Flipped Classroom

WHAT IS IT?

Flipped classroom is a blended learning model characterised by the expectation that students are exposed to content before class so they are prepared for active learning in class. Active learning strategies have been shown to improve student engagement and present a variety of opportunities for formative assessment and feedback. In a flipped classroom, there is a clear link between in-class and out-of-class activities and purposeful use of technologies to support teaching and learning strategies

Related learning approaches, where there is an expectation for students to prepare before a face-to-face session, include:

- Inverted classroom
- Peer instruction
- Case-based learning
- Problem-based learning
- Project-based learning
- Enquiry-based/guided learning.

There are various definitions of the flipped classroom, but the common element and key driver is active learning where students "do things and think about what they are doing" (Bonwell and Eison, 1991). To facilitate this, the flipped classroom requires pre-class work where most information transfer occurs, preparing students for in-class active learning.

WHY USE IT?

- **Active Learning**: "Flipped classrooms promote active learning by encouraging students to engage with the material through discussions, problem-solving, and hands-on activities during class time."
- **Individualized Pace**: "Students can learn at their own pace, rewinding and reviewing lecture materials as needed, which accommodates different learning styles and speeds."
- **Increased Interaction**: "Class time is freed up for more interactive and personalized learning experiences, such as group work, projects, and one-on-one instruction."
- **Deeper Understanding**: "Students have the opportunity to delve deeper into the subject matter during class, applying concepts and theories in a collaborative setting."
- **Enhanced Student Engagement**: "By moving traditional lectures to homework time, students come to class prepared to engage in meaningful discussions and activities."
- **Immediate Feedback**: "Teachers can provide immediate feedback and support during class activities, helping students to correct misunderstandings in real-time."
- **Development of Higher-Order Thinking Skills**: "Flipped classrooms focus on developing higher-order thinking skills, such as analysis, synthesis, and evaluation, through active classroom participation."
- **Collaborative Learning Environment**: "This model fosters a collaborative learning environment where students can work together to solve problems and explore new ideas."
- **Utilization of Technology**: "Flipped classrooms leverage technology to deliver content in innovative ways, making learning more engaging and accessible."
- **Preparation for Future Learning**: "This approach helps students develop skills that are crucial for lifelong learning, such as self-directed learning, critical thinking, and collaboration."

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🔘 HOW DO I DO IT?

Implementing a flipped classroom involves several key steps to ensure a smooth transition and effective learning environment as follows.

1. Plan Your Curriculum
- **Identify Content**: Determine which parts of your curriculum can be delivered outside the classroom through videos, readings, or other resources.
- **Set Objectives**: Clearly define what you want students to achieve from both the out-of-class and in-class activities.

2. Create or Curate Materials
- **Video Lectures**: Record your own lectures or use high-quality educational videos available online. Keep them concise and focused on key concepts.
- **Readings and Resources**: Provide articles, textbook chapters, or other reading materials that support the video content.
- **Interactive Content**: Include quizzes, discussion questions, or other interactive elements to keep students engaged with the material.

3. Prepare In-Class Activities
- **Active Learning Exercises**: Plan activities that promote engagement and interaction, such as group discussions, problem-solving tasks, labs, or case studies.
- **Collaborative Projects**: Design projects that require students to work together, applying the knowledge they've gained from the out-of-class materials.
- **Assessments and Feedback**: Incorporate formative assessments to gauge understanding and provide immediate feedback during class.

4. Set Clear Expectations
- **Communicate the Model**: Explain the flipped classroom model to your students and the reasons behind it. Make sure they understand the expectations for out-of-class and in-class work.
- **Provide Guidelines**: Give clear instructions on how to access and engage with the out-of-class materials, as well as what they need to prepare for in-class activities.

5. Implement Technology
- **Learning Management System (LMS)**: Use an LMS like Moodle, Canvas, or Google Classroom to organize and distribute materials, track progress, and facilitate communication.
- **Video Hosting**: Utilize platforms like YouTube, Vimeo, or your institution's video hosting service to share lecture videos.
- **Interactive Tools**: Integrate tools like discussion boards, quizzes, and collaborative platforms (e.g., Padlet, Flipgrid) to enhance engagement.

6. Monitor and Adjust
- **Gather Feedback**: Regularly solicit feedback from students about the flipped classroom experience and make adjustments based on their input.
- **Assess Progress**: Monitor student performance and understanding through both formative and summative assessments.
- **Reflect and Improve**: Continuously reflect on the effectiveness of your flipped classroom and look for ways to improve the content, activities, and overall approach.

Example Workflow
1. **Pre-Class**: Students watch a 15-minute video lecture and complete a short quiz on key concepts.
2. **In-Class**:
   - **First 10 minutes**: Brief review and Q&A session based on the pre-class quiz results.
   - **Next 30 minutes**: Group activity where students apply concepts to a real-world scenario.
   - **Last 10 minutes**: Individual reflective writing exercise to consolidate learning.
3. **Post-Class**: Students submit a summary of what they learned and any remaining questions, which informs the next session's focus.

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WHAT SHOULD I CONSIDER?

Flipped classroom requires more than dividing a course into face-to-face and online components. Careful planning is needed to ensure that your course will flow logically for your students and take into account factors such as:

- Design models and principles
- Project planning
- Integration of technology
- Support for students

WHAT IF I WANT MORE?

- Educause (2012) Seven things you should know about the Flipped Student Strategy White Paper Classroom. Retrieved from: https://net.educause.edu/ir/library/pdf/eli7081.pdf
- Mazur, E. (1997). *Peer Instruction: A User's Manual.* Series in Educational Innovation, Prentice Hall, Upper Saddle River, NJ.