Using flipped learning to engage and integrate international students
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Overview

• Foundation Programme at UoN – Present and future

• What is ‘flipped learning’?

• Why use it?

• How to facilitate it?

• How to make it a success – my experience
Typical cohorts to 2017:

• 110 – 140 students
• 20% female
  (2016/17: Male 92/Female 22)
• 10% U18’s
• 50% home/EU
  50% international
  (2016/17: HEU 69/Int’l 45)
Typical cohorts to 2017:

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but ..........
Moving towards 2020:

- 210 – 280 students
  - September intake
  - 40% home/EU plus
  - 60% international
- 30 – 60 students
  - January intake
  - 100% international
- 9 new staff
What is ‘flipped learning’?

• Traditional lecture followed by ‘homework’ elements are reversed

  → Students study new material in advance of class

  → Students attend class with prior knowledge

  → Prior knowledge is assessed

  → During class, students undertake further enquiry, apply knowledge to problems, participate in discussions to consolidate learning (small group work)
What is ‘flipped learning’?

Conventional classroom:

1. Lecture in-class
2. Homework

Flipped classroom:

1. Independent prior learning
2. In-class learning

Bloom’s taxonomy:

- Remembering
- Understanding
- Applying
- Analysing
- Evaluating
- Creating
Why flip the classroom?

- Promotes active learning
- Facilitates inclusive teaching
  - Students in control of own learning
  - Access material in different formats
  - Work at own pace
  - Discussions structured to engage all group members
Why flip the classroom?

• **Improves student engagement**
  
  → Students can’t be ‘invisible’
  
  → Assessments encourage attendance
  
  → Students did more preparation for flipped sessions than others
  
  → Students undertake deeper learning in the presence of the lecturer (Bloom’s taxonomy)
Why flip the classroom?

• Fosters interaction across demographics
  → Forces international students to practise English in an engineering context
  → Students formulate friendships outside their first language/domicile group early in the course

• Immediate peer and tutor feedback

• Improves student achievement and experience
  → Better grades
  → Good student feedback (eventually!)
How to make it work?

- Accommodation
How to make it work?

• Accommodation

• Explain process to students
  → What, why, how, benefits, expectations

• Select topic to flip – not all classes

• Provision of learning material prior to class
  → VLE – notes, screencasts, videos, links to websites, suggestions for own research
How to make it work?

• Assessment of prior learning
  → Quiz/test, MCQ, online, audience response systems
  → Has to be credit bearing

• Selection of student groups
  → Initially, friendship groups
  → Random allocation
  → Assigned by demographics
How to make it work?

• **Control the environment**
  → Chunks of activity, time-keeping

• **Assigning and rotating group roles**
  → For example, chair, note-taker, spokesperson, data collector etc.
Experience suggests positive outcomes ……

- Promotes active learning
- Facilitates inclusive teaching
- Improves **student engagement**
- Fosters **interaction across demographics**
- **Immediate** peer and tutor feedback
- Improves **student achievement** and experience
Experience suggests positive outcomes ......

Recent literature also suggests positive outcomes:

• “.... positive gains in problem-solving skills, conceptual understanding, student retention ...”

“Most studies reported high student satisfaction and increased performance in a flipped classroom environment.” (Kerr, 2015)

• “International students who connect with home students at an early stage are more likely to feel a sense of belonging, which can translate to academic advancement and personal growth” (The British Council, 2014)
Literature suggests positive outcomes:

Summary of outcomes from articles reviewed by Karabulet-Ilgu et al. (2017)

- Flipped is more effective: 15
- Flipped is more effective and/or no difference: 4
- No difference: 9
- Flipped is less effective: 2
- Flipped is less effective and/or no difference: 1
What did the students think about the sessions?

- Initially reticent but ....
- More positive than negative comments when surveyed
- When asked if ‘flipped learning’ should be used for next cohort, majority recommend.
Summary of potential outcomes

- Better engagement
- Better attainment
- Positive student feedback
- Students (eventually) enjoyed it
- Improved student experience
References


Further information:
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Or HEA Knowledge Hub:
https://www.heacademy.ac.uk/knowledge-hub/flipped-learning
or
http://flippedclassroom.org

Thank you.