How to Prevent Your Flip from Flopping: Five Key Mistakes to Avoid When Switching to the Flipped Classroom Model

Gary S. Atwood
The University of Vermont, gatwood@uvm.edu
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Objectives

Contrary to popular perception, successfully adopting the flipped (or inverted) classroom model requires more than just recording videos of lectures for students to watch outside of class. This poster will highlight five key mistakes that teachers sometimes make when adopting the flipped classroom model, and outlines effective strategies to avoid them.

Methods

The following sources were analyzed for common factors identified as contributing to either the success or failure of a flipped classroom initiative:

- **Flip Your Classroom: Reach Every Student in Every Class Every Day** by Jonathan Bergmann and Aaron Sams, the two teachers credited with launching the flipped classroom movement
- The research studies and reviews listed in a bibliography on the Flipped Learning Network's Research, Reports, and Studio webpage
- Three recently published research articles from the medical literature that describe efforts to convert a course to the flipped classroom model. These articles were found by conducting a search in PubMed for the keywords “flipped classroom” or “inverted classroom”.

These common factors were grouped into categories and the five most frequently repeating problems were identified. Recommended practices to address these problems were synthesized from the literature.

Results

Based on the research, there are five key mistakes that teachers make when adopting the flipped classroom model:

1. **Failure to convince students to embrace the flipped classroom model**
2. **Failure to anticipate the time and costs associated with the flipped classroom model**
3. **Failure to incorporate effective assessment methods into the course**
4. **Failure to adopt appropriate technology for the information being taught**
5. **Failure to adjust the course structure to fit the new model**

One of these mistakes alone will not cause a course to fail, but committing more than one makes it increasingly difficult to be successful.

Conclusions

Adopting the flipped classroom model requires careful planning and lots of hard work in order to be successful. By understanding and avoiding the five key mistakes outlined in this poster, teachers can increase their chances of success and create a classroom environment that encourages students to learn.

References


A complete list of the resources used in this project can be found at http://go.uvm.edu/ef9vo

Acknowledgments

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1. ✔ Provide extra reinforcement and support during the initial days/weeks of the class and create as many positive experiences as possible

Table

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Solutions</th>
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<tr>
<td>🔴 Failure to convince students to embrace the flipped classroom model</td>
<td>✔ Start the first class by explaining what the flipped classroom model is, how it works, why it was adopted, and how it will benefit students; ✔ Create tools that demonstrate how to effectively study and learn in the flipped classroom model; ✔ Assess how students are adjusting and be prepared to make adjustments to the structure (e.g. changing the number or nature of projects) if necessary; ✔ Provide extra reinforcement and support during the initial days/weeks of the class and create as many positive experiences as possible</td>
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<tr>
<td>🔴 Failure to anticipate the time and costs associated with the flipped classroom model</td>
<td>✔ Whenever possible, take advantage of pre-existing materials (e.g. MedEd Portal); ✔ Co-teach with another teacher in order to divide the workload; ✔ Take advantage of other resources (e.g. student workers, instructional designers, etc.) if they are available; ✔ Search for grant opportunities that may help pay for equipment</td>
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<td>🔴 Failure to incorporate effective assessment methods into the course</td>
<td>✔ Use multiple formative assessments in each class session (e.g. clicker questions, mini-group exercises), and capture data from in-class work; ✔ Create low-stakes assessments so that students keep up with their work, but do not obsess over their grades; ✔ Incorporate active observation into daily practice in order to identify when students are struggling; ✔ Provide opportunities for individual, small, and class feedback with the teacher</td>
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<td>🔴 Failure to adopt appropriate technology for the information being taught</td>
<td>✔ Use e-learning technologies to project information; ✔ Follow recommended standards for each technology (e.g. recommended video length, format); ✔ Provide alternative opportunities/formats to learn the material (e.g. students with slow/no internet access should be given the opportunity to view videos at school)</td>
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<td>🔴 Failure to adjust the course structure to fit the new model</td>
<td>✔ Provide multiple opportunities for students to demonstrate understanding (e.g. group projects, experiments, simulations); ✔ Develop a strategy ahead of time to ensure that students receive necessary, timely, and appropriate feedback and help during each class meeting; ✔ The teacher should master the course content so that they can easily shift from one topic to the next without having to consult notes, textbooks, etc.; ✔ Consider rearranging the classroom space to encourage more active/collaborative learning</td>
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Services

The flipped classroom requires significantly more prep time. One study reported that each lecture took 2 hours of development and 2 hours of filming. 1

Key things to be aware of:

- ✔ Converting lectures to flipped classroom assignments requires significantly more prep time. One study reported that each lecture took 2 hours of development and 2 hours of filming.
- ✔ The time requirement will shrink, but not disappear, in subsequent years because the content will need to be updated.
- ✔ Teachers may need to purchase equipment (e.g. video cameras, editing software) or pay for long term storage.
- ✔ While not impossible, it is frequently inadequate for a flipped classroom model.
- ✔ Traditional summative assessments (e.g. exams and projects), while still necessary, do not provide enough insight into the day-to-day learning that takes place.
- ✔ Threat of assessment burnout among students.
- ✔ Overlooking inherent weaknesses or restrictions associated with the video format.

Possible Solutions

- ✔ Use an accepted curriculum design process (e.g. backwards design) to frame the instructional design, and then select an appropriate technology to achieve them.
- ✔ Use multiple technologies to present information.
- ✔ Use accepted formative assessment practices to guide course development.
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