension

Think-aloud pair problem solving
Time on task: 30 to 45 minutes; *Group size*: 2
- Present students with a set of complex problems that require multiple steps to solve
- Pair up students and ask one student to be the problem solver, who explains their thought process in developing a solution based on what was learned out of class
- The partner listens to this process and offers suggestions if there are difficulties, or expresses confusion should there be parts that are difficult to understand
- After the first problem has been solved, ask the students to switch roles and begin again

Case studies
Time on task: 1 to 2 hours; *Group size*: 3 to 6
- Students review a case study concerning a specific, real-life problem or scenario
- Applying what they learned in the out-of-class portion of the flipped classroom, the group will discuss how they would tackle the problem and what solution they would prepare
- Each group can then debrief with the rest of the class and present their solution

Group activities for smaller classes

Three-step interview
Time on task: 15 to 30 minutes; *Group size*: 2, then 4
- Students are initially grouped into pairs where each student takes a few minutes to interview the other about the material that was read online
- Students come up with questions they would like to ask, and after each member in the pair has interviewed the other, the pair summarizes their partner's responses and then shares them with another pair of students

Role play
Time on task: 15 to 45 minutes; *Group size*: 2 to 5
- Role play can be facilitated in class to demonstrate varying perspectives on a topic (such as a controversial topic in the media)
- Students assume different roles in small groups and act out the parts with the varying perspectives they would have
- After the role play, conclude with a larger discussion to see what approaches the groups or individual members took

Reaction sheets
Time on task: 30 to 45 minutes; *Group size*: 4 to 6
- Choose a number of broader, overarching questions based on out-of-class material

- Divide the class into small groups and give each group one of these questions and a large piece of paper to record their responses
- Each group spends ten minutes to write everything that comes to mind in relation to the topic
- When the ten minutes is up, each group moves to another table and leaves the paper with the question and their responses on it behind
- At their new tables, groups review the question and the comments which have already been recorded and add additional comments
- After each group has added comments to all other groups' questions, they return to the initial question, review the additional comments provided, and summarize to the entire class
- This activity is useful for solidifying the understanding of a special topic or a threshold concept that the entire class needs to understand properly

Critical debate

Time on task: 1 to 2 hours; *Group size*: 4 to 6, then 8 – 12

- Choose a controversial topic, and determine what side of the argument the students would be in favour of during the out-of-class task
- Once in class, separate the students into groups based on their alignment and have them argue for their chosen position
- Have students in each group choose specific roles in the debate process, and after having sufficient time to prepare an argument (thirty minutes or so), have each group pair up with a group of the opposing viewpoint and engage in a debate
- Afterwards, synthesize the various points of debate in a larger class discussion

I have dozens of other activities for individuals, groups in small and large classes. I would be happy to talk to about your specific classes and activities you could plan for your classes.

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