

OUTCOMES

- Skills and techniques you can apply immediately in your units
- Expanded network of peers and colleagues confronting similar issues
- Critical insights and reflection on tricks and traps relating to the implementation of active learning techniques in your units
- Increased confidence to embrace the cultural change required for implementing and experimenting with new engaging learning activities

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This Workshop is an activity deriving from the project, Radical transformation: re-imagining engineering education through flipping the classroom in a global learning partnership, supported by the Australian Government Office for Learning and Teaching.



INCOLLABORATIONWITH







Stanford University





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WELCOME AND OVERVIEW

Throughout the day, you are going to experience flipped classroom approaches. We highlight these throughout the booklet by using these sticky notes.

Questions

- 1. What is the thing that most interested you about the video/article/infographic? What did you want to know more about?
- 2. How does the video/article/infographic relate to your own teaching?
- 3. List three key things you want to get out of the "How to flip a classroom and land on your feet Workshop".

We'll display and collect your answers but you may want to capture so	ome thoughts here:
	You were all given instructions for Pre- Learning activities (Appendix A)
	This activity is one of the ways we use to quickly bring those who didn't do it on to the same page as everyone else.

Team agreements

Write 3-4 behaviours for working in a team			

EXPLORING UNDERSTANDINGS OF FLIPPED CLASSROOMS

We will lead a modified 'six thinking hats' session to explore, and make explicit, hopes and fears for flipped classrooms.

Communication between students in flipped classrooms underpins collaborative learning. To ensure there is trust, an exercise such as this makes feelings and preconceptions clear. Shared meaning can then be much more easily developed.

RED HAT - How do you feel

Show either your **yellow** (YES) or **black** (NO) card in response to:

- Do you feel daunted at the prospect of flipping the classroom?
- Do you feel pressured into flipping your classroom?
- Do you feel excited with the prospect of flipping the classroom?
- Do you think that you're going to meet resistance from students in adopting a flipped classroom

You are likely to be surprised at how many people feel just like you. This is a very quick method for gauging the class feeling.

BLACK HAT - What are the potential barriers and obstacles?

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Work with the group at your table and decide the two biggest problems you have or

Responses will be collected from each table and displayed electronically using LinoIT

¹ 1 de Bono, E. (1985). Six Thinking Hats: An Essential Approach to Business Management. Little, Brown, & Company

YELLOW HAT - What will be the benefits? Work with the group at your table and decide the two biggest benefits of implementing a flipped classroom. Responses will be collected from each table and displayed electronically using LinoIT GREEN HAT - What possibilities, alternatives and new ideas does the flipped classroom elicit? Write your ideas on yellow sticky notes and post them on a poster, in categories if you like, for reference in Session 3 when your group will be planning a flipped classroom.

Diagram: Flipped Classroom Design Considerations

of where your course sits within a curriculum and the context in which that curriculum operates. 1. You will need an appreciation

what can you borrow, what can you 6. Resources - what do you have, create, who can you empower?

People-Spaces-Tools

5. The design: refer to the Bare Bones model flipped classroom will still operate within a than putting content online and that your should remind you that flipping is more for the details but essentially this step curriculum and a particular context.

if current delivery is working why are flipping? Would a partial flip work? 3. Is this something that needs vou changing?

CURRICULUM

CONTEXT

Course

EVITARRAN

DRIVERS:

Learning Objectives

- Institution/Management
- Academics/Students
- Industry
- Technology
- Global trends

show success, to allow research etc. 7. Evaluation - for improvement, to

design. For example, does your institution support flipped classrooms and what's

You will need an appreciation of your drivers and how they can underpin your

the opinion of your colleagues? What are your student characteristics – do they

know how fipped dassrooms operate? Does industry want to input into the

process - how authentic will your classroom activities be? What will technology

support? What can you use from elsewhere?

Design with these three elements in mind - they are fundamental to the success of

your flipped classroom.

2. Shared understanding 3. Ownership of learning 1. Learning Outcomes Communication **EVALUATION** Assessment CURRICULUM Activities Content Course

LEARNING OBJECTIVES

What do your students need to know and do, and to what level?

CONTEXT

Design with your students, curriculum, resource availability, and external drivers in mind





1. Independent (Pre-) Learning

What information do your students need?

How will students access this content?

Is there any preparation for the active session?

What do you need to ensure students to complete the pre-learning?

What resources do you need?



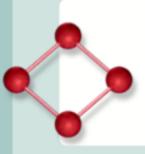
2. Engaged Learning in Class

What kinds of activities will develop student learning?

