**Motivating effective use of online components by students
in flipped/blended learning formats**

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What follows are ideas and comments addressing ways to motivate students to use the online components of a course, particularly in use with flipped/blended course formats. What I present here comes mostly from experience but also from sharing ideas with several people, including many of you. As will be obvious, this is informal and a work in progress. You are encouraged to send me edits/additions/comments and we can revise and reissue it.

A more formal discussion of engaging students is at the Global Campus eLearning site, **Engaging Students.** An article about a recent and relevant WSU workshop is here: **Workshop**

Here's my take on flipped/blended formats exclusively:

The Challenge

In my experience, the most challenging part of flipping/blending courses is getting students to watch and digest the online lectures. Assimilating and achieving significant understanding of the online material is critical for the success of flipped/blended learning. **The online portion must be learned, digested, and understood BEFORE the relevant Face-to-Face (FTF) portion of the class**.

What we are fighting: Students "sitting" in lectures, (maybe) taking notes, cramming, taking the exam; repeat. Cramming is often the preferred learning method for many students (and is documented as an inferior route to meaningful learning).

Some Ideas and Opinions on Making it Work

(Many of these ideas are practiced by and/or come from other WSU instructors.)

- **First up:** What one does in the FTF part of the course is a big factor in promoting success.
- **In the first FTF meeting** (start of the semester) and a few later FTF meetings (soon and later), it is important to outline the format, expectations, and goals of the class. Emphasize the value of this type of learning AND the advantages, e.g., online work can be done at flexible times, and means better presentations (believe me, this is usually the case). I guess this is called marketing.
- Emphasize the need to keep up so that FTF time is used effectively. Explain the nature of **Active Learning** and how it applies to the material and understanding gained from the online presentations. Emphasize that the FTF time will be demanding, involve applying the online material, and will probe what they *don't* understand — but will understand at the end of the session.
- Periodically tell students **what they should be doing and why** they should do it; make very clear the timing of doing an online portion (i.e., when should they to it). Repeatedly talk to yourself about communication and clarity in terms of focusing their attention.
- Make the FTF periods as **challenging, useful, effective, active/interactive** as possible.

- Make available as best as possible a **question-answering system**. BTW: Students want "instant answers" while working on the online material. Possible tactics:

  - **Discussion Boards** – you can encourage student responses to each other's questions (broadcast), but you may need a monitoring system to prevent nasty replies. Instructor resolution of best/correct answers needs to be provided at some point.
  - **Instructor answers** (broadcast), when practical (obviously frequency and time of question submission needs consideration: ("…After xxx o'clock, the Doctor is not in!"). Obviously, for large classes, multiple staff members are essential for this task.
  - **Question <u>answering</u> in the FTF portion**. Opinion: It should be the first thing one does. (Students learn that asking more questions reduces the available time for the more difficult thinking exercises! Perhaps limit time spent on questions? I usually do not but at some point I might suggest that I post remaining questions online).

- Make online components **necessary** for meaningful and timely experiences during the FTF sessions (i.e., if possible, work on FTF exercises focused on the most recent assigned online material).

Additional Ideas for Making FTF Time Most Effective

- Throw out to the FTF class **a question or two** on the material near the beginning of FTF to get people thinking; perhaps start with the traditional form of answer(s) from the class.
- Initiate and lead a problem/task **for the entire FTF group**; you break down the task into small bites, encouraging questions, asking questions, pointing toward solutions.
- **Do the same in a peer learning format**. (Sometimes **peer pressure** on less motivated students will occur, encouraging preparation in the future.) BTW, I am always surprised at how many students like working on posed questions and problems in a small group (I use 4-5 students). Rough statistics: This format is preferred by more than 95% of students.
- Occasionally "**Sermons**" focused on the importance of material ("…led to a Nobel Prize"), applications (… "this could get you a job").
- **Graded quizzes** - sledge hammer approach but often necessary. My observation: give them immediately the solution(s) — they really pay attention, particularly those who have had difficulties.

Making the Online Components Work Well

- **Tutorial Quizzes/Questions** interspersed within the online presentation and/or at the end of the presentation. Recommend: Use shorter presentations and put these at the end (it is <u>much</u> easier for editing and revising).
- Important: **Have these responses turned in.** If appropriate, you can automatically gather them and grade them using an online quizzing program – I use Google Docs or a *Mathematica* notebook (useful for STEM courses). Frequently, instructors **grade them for the instructor's benefit only** – then one can see if students have actually viewed the

presentation AND have gained from doing so. Let them know that you are doing this. Decide if you want to pull someone aside and "make them an offer they can't refuse."

- Instead of "for instructor's benefit only," some instructors **give some credit** for doing the tutorial quizzes/questions. In all cases students should at some point see how they performed and see the correct answers (normally with explanations and solutions).
- It's important to make it clear to students about the credit/no credit policy you choose.
- Recommendation: **DO NOT distribute slides** of online material. (Students want them!) **Not distributing** them encourages manual note-taking and it is known to help the learning process. If presentations involve derivations and equations, hand note-taking encourages step-by-step analysis (and encourages filling in missing steps). This might be called **Active Viewing**. Such an approach generates more and better questions. Some allow handwritten notes to be used during exams.
- This one is touchy: **The online presentations – can they be improved to contribute to motivation?** It's touchy because it takes so much work and you have to look at the presentations more critically (which normally includes looking at yourself — I can barely stand to look at my past presentations!).

Continuous Improvement

- Perform a **mid-semester Student Evaluation** emphasizing the learning format, opinions of the online and classroom components, issues involving the technology, suggestions. Strongly consider responding.

Pitfalls

- Mismatch or misalignment (**issue of timing**) of the online material and the FTF activities. For me, the online due dates were ahead of the FTF activities – not quite so bad as the reverse.
- **Amount of overall work** expected from student – online lectures, readings, assigned problems/exercises, and FTF time. May be excessive ("My course is the most important!"). *I plead guilty.* Raises issues (same for any instructional format) involving quantity-quality-learning outcomes.
- Problems dealing with **big classes** (TAs?)—possible problems concerning volume and perhaps TA training.
- Handling "*unfriendly attitudes*" that some students develop. (My experience: The issue is usually over the **cramming vs. constant challenges** approaches)
- Dealing with **dropouts (*sort-of-dropouts*)** – students who stop participating but take exams. My observation: Students who have difficulties attending traditionally taught classes have similar difficulties in flipped/blended classes. They usually are struggling with issues like: *"I don't know what I want to do."* I usually haul them in to discuss career options and also contact their advisors.