#### Micromechanics

MICROMECHANICS

Due to the nature of the permissions forms I use for images, you'll see some of the students with squares over their heads. Due to copyright, I have also needed to remove some other images from the presentation - but will supplement those with little side notes like this one!

The presentation here is meant for the personal use of people who have attended my sessions, rather than full blown cascade sessions. If you would like specific images or sections sending as PPT files, to integrate into your own presentations, by all means send me an email and I'll see what I can do. Please be specific in your requests though!

I would also appreciate it HUGELY if you did not repost this or share on public sites as it is my bread and butter - as it were (I am using the material for my current training sessions elsewhere). Thanks!

So there's this clip...

https://www.youtube.com/watch?v=jofNR\_WkoCE

Which you may or may not know.

My point here was though that we are not just limited to the lyrics.

The description on the next slide comes from the Wikipedia description of the video.

It is a narrative of what happend in the clip.

Students can work with and order this just as easily as the lyrics.

The video begins with Bård singing at a costume party where other participants are dressed as different animals, whose appearances follow the progression of the lyrics.

He gives a summary of animal sounds and asks "what does the fox say?"

The group then transitions into a synchronized dance scene in a forest with Bård in a bear costume and Vegard a squirrel costume complete with face-paint and giant, bushy tails.

During each chorus, the song offers several increasingly absurd possibilities for the fox's sound such as "gering-ding-ding-dingdingeringeding!"

Among the dancers, an elderly man is shown reading the lyrics from a book to a boy sitting on his lap.

In the second chorus Vegard sings "fraka-kaka-kaka-kaka-kow!"

The song then describes the fox and the singer's admiration for it, and asks whether it would communicate with a horse using morse code.

The singers float in the air, continuing to wonder what the fox would say, while failing to notice a computer-animated fox which stands and scat sings (voiced by Vegard), answering their question.

Bård finishes the song with a melancholy falsetto and the fox leaves without being seen.

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The song then describes the fox and the singer's admiration for it, and asks whether it would communicate with a horse using morse code.

a bit of bio!

#### Sevilla





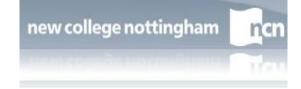
#### Cádiz





#### Barcelona

#### Nottingham



Barcelona & Syria



## **Qu J.** and **M. Cherkaoui**. 2006. *Fundamentals* of *Micromechanics of Solids*. New Jersey: Wiley.

So when I talk about micromechanics, I'm talking about looking at the smallest denominator in our classes...

Which is:

# What will each student be doing at a given stage of the lesson?

Which leads on to:

# What will each student be doing at *each* stage of the lesson?

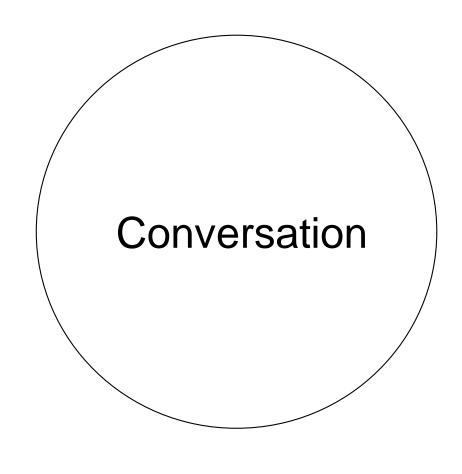
### 3.33% of a conversation

## 30

If there are 30 students...

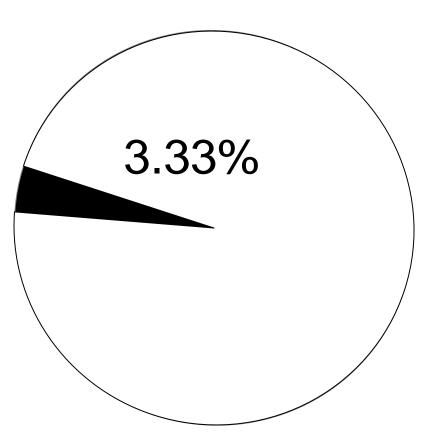
30

And the teacher is talking to one of them...