How will you foster intra-class communication?

What is the driver for students to attend the session?

How will students demonstrate their learning and how will you evaluate success of your flipped classroom? (What evidence will you gather?)



3. Integration

What brings relates all the learning activities together?

Is there an activity, tool or resource that reminds the students how it hangs together?

How does this class serve the course learning outcomes?



4. Reflection

Did you facilitate effectively?

Did the students achieve ownership of learning?

Is there a shared understanding of meaning?

EVALUATION

NARRATIVE

PLANNING A FLIPPED CLASSROOM

At the end of this session you should:

- recognise the importance of understanding your context to underpin your flipped classroom design;
- appreciate the need for a structured approach to flipped classroom design;
- appreciate how a collaborative approach to solving a problem works; and
- be able to apply a method for planning a flipped classroom.

We all know that our students learn well from each other and that working as a team they can produce amazing work. See if you can adopt this mindset today

 listen to the others at your table, build on their experiences as well as your own, and ask questions of the group to explore different perspectives.

Your table will collaboratively produce a flipped classroom plan; to help you with this process, we have produced two diagrams (see following pages):

- Flipped Classroom Design Considerations (showing how the design fits within the big picture and how this necessarily influences your design; and
- Bare Bones Model: summarising the flipped classroom design process that you will work through.

SESSION EVALUATION

If you want a more detailed evaluation of your classroom, you might consider using a specific instrument such as the Teaching Dimensions Observation Protocol (²TDOP), the Classroom Environment Inventory of student ³perceptions, the ASSIST ⁴instrument, or an adaptation of these.

Appendix D contains our data collection and evaluation plan for ENGG1200 as an example of what you might include.

² Hora, M., & Ferrare, J. (2010). The Teaching Dimensions Observation Protocol (TDOP). Madison, WI: University of Wisconsin-Madison, Wisconsin Center for Education Research.

³ Fraser, B. (1998). Classroom environment instruments: development, validity and applications, Learning Environments Research, 1, 7-33.

⁴ Entwistle, N. J. (2009). Teaching for Understanding at University Deep Approaches and Distinctive Ways of Thinking. New York, N.Y: Palgrave Macmillan

TOPIC, LEARNING OUTCOMES, AND CONTEXT

In your groups decide on the context for your flipped plan.

Students	Number in cohort:	60	150	300
	% International	10	20	30
	Year level:	First year	Later year - undergraduate	Postgraduate
	Mode:	On Campus	Distance	Both
	Experience with flipped	None	Some	Lots
Curriculum	Integration	New topic - taught once	New topic - fundamental	Done before - next level
	Relevance of topic to industry	Low	Medium	High
Institution	Attitude to flipping	Non-committal	Supportive	Mandated
People	Who have you got?	Just you really	You + shared team	Full team + Ed. designers
Spaces	What have you got?	Lecture + tutorial	Flat floor spaces	Labs & studios
Tools	What have you got?	Fundamentals	Limited funding	Funding to develop tools

Choose a topic for your flipped class from the following:

- 1. Reflective practice
- 2. Professional writing
- 3. Teamwork
- 4. Leadership
- 5. Information Management
- 6. Other...

Write at least two learning outcomes for the class

What are the two most important things students need to know about the topic? What are the two most common questions students ask you related to this topic?

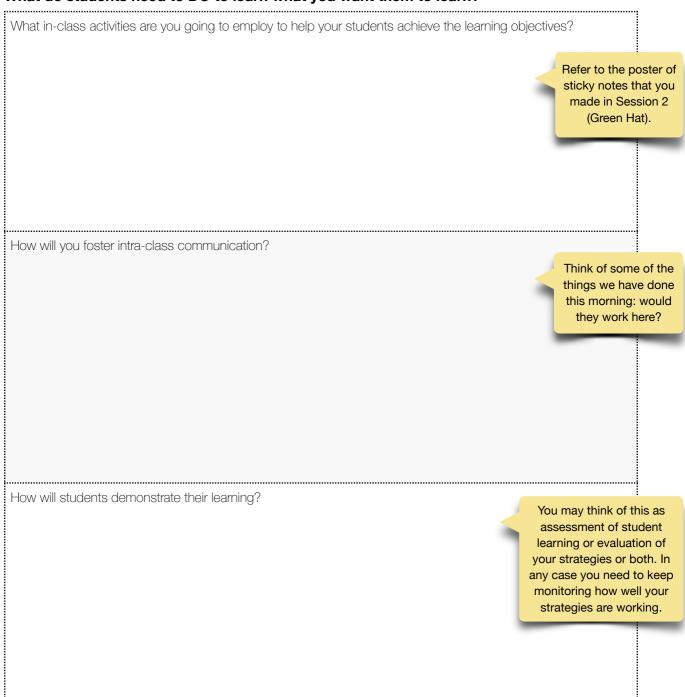
INDEPENDENT (PRE-) LEARNING

What do your students need to know?

