

Flip Classroom

My Approach

I have been teaching two subjects: Manufacturing Management, ME-Part-I, and Facility Design and Planning, ME-Part-II for ME (Manufacturing) since 2008-09 till date. The number of students is 18 who are admitted from different parts of the state, most of them employed, attending traditional class is found to be difficult. Hence following strategies are adopted:

1. Floating the lesson planning before the start of Semester including Question Bank, scheduled home assignments, a list of reference books, etc.
2. Dispatch of course material topic wise that includes notes, websites references and ppt presentations, numerical, latest development, published articles, etc.
3. Students in a group of 3-4 approach me and we spend 2-3 hours for solving numerical, clarifying fundamental concepts, exchange of information, discussion on traditional approach and current development. Like referring to MPI, CII reports, obtaining additional articles from Digital Library, etc.
4. Interaction from home is a continuous feature.
5. For all the above e-mail is extensively used, occasionally cell is used.
6. Students appear examination as they find comfortable and get through. Normally two semesters are courses taught students clear within 3-4 semesters with good examination scores.

This approach is like Flip Classroom and even used for UG courses like Industrial Engineering, and Industrial Management and Quality Engineering. The concepts used are something like this:

- Flip Classroom is inverted classroom, see Fig. below.

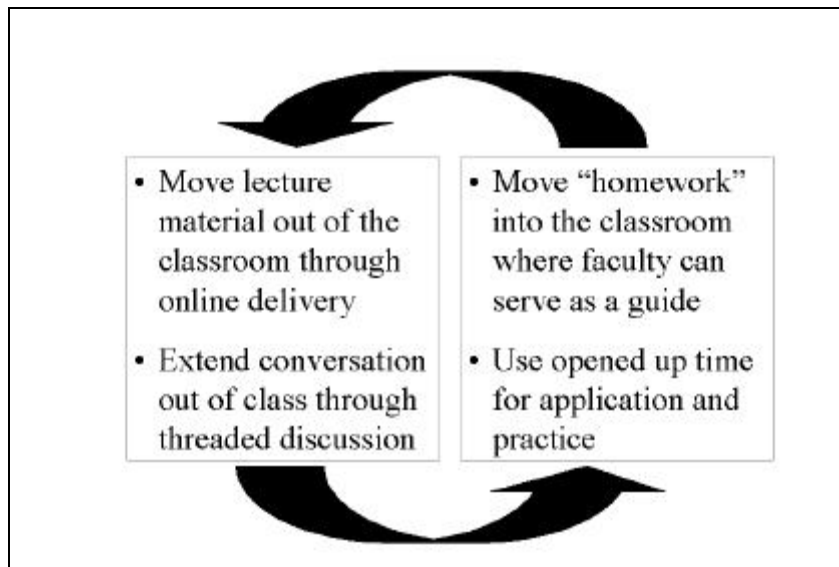


Fig. : Flipped (Inverted) Classroom.

References:

1. Baker J W & Mentch M W, 2000, IMOWA curriculum materials, Retrieved December 11, 2002, <http://www.imowa.org/curricula/flip/>
2. Strayer J F, 2007, The Effects of the Classroom Flip on the Learning Environment: A Comparison of Learning Activity in a Traditional Classroom and a Flip Classroom that used an Intelligent Tutoring System, al Ph D Dissertation, the Ohio State University.

The basic principles are:

- Provides lecture materials outside class, while using class time to explore concepts and key points in material.
- Creates engagement and discussion in the classroom.
- Makes students accountable for class preparation.