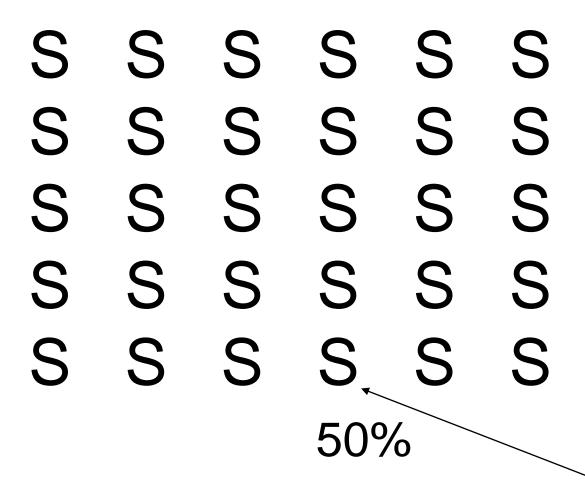
It is tempting to think that the conversation is shared by all.



(conversation  $\div$  30 = 3.33%)

S S S S S S S S S S S S S S S S S S S S

But really...



...only the speakers count.

50%

#### So?

Let's try to minimise how much time we stand in front of a class 'talking to the students'.

## bottlenecking

This happens when the many are waiting for the few to complete an action before they get to do something.

It is a general characteristic of education in groups.

Since time began.

But it's where many of our troubles start!

## bottlenecking

I showed you my picture dictionary for a Spanish Christmas which I created to take the strain off myself and avoid students having to wait for vocabulary that was essential to the writing task they'd been given.

Picture dictionaries of this sort can be prepared to help your students and take the strain off you for all popular festivals.







## question as cane...

Here I talked about trying not to use the question as a classroom management measure in itself...

## reading as rod

Similarly, if we really want people to enjoy reading aloud, reading aloud to the whole class, one by one, is probably NOT the most conducive set up for this.

How do you feel about "What is each student doing at each point in the class?" as a starting point?

Does talking to the class like they were one person really work?

Have you experienced bottlenecking?

Do you think it's a useful concept to highlight to our new or experienced teachers?

Do you have any comments on question as cane or reading as rod?

Would you like more whiteboards in your class?

# the micromechanics of going over exercises

There is often more learning potential in the going over of an exercise from the book as an event than there is in the language content of that exercise itself.

Chrissy Boy – just now

Teacher, could you tell me the answer to number _	please?
Certainly. It's	

```
What do you think the answer to ____ is?
I think it's ____.
I agree with you.
I'm not so sure. I think it's ____ because...
I see what you mean.
I still disagree with you. Let's ask Chris.
```

With this next idea, I suggested that instead of going over exercises one by one in a whole class teacher led activity, we give students a template for a dialogue to discuss their answers with a classmate.

# What did you think number 1 was? I thought it was \_\_\_\_\_. ✓Yes, me too. \*Oh. I didn't. I thought it was \_\_\_\_. Mmm. Okay yeah. I see what you mean. Mmm. Let's ask Chris.

I then demonstrated how this language can be transferred to other situations in our students' lives.

What did you think of the film?

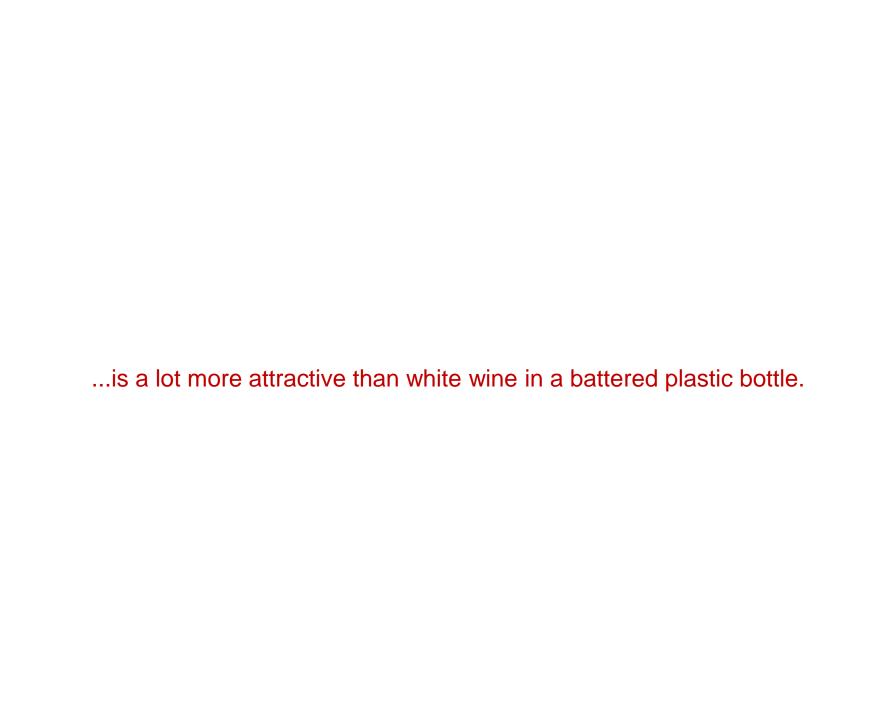
- I thought it was rubbish/fantastic.
- √Yes, me too.
- \*Oh. I didn't. I thought it was rubbish/fantastic.

