How to design and deliver successful tutorials

Introduction

In order to deliver an effective tutorial you need to have a good tutorial plan. An effective tutorial here means a tutorial that facilitates and advances students' learning in the discipline but also that is not stressful for the tutor. This guide is intended to help you to design an effective tutorial. It begins with a brief discussion about how to think about student learning, provides some tutorial design plans and walks you through the design process.

The rationale

In order to design a successful tutorial you must have some idea about how students learn and what promotes this. Even if it is not consciously articulated, behind all teaching is an implicit theory of learning. Making explicit the theory that informs tutorial practice will not only help you to feel confident in designing and facilitating tutorial but it will allow you to identify how to address weaknesses (See King (1993) for further discussion of this point).

How students learn

There is a long history of research about how students learn. The main idea is that, while students might learn something from listening to a tutor tell them something, they will learn far more, and more deeply, by doing something themselves: for example by trying to put concepts in their own words, by discussing and debating the merits of ideas with other students, or by explaining their thinking as they try to solve a mathematical problem. The basic idea is that students construct new knowledge by interacting with and by transforming received information in order to own it and make it personally meaningful. This is sometimes called 'active learning', 'constructive learning' 'deep learning' and even 'experiential learning'. The term we use is **self-regulated learning**.

The overall idea is that tutorials must develop students' capacity to monitor, evaluate and regulate their own learning independently of the tutor. This means that everything a tutor does in a tutorial should, as far as possible, over time, be placed in the hands of the student. Instead of the tutor asking questions, the tutor should organise the tutorial to elicit student questions. Instead of the tutor answering questions he or she should first see if other students, either alone or in groups, can construct answers. Instead of tutors presenting

models from the literature he or she might ask students in groups to present the model or even to construct their own model before comparing it with the one in the literature.

Working in groups

While there are times when working on academic work alone is valuable, there is a vast body of research evidence showing that interaction with others can also deepen learning. The most important finding in this research is that when a group of students come together to discuss an idea the learning of all members of the group improves as compared to solo working. This is true even if they do not actually reach an agreed conclusion. It is the variation in perspectives and the dialogue that ensues that promotes learning.

Effective designs for small group learning

There's a variety of ways in which you can structure your tutorials in order to help students to work together successfully. Here we share ten that we have found to be the most successful. You can use these on their own, or use a variety of them during a tutorial session. You might choose different designs each week depending on the tutorial topic, or find a design that works best for your tutorial groups and use that each time. The important thing is to think through for yourself what you want the tutorial to achieve and choose a design that works best for you and your students.

Rounds	Brainstorming
Go around the room and ask each student to say one sentence about a question or topic. This can work well as an icebreaker at the beginning of a session or as a wrap up activity at the end of a session.	This method can be a good way of generating diverse ideas quickly. Stand at the board (or, better, get a volunteer to do this) and ask students to call out ideas in answer to a question such "how do we?" "what do we know about?"
Dair dialogue, version 1	This technique can be used to generate a set of topics to be allocated to small groups for the next section of the tutorial.
Pair dialogue, version 1	Pair dialogue, version 2

Pu	t students into pairs and ask them to	Put students into pairs and ask them to	
spe	eak in turns to each other about a pre-	speak in turns to each other about a pre-	
agreed topic or issue. Each student must		agreed topic or issue. Each student must	
list	en to the other without responding	listen to the other without responding	
be	fore both students have had a turn. This	before both students have had a turn. This	
is a	a good way of getting quieter students to	is a good way of getting quieter students to	
articulate their thoughts in a non-		articulate their thoughts in a non-	
threatening situation.		threatening situation.	
This activity can be used to feed into other		Ask each student to summarise what their	
activities such as TPS or buzz groups (see		partner said into a sentence or two and	
below)		feed this back to the whole group.	
Think, pair, share (TPS)		Buzz groups	
1.	Give students a question and ask them	Put students into groups of two or three	
	to think about it alone without speaking	and give them a topic or issue to discuss for	
	for a very short period of time (just a	a few minutes.	
	couple of minutes).	Reconvene as a whole class and get each	
2.	Next get them to turn to their	group in turn to say one thing that they	
	neighbour and ask them to state their	discussed in their group. Keep going around	
	answer and justify their reasoning.	the groups until there are no further	
3.	Now put them into larger groups of four	answers.	
.	or five and repeat step 2.		
4.	Finally have a whole group discussion	Alternatively give each group a different	
	where each group feeds back in turn.	issue, and allow each group time to	
	Can you reach a consensus?	feedback about their issue in turn.	
De	bate	Peer critiquing	
1.	Find a controversial question (even	In order for this to work students need to	
	better, get the group to come up with	come to the class with something that they	
	one). Appoint a chair for the debate (or	have already produced and that they are	
L			

