Flipped Out:
Successful Strategies for Improving Student Engagement

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Goals & Objectives

- Differentiate between a flipped class and traditional class.
- Describe the benefits of a flipped classroom.
- Explain one way to flip content in your own class.
Simple Observations

- Typical Kindergarten Classroom
  - Movement
  - Interaction
  - Group work
  - Discussion
  - Manipulatives
  - Active learning

- Teacher moves about room from student to student to work on individual level
- Teacher knows student by name and often knows some information about their life in general
Simple Observations

- Typical College Classroom
  - Students sit quietly at individual desks
  - Listens to lecture
  - Quietly takes notes
  - Very little interaction, movement, or discussion
  - Sparse use of active learning techniques

- Teacher seldom walks about from individual to individual to offer individual guidance
- Teachers may know students first or last name, but typically not both and seldom know any additional information about student.
Kindergarten to College

- Major difference:
  - level of student engagement, and
  - level of interaction with the teacher.

How do we move closer to the engaged model?
What is engagement?

- Students’ willingness to participate in academic activities,
- application of successful cognitive strategies,
- and persistence through difficult tasks.

(Chapman 2003)
Constructivism

- people construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences.
- we are active creators of our own knowledge by asking questions, exploring, and assessing what we know.
- “best learning happens when students are active agents processing content, assuming responsibility for, and exerting control over their own learning processes” (Pang & Ross 2010)

Learning should be an active rather than passive process
Edgar Dale (1954)
Dale’s Cone of Experience

People learn best when they are actively engaged in the learning process!
The Learning Pyramid

Average Retention Rates

<table>
<thead>
<tr>
<th>Method</th>
<th>Retention Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>5%</td>
</tr>
<tr>
<td>Reading</td>
<td>10%</td>
</tr>
<tr>
<td>Audio-Visual</td>
<td>20%</td>
</tr>
<tr>
<td>Demonstration</td>
<td>30%</td>
</tr>
<tr>
<td>Group Discussion</td>
<td>50%</td>
</tr>
<tr>
<td>Practice</td>
<td>75%</td>
</tr>
<tr>
<td>Teaching Others</td>
<td>90%</td>
</tr>
</tbody>
</table>

*Adapted from National Training Laboratories. Bethel, Maine*
Engagement Research

- Traditional lecture:
  - continues to be the main mode of content delivery in higher education.
  - alone yields lower rates of retention of information.

A shift is needed toward a more active and engaging format to increase learning.
Flipping the Classroom

“Flipping” moves lecture outside of class and replaces class time with what used to be homework.

- Transfers ownership of learning to the students
- Personalizes learning for students
- Gives teachers time to explore deeper learning opportunities with their students
- Makes learning (not teaching) the center of the classroom
- Maximizes the face to face time in the classroom.

(Bergmann & Sams 2012)
Many active learning strategies increase student engagement in the classroom: Group work, Differentiated learning, Hands-on activities, Think-pair-share, Inquiry/Discovery learning, Learning Stations, Cooperative learning, Guided reciprocal peer questioning, Problem-based learning.

Where do you find the time in class to use these?
Moving Lecture Out

- Many strategies for moving the lecture out of class:
  - Video recorded lectures
    - Placed on YouTube
    - Placed inside a learning platform (Blackboard/ANGEL)
  - Audio recorded lectures
    - Podcasts
    - Voice narrated PowerPoint presentations
  - Typed out lectures with illustrations
    - Not recommended as highly as other methods, but clear, organized, and attractive documents can be made to cover lecture material effectively.
  - Existing audio/video lectures
    - Khan Academy
    - TeacherTube/YouTube
    - CAUTION – Watch or listen to all of the lecture if you are using someone else’s. The information may be wrong, or even inappropriate for your audience!
Now that you have time...

- Class time is devoted to working through problems, collaboration, discussion, and active learning.

- Class time becomes an opportunity for discussion, explanation, and experimentation of the content.

- Students became more involved with the content.

- Student learning increases as well as their interest in learning.
Benefits of Flipping

- Increased:
  - student engagement
  - higher order thinking skills
  - teacher/student collaboration
  - student/student collaboration
  - time in class to work through problems
  - Opportunity for differentiated learning

- Students:
  - can review the lecture at their own pace and as much as they want
  - become more responsible and take ownership of their learning process

Active learning environment is established!
Flipping Cautions

- Recording lectures and providing the lecture outside of class takes time.

- Don’t get overwhelmed; flip one lecture at a time as you are able. Everything does not have to flip!

- Record in 15-20 minute blocks for ease of recording, ease of viewing, and ease of uploading.
Flipping Cautions

- Moving lecture out of class requires the teacher to be very interactive and prepared.
  - Plan the in-class activities
  - Prepare ahead for times when it doesn’t go as planned (have a backup activity/lesson)
  - Increase student responsibility by allowing them to plan/facilitate some class sessions
  - Think ahead about the questions you may be asked and be prepared to answer questions, or help students arrive at answers.
Flipping Cautions

- Access to technology required
  - Be sure that your method of delivery is accessible to your students
    - Internet access, computer access, podcast access, etc.
    - Technology is entrenched in higher education; we must reconsider how and when we use it.
  - Be sure that you know how to use the technology!
Flipping Cautions

- How do you know the student listened or watched?
  - Use “ticket-in-the-door” method
  - Give pop quizzes for bonus points
  - Include false information in the presentation and have them “catch & correct” the problem
  - Realize that even if lecture is given in class, it still doesn’t mean they are listening! Be creative in both settings.
Flipping Cautions

- It isn’t the answer to everything!

- Sometimes flipping doesn’t work for a particular class or topic.

- Assess your audience and your material – only flip when appropriate.

Lecture still holds a place in education and does not have to be ditched!
Recap

- Watched lecture outside of class
- Began class with quiz ball to check and see if students listened to the assigned lecture
  - Ticket-in-the-door
- Broke into small discussion groups to further explore the concepts of flipped learning using guiding questions. Groups shared responses with whole class.
  - Think-pair-share
- Collaborative groups formed to create a flipped learning plan.
  - Ticket-out-the-door

**Important**: Teacher acts as facilitator and guide throughout all active learning tasks.
Conclusion

- Flipping
  - It’s only ONE way, not THE way
  - It’s about a willingness to change some aspect of your teaching – to make a gradual shift toward engagement and active learning.
  - Get students engaged and active to where they think you are going to ask them something – they write more down and are better prepared and engaged; they remember more!

  “Once you engage the students’ minds, there’s an eagerness to learn, to be right, to master”

  – Erik Mazur, Harvard Professor
References