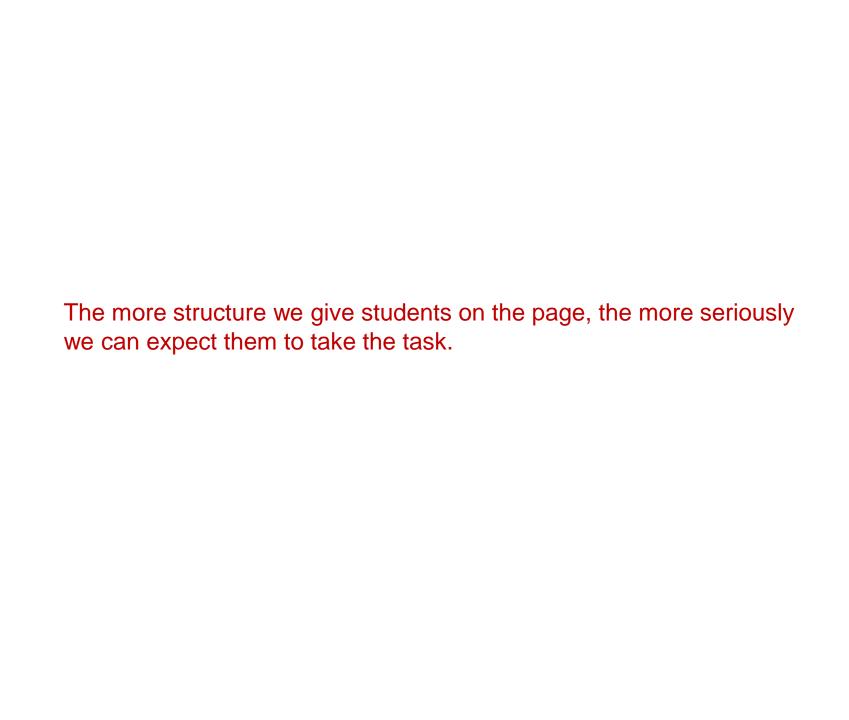
Mmm. Okay yeah. I see what you mean.

Mmm. Let's go home/grab a drink.

# the micromechanics of appearances







My Christmas	
	Words:
Words from the teacher:	

#### **Evaluation 080114**

My Christmas	
	Words:
	Grade:
Words from the teacher:	

# the micromechanics of getting students to listen to each other in open class

In the next sequence, we looked at how to use a grid to get pre-teens listening to each other.

For an in depth explanation, look at *Understanding Teenagers...* 

Estela Carmen María Ductor John Enrique Pablo I

Estela

	Estela	Carmen	María	Ductor	John	Enrique	Pablo I
Estela	Sp	L	L	Q	Q	Q	Q

	Estela	Carmen	María	Ductor	John	Enrique	Pablo I
Estela	Sp	L	L	Q	Q	Q	Q
Carmen	L	Sp	Q	Q	Q	Q	Q

	Estel	Cormon	Harit	Ductor	Sohn	Enrique	Pable	Hayel	Taxer	Aluaro	Morta
Estella	SP	L	L	Q	Q	0	0	Q	Q	0	0
Carmon	1	SP	Q	Q	0	Q	Q	Q	0	a	Q
Harria	Q	Q	SP	Q	Q	Q	Q	Q	0	0	Q
Ductor	Q	0	Q	SP	Q	0	0	Q	Q	0	0
Tohn	Q	0	Q	0	SP	Q	0	Q	0	Q	0
Ennan	L	L	Q	Q	Q	SP	Q	Q	Q	0	0
Poblo	Q	1	L	Q	Q	0	SP	L	Q	Q	Q
Kigod	Q	Q	0	Q	Q	0	Q	SP	0	a	Q
Jacobar	Q	Q	Q	Q	Q	Q	Q	0	SP	Q	0
Alono	L	Q	L	L	0	Q	Q	Q	Q	SP	Q
Harto.	L	Q	Q	Q	Q	Q	Q	0	L	Q	SP

France 1142

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#### creeping referrals

Here's a little text I prepared earlier...