	choose to chair it yourselves). Phrase	willing to share with a peer. This could be a	
	the question as a standard debate	previously submitted essay, a draft of an	
	question: "This house believes that"	assignment or presentation, or maybe just	
2.	Divide the class into two, either arbitrarily or by letting them choose	an outline of something they intend to write.	
	sides. Give them time to put together	Put the students in pairs and give them	
	their arguments.	time to read each others' work. As they do	
3.	Give each side a set amount of time to make their arguments verbally. The side in favour of the argument go first, then the side against.	so, ask them to consider what has been done well, and what could be done better. Each student then provides feedback to their partner in turn. You could take the feedback criteria for your course and use this to provide a set of guidelines for students to provide feedback: so each student provides feedback on what was done well and what could be done better according to each of the set criteria.	
4. 5.	Allow each side a couple of minutes as a group to come up with a response. Let each side respond. The side against the argument go first this time, then the side for the house. Reconvene as a whole class. Discuss		
	which side each student thinks was more successful and why. Vote as a class.	You could also ask students to tell their partner if there is any specific aspect of their work that they would like to get feedback on.	
Jig	saw groups	Problem based learning	
1.	Divide your tutorial topic into sections and give one section to each group (the expert groups). Students work in their expert group to help each other to learn this topic.	 Divide students into groups of about 5 and give each a topic (either the same topic each, or different ones). Each group appoints a scribe and a chair. 	

- Now rearrange the groups. In each new group have one member of each expert group (the jigsaw groups). Each student in turn teaches the other members of the jigsaw group about their expert group subject.
- Reconvene as a whole class. Each group feeds back one thing that they have learned.
- Group defines the problem to be discussed. Scribe records agreed version.
- Group brainstorms possible answers.
 Scribe records agreed version.
- Reconvene as a whole class. Each group in turn feeds back their scenario and agreed solution.

Designing a successful tutorial

A key principle of self-regulation is to increase student agency and ownership for learning. This means that, as you design your tutorials, you should be thinking about how you can involve all of the students at each stage of the tutorial.

First make a tutorial design template (we have provided one for you on the next page). This is a single sheet of A4 paper, divided vertically by a line down the middle, with the 'tutor' written on the top left hand side and 'students' written on the right. The first thing to do is to write down what you (the tutor) will do on the left and then write down what the students will do on the right (with this side showing when students are working individually, in pairs and in groups). Having done this, have a look at each entry on the left hand side and ask yourself: "can this be re-designated as a student or student group activity?". If it can, move it over to the right hand side of the page. The key to this is to see how many of the entries on the left hand side you can move over to the right hand side. Now you have a tutorial plan.

Next think about timings for each entry on the plan. Be realistic about this, and remember to include time for students to move around if this is part of your tutorial plan. Also remember to leave sufficient time for a feedback activity at the end to wrap the lesson up and make it feel complete to the students. Write the timings for each stage of the tutorial onto the tutorial plan you have completed, and make sure they add up to the total amount of time allotted. Think about an icebreaker activity. You might not need this for each tutorial, but it can be a good idea for the first time of meeting. You could use one of the activities above, such as **rounds** or **brainstorming** as an icebreaker that gently starts students thinking about the tutorial topic.

Tutorial Design Template

Tutor	Students	Timings

How to form groups

There are many different ways of forming groups. Are you going to let students choose who they work with, or are you going to stipulate who works with each other? Do you want your students to work in the same groups throughout the semester, or work with different students each time? If you decide on group formation before the tutorial, what do you do if students are absent and you have some very small groups? There are no right or wrong answers here, but it is important that you spend time thinking about this as you design your tutorials.

One very quick way of forming groups is to put students together depending on where they are sitting. Another successful method is to decide how many groups you need (based on the tutorial design, of the number of students present) and then go around the room allocating the first student to group 1, the second to group 2, etc. until all students are allocated to a group.

Final thoughts

This guide is designed to get you thinking about the process of designing and delivering a successful tutorial. The main point is to realise that you are there to help facilitate student learning, you are not there as a substitute for a lecturer. If the students ask you questions that you are not sure of the answer is, a perfectly acceptable answer is to say that you don't know, but that you will endeavour to find out. If you say this, make sure that you do find out and let the student know the outcome.

At the end of this guide you will find some further resources which we hope will help you to further develop yourself as a teacher in HE. Good luck, and remember to enjoy yourself.

Further Reading

Barr, R. B. and Tagg, J. (1995) From teaching to learning – a new paradigm for undergraduate education. *Change: The Magazine of Higher Learning*. 27: 6. 12-26.

King, A. (1993) From sage on the stage to guide at the side. *College Teaching*. 41: 1 30-35.

Mills, D, and Alexander, P. (2013) *Small group teaching: a toolkit for learning*. Higher Education Academy. Available at:

https://www.heacademy.ac.uk/system/files/resources/small group teaching 1.pdf

Race, P. (2015) The Lecturer's Toolkit: a practical guide to assessment, learning and teaching. Routledge: London. You can find an online copy of chapter four of an earlier edition of this book online (with the author's permission – this link is taken from his website) here: Extracts-from-Chapter-4-from-the-Lecturers-Toolkit-handout.doc (665 downloads)

Further training and support

The Learning Enhancement and Academic Development Service (LEADS) run courses for GTAs:

- GTA Introduction to Learning and Teaching in Higher Education (GTA ILTHE) This is a statutory training course provided by LEADS as an introduction to teaching and learning for new GTAs https://www.gla.ac.uk/myglasgow/leads/staff/gtas/
- Developing as a Teacher in Higher Education (DAT HE). This voluntary course follows on from the statutory training. You can find out more details, including how to register, here: <u>https://www.gla.ac.uk/myglasgow/leads/staff/gtas/dat/</u>