Flipped Classroom (FC): Introduction

Video Links (to be flipped before the seminar)

• What:

https://youtu.be/Z58CqX3QgKY https://youtu.be/r2b7GeuqkPc

- Why:
- <u>https://youtu.be/9aGuLuipTwg</u>
- https://youtu.be/EceWjPUgWc8

What is FC?

FC moves **direct-instruction lectures** outside the classroom (usually via online videos) and reserves the in-class time for **higher-order student-centred learning activities**.



Image extracted from http://www.yuja.com/web-capture/

What is FC?

A FC does not necessarily result in flipped learning (FL).

FL is not the same as "school work at home and home work at school".

- Flexible environment (F)
 - -FCs accept a variety of learning modes.
 - -Students are allowed to learn at any time and any place.
 - -Teachers who practise FL are expected to be **flexible in** meeting student needs.
 - -Teachers are still obliged to make **objective assessment of student understanding**.

- Learning culture (L)
 - -In traditional classroom, teachers are the main provider of information and knowledge.
 - -In the FL model, a teacher-centred approach is changed to a **student-centred approach**.
 - -Students review the content outside class and the in-class time is spent on in-depth exploration of the content through interactions with their peers and teachers.

- Intentional content ()
 - -Teachers deliberately examine the content they need to deliver in class while leaving other materials for students to explore outside class.
 - -Teachers should constantly think how FL can be used to help students achieve **conceptual understanding and procedural fluency**.
 - -Teachers adopt a variety of instructional methods in order to maximise the classroom learning opportunities.

- Professional educator (P)
 - In flipped learning, professional educators are more important than the instructional videos.
 - -They must endeavour to provide individualised support to students at the expense of using direct instruction during class time.
 - -The important challenge for educators lies in how they can capitalise on the **affordances of the model** to enhance student conceptual understanding and procedural fluency (Gojak, 2012).
 - -All these call for professional educators to be **reflective in their teaching practices**.

Advantages of FC

- Make learning central rather than teaching
- Foster independent learning
- Promote peer interaction and collaboration
- Encourage higher student engagement
- Provide personal-wise / group-wise attention, feedback and assistance to students

Dale's Learning Pyramid Model



Source: Edgar Dale (1969), Student Success and Support Program at Sacramento City College Image extracted from http://www.scc.losrios.edu/successcoaching/strategies/learning-how-to-learn/

Anderson et al.'s Revised Bloom's Taxonomy



Image extracted from http://melanielinktaylor.mzteachuh.org/2015_10_11_archive.html

Learning Pyramid Model x Revised Bloom's Taxonomy



Three Essential Design Principles for a FC setting



Fig. 4 Design principles of a flipped classroom

Source: Hsieh, B. (2017). Step by step, slowly I flip. In L. S. Green et al. (eds.), *The Flipped College Classroom: Conceptualized and Re-Conceptualized* (pp. 11-36). Switzerland: Springer International Publishing.

Suggested In-Class Learning Activities

Table 2	Sample	in-class	interactive	activities
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Activity	Description	Goal
Think–Pair– Share	Students write or think about a given prompt/question, then share with a partner before sharing aloud	Increase and scaffold student participation
Class discussion	Students discuss class topic in small or large groups	Deepen understanding, share perspectives
Jigsaw Readings	Students are assigned different segments of a particular text to become experts on. They share their understandings of their segment of the text in small groups and learn from peers about other assigned sections.	Reduces cognitive load by chunking reading material; Encourages interaction, participation and accountability for knowledge
Group work on problem sets	Students work in groups on challenging problem sets	Scaffold understanding through peer interaction and instructor support
Scenario/Lab Activities	Students engage in hands on learning in authentic disciplinary situations	Encourages interaction and conceptual application
Rubric-based feedback	Students receive peer and instructor feedback using rubrics	Students interact with rubric criteria, understand how to improve

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