Teacher, what does 'challenge' mean?
It's a difficult thing to do, Marta.
Eh?
I think you say: XXX or XXX [L1 translation].
Thank you teacher.
Teacher.
Yes Juan?
What is 'challenge'?
Ask Marta.

And Marta looks up and Juan asks Marta. Now Marta might not be the strongest student in the group but she's suddenly become the owner of new knowledge that is valuable. And the next student to ask about the word challenge gets referred to Juan.

### student tannoy

Juan is stood next to our table as the class come to the end of an activity. We lean to Juan and say quietly: Juan can you ask everyone to sit down and look this way please. Juan rises to the task of spokesperson.

Sit down everyone and look this way! Please.

Please!

Now ask everyone to turn to page 51 and do exercise A.

Turn to page 51... and so on. it's a pantomime, Juan knows that too but it's a new interaction pattern in terms of the diffusion of power and the delivery of dictate.

#### loose connections

In each group, on each row or table, there's normally a 'loose connection' that isn't quite hooked up to the rest. The challenge is how to keep those individuals in the loop and not isolated from the activity of the rest. Imagine we are playing a whole class game, with the students in three teams of five. In the first group, Toni is the loose connection. He doesn't know any of the answers and he's not following the game so well. Patricia knows the next answer but she gave us the last answer.

Teacher: "I want the answer to come from Toni this time".

Patri: "But he doesn't know it".

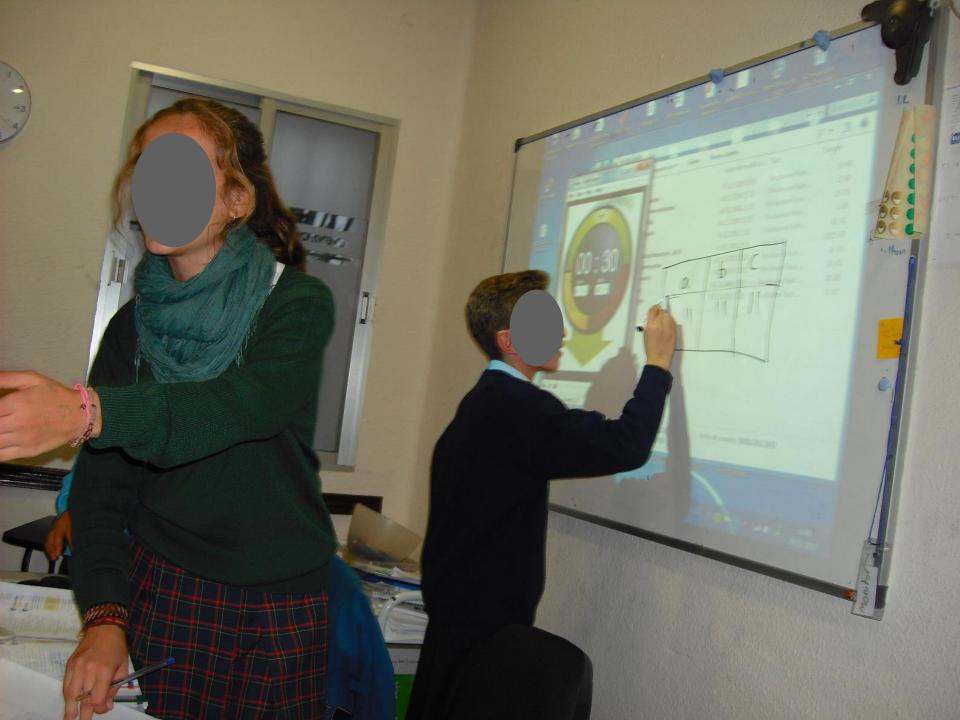
Teacher: "You tell Toni. Toni tells me".

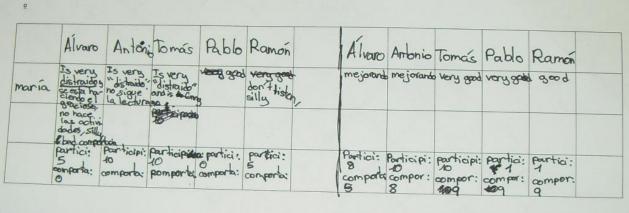
So Patricia whispers the answer quite emphatically into Toni's ear and Toni tells the teacher. He wasn't the originator of the answer and he probably only half understands what he's saying but the answer has gone through him nonetheless. He's involved on some level and he's back in the loop.

