The Flipped Classroom: Shifting the Paradigm from Instruction to Learning

October, 2014
EMBA Council Conference
Converging Trends

- Technological innovation has made it easier to distribute lectures
- Large institutions find it makes of faculty time more productive
- Plentiful sources of information means transmission is not as important assimilation
US Higher Education Trends

Focus
Teaching and learning models

Innovation
Blended, adaptive and interactive learning most promising source

Flipped Classroom Myths

- It relies mostly on technology
- It reduces the importance of faculty
- It’s more time intensive for faculty
- It lessens learning outcomes
Flipped Classroom Defined

**Pedagogical model** in which the typical lecture and homework elements of a class are reversed.

**Form of blended learning** where a student is first exposed to new material outside of class and in class, time is used to apply the material in the form of problem solving and discussion.
Foundations of Good Teaching

- Who are the students?
- What do they need to know, to feel, or to be able to do as a result of this course or experience?*
- Where, when, and with what resources will students be learning?

* Ties in with AACSB Assessment of Learning requirement to define learning outcomes.
<table>
<thead>
<tr>
<th>OLD (Before the Flip)</th>
<th>NEW (After the Flip)</th>
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<tbody>
<tr>
<td><strong>BEFORE CLASS</strong></td>
<td><strong>CLASS</strong></td>
</tr>
<tr>
<td>Students read over materials</td>
<td>Students complete interactive learning module.</td>
</tr>
<tr>
<td><strong>DURING CLASS</strong></td>
<td></td>
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<tr>
<td>Students listen to a lecture.</td>
<td>Students practice applying key concepts with feedback.</td>
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<tr>
<td><strong>AFTER CLASS</strong></td>
<td></td>
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<tr>
<td>Students attempt the homework.</td>
<td>Students check understanding and extend learning to more complex tasks.</td>
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Typical Traditional Classroom Example

Before Class

Faculty prepare
• Develops content for lecture
• Assigns homework

Students prepare
• Read chapters or articles
• Submit homework

During Class

Faculty deliver
• Lecturers and presents information

Students absorb
• Listen and take notes
Typical Flipped Classroom Example

**Before Class**

**Students interact**
- Watch video, listen to pre-recorded lecture, read articles, contemplate questions that access prior knowledge
- Reflect on what they learn and post questions they have

**Faculty react**
- Sorts through student’s questions
- Develops class material and scenarios to focus on what is not understood

**During Class**

**Faculty interact**
- Uses Socratic method of teaching posing questions and problems

**Students react**
- Respond individually or work together to answer or solve a problem
Paradigm Shift

Instruction → Learning
<table>
<thead>
<tr>
<th>Purpose</th>
<th>Roles</th>
<th>Structures</th>
<th>Criteria</th>
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<tbody>
<tr>
<td><strong>Instruction (institution-focused)</strong></td>
<td>Deliver content</td>
<td>Lecturer Has knowledge and gives it Impartial of student characteristics</td>
<td>Schedule dictates content Attendance on demand Live delivery in person</td>
</tr>
<tr>
<td><strong>Learning (student-focused)</strong></td>
<td>Elicit exploration</td>
<td>Facilitator Designer of learning experience Responsive to student needs at individual and in groups</td>
<td>Needs dictate content Instruction on demand Delivery fits student’s schedule</td>
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Paraphrasing the Flipping-relevant bits of Barr & Tagg (1995)
Flip: Key Principles

- Active learning
- Student centered
Active Learning

Instructional strategies that involve students in doing things and thinking about the things that they are doing

*Tell me and I'll listen.*
*Show me and I'll understand.*
*Involve me and I'll learn.*

Teton Lakota Indians

(Bonwell & Eison, 1991)
Active Learning Strategies

• Action learning
• Case-based learning
• Peer Instruction
• Project-based learning
• Team-based learning
BLOOMS TAXONOMY

**Knowledge**
- Recall of information;
- Discovery; Observation;
- Listing; Locating; Naming

**Comprehension**
- Understanding; Translating;
- Summarising; Demonstrating;
- Discussing

**Application**
- Using and applying knowledge;
- Using problem solving methods;
- Manipulating; Designing; Experimenting

**Analysis**
- Identifying and analyzing patterns;
- Organisation of ideas;
- Recognizing trends

**Synthesis**
- Using old concepts to create new ideas;
- Design and Invention; Composing; Imagining;
- Inferring; Modifying; Predicting; Combining

**Evaluation**
- Assessing theories; Comparison of ideas;
- Evaluating outcomes; Solving; Judging;
- Recommending; Rating
The Learning Pyramid*

Average Retention Rates

5% Lecture
10% Reading
20% Audio-Visual
30% Demonstration
50% Group Discussion
75% Practice
90% Teaching Others

*Adapted from National Training Laboratories, Bethel, Maine
Bloom and the Flip

- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

Time with Facilitator

Independent Work
Flipped Classroom New Realities

- It relies mostly on technology **LEARNING**
- It reduces **AMPLIFIES** the importance of faculty
- It’s more time intensive for faculty **UPFRONT**
- It lessens **ENHANCES** learning outcomes