What do your students need to know:	
What are the information needs?	
How will your students access this content (e.g. podcasts, readings etc.)?	
Will they do any preparatory activities other than accessing the content?	
Do you need to do something to ensure that they do the pre-work?	You might also like to consider: • Is it important that everyone does it? • What happens if students don't do it? • Will you assess it? • How will you communicate its importance to students?
What resources will you need? (Can the class itself generate any of them?)	importance to students:

ENGAGED LEARNING IN CLASS

What do students need to DO to learn what you want them to learn?



How will you evaluate the success of your flipped classroom?	Think of some of the things we have done this morning would they work here?
What data will you collect data (e.g. 1-minute in class polls, structured observations, etc)	to demonstrate:
student learning	
• W ye • W th • W fro	u might also like to consider: (ill it be compulsory to attend? (les, how will you police?) (hat happens if students missive session? (ill you assess anything arising om the session? ow will you set up work groups? (hat resources (people, space, echnology etc.) will you need?
• flipped classroom success	

INTEGRATION

How will students develop a narrative around the session that helps them contextualise what they have learnt?

What relates all the learning activities together? Is there an activity, tool or resource that reminds the how it hangs together?	he students	
	What will you provide structu coherence in flipped classro How will student meaning of the saims?	re and your oom? ts mak
How does this class address the course learning outcomes?		
1	An important que to ask, but perhap that's difficult to a here as you have designed a flipp class based on a rather than on a cor curriculum	os one nswer e just oed topic course

REFLECT & SUMMARISE

How will students develop a narrative around the session that helps them contextualise what they have learnt?

Reflect as a table on your flipped classroom plan and produce a summary diagram or list of porthart that you can share with the rest of the room (2mins max for each presentation)	oints on your flip
	Reflection is an important part of active learning and in the flipped classroom encouraging reflection helps students to tie all of their experiences together.

BLIND VOTE

Close your eyes. One vote per person. No voting for yourself!

Listen to each others presentations and vote (this is competitive and there are prizes):

'Which plan are you most likely to use in your own teaching'

DEBRIEF

WHAT WAS MOST VALUABLE TO YOU?

What were the moments of deepest insight to you?	
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NEXT STEPS

WHAT ACTION WILL YOU TAKE?

What have you taken away from today that you act on in the next 24hrs

:	
Reflect	
Plan	
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∧ ot	
Act	

WHAT ACTION WILL WE TAKE?

- Run a follow up session to hear/share your flipped activities/
- Publish survey results
- Collect resources and artefacts / share through Mahara portfolio
- Build our flippin' community (Yammer/Mahara)
- Send you a participation badge in Moodle

APPENDIX A PRE-LEARNING

Resources were provided for you to engage with content and prepare before class.

To prepare for this workshop in a minimum of 10mins please choose ONE of the 5 pre-learning resources below and answer the following 3 questions and bring them with you.

One of the first workshop activities will be working in groups to share your insights on these 3 questions:

- 1. What is the thing that most interested you about the video/article/infographic? What did you want to know more about?
- 2. How does the video/article/infographic relate to your own teaching?
- 3. List three key things you want to get out of the "How to flip a classroom and land on your feet Workshop".

Watch Flipping Classroom Vldeo on <u>lynda.com</u>	Parts 1 (3mins) and part 2 (2mins)	http://www.lynda.com/Business- tutorials/Flipping-Classroom/ 144198-2.html
Watch and read 'What is a flipped classroom?'	Video (60sec) and article	http://blog.peerinstruction.net/ 2013/04/22/ what-is-a-flipped- classroom-in-60- seconds
Infographic - A new method of teaching is turning the classroom on its head.	Graphic	http://www.knewton.com/flipped- classroom
Article. The 2 most powerful flipped classroom tips I have learned so far.	Article	http://blog.peerinstruction.net/ 2013/04/16/ the-2-most-powerful- flipped-classroom- tips-i-have- learned-so-far
Article. Can you flip large classes?	Article	http://blog.peerinstruction.net/ 2012/04/06/can-you-flip-large- classes

APPENDIX B RESOURCES

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