#### student led lessons

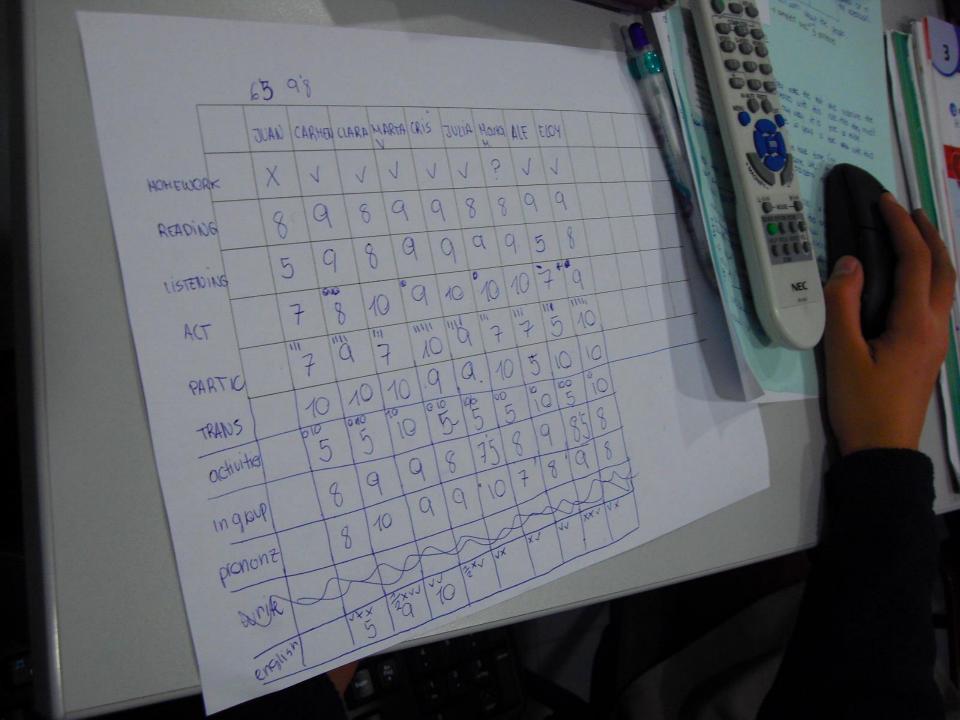








my hour a



Teachers: Cristian Munoz, Ann, Albert

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#### 25 mint 7 Grammar and speaking - splaind \* First conditional Stronger classes: Read through the example sentance with students and ask them to offer suggestions to -D example complete the gap. Students then ture to the text on page 28 again and check or change their answers. - table Remind students how to form the first conditional by asking them which verb goes in each half of the IN the From I I'm ... sentences. They read through the rule box and VF --complete it using the examples to help them. BOARD OF IN Wester classes Books closed. Write a few examples. the notebook of your own on the board, e.g. If I study hard for my example. I if it doesn't sain comprose to / if it save up unough money ( ... Auk students to offer suggestions to complete each sentence. Ask students what they notice about the verbs in each half of the -Date)) wath about the sentence. Sixti that the first one is present ample. and the second one is will/world. Students now open. -p complets and while their books at page 3I and read through the example sestence Students look back at the test on page 28. and compare the sentence. They read through the rule box and complete it using the examples to help them. Grammar notebook Students should note down the rules for the first conditional from this unit and some example. sentences of their own. text and underline the . OHIBNOS GOR. \* unless in first conditional sentences rule then they must this F Stronger classes: Students read through the example: bentences with true or palse. santence from the test. Ask them what they redice: to tay way about the web following unless in the sentence and elicit that it is positive. Students complete the rule. abo with thus -b write Wester classes Sook closed Wilto two exemples on the board, e.g. thinse you study hard, you won't rules. proto your owners. I if you study hard you'd prose your - DIF we have time I'm example state students to identify the first conditional a sentences we: I bay secomplete. 6th dens complete it. is + present simple + will/wont, conditional rule: 15 a this exsample: is I study more, will ! I will have mark you do ther this table in sentences and write 2 more the notebook some help, 1 homewor in an nour. message, if 3onn YOUR hamburgers,

money for the allm

## the micromechanics of stress

- The window's shut. Looks grey but muggy outside.
- It's 4.24. Is the clock slow? No.
- That's a big bruise Clara's got. Wonder how she got that.
- Lucia and Mariano are working well together. I'll put them together again.
- Paco still hasn't started the exercise and just seems to be messing about.
- He's seen me and put his head down.
- Sergio's clicking his pen top. Sergio needs some help.
- Need to pop out and buy coriander in the break.
- Luis isn't here. If he were coming he'd probably have arrived by now.
- Is Maria stuck?...no.
- We're going a bit slowly.
- Cristina's helping Marta.
- It's 4.25.
- Where's the air con remote?
- Rafa's working well. He's got some weird new trainers on.
- Elena's finished. Lucia and Mariano have finished.
- Paco's mum came in yesterday to say he's failing English at school.
- Is my phone off?

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Estela's paying attention.

Is John giving me the ansers in a silly exaggerated English accent?

Pablo just used a word we introduced last lesson . Yes!

Enrique's behaving well.

Question number three doesn't make a lot of sense to me.

Carmen, Marta and Maria are all on task.

Enrique didn't quite get that right.

Did Javier ever buy a book?

I'll have to photocopy him this page so he can do the homework.

Pablo's just given me another good answer.

Carmen knew it too, better give her the chance to answer in a moment.

A couple of the other students just noticed John's silly answers and looked at me.

I'll ask Carmen next.

Estela's paying attention.

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The class is making a noise.

The director's office is just down the corridor.

Not everyone in each group is participating on the project.

I imagined this activity with everyone in each group participating.

A couple of the students keep sighing everytime I set them an exercise. I can't stand it when students do that, it's so rude.

This exercise is too easy for Margaret and James who look bored. I have to repeat everything twice for Loreta because she isn't getting it.

- Did you like the scripted dialogues for going over exercises?
- How do you get your students to listen to each other?
- Do you use some sort of creeping referrals variant?
- Can you remember Chris's suggestion for souldering back in *loose connections*?
- Student led lessons: Do you do them? Have you done them? Or// Would you do them?
- Does the stress sandwich model fit any situation you have experienced teaching?

## the micromechanics of after exams

The main point here was that, after exams, we have somewhere for them to go...

On this occasion, my students did a Mr Man book review.

Could be anything.

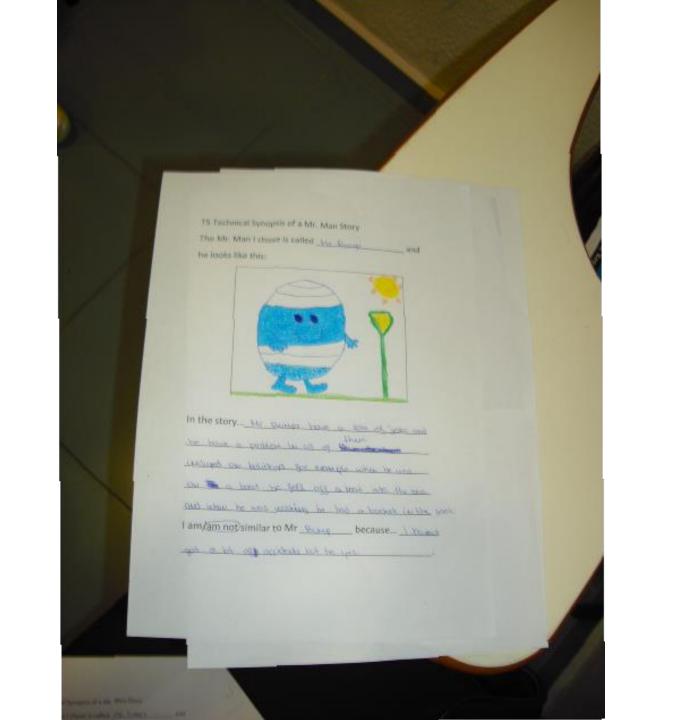
The important thing is that we have used our adult imaginations to give them a sense of direction after the exam.

T5 Technical Synopsis of a Mr. Man Story

The Mr. Man I chose is called Mc Scott and the looks like this:



In the story... The ray and gifts as home asserbecause the day at night Father Christmas
care to give at to the childs. Father Christmas
cask for halp to a snowman and see they be
give and the property
tam/embossimilar to Mr snow because... I
halp to my forms.



This was another.

These students are doing a rewrite of their writing exam (complete with corrections) on tin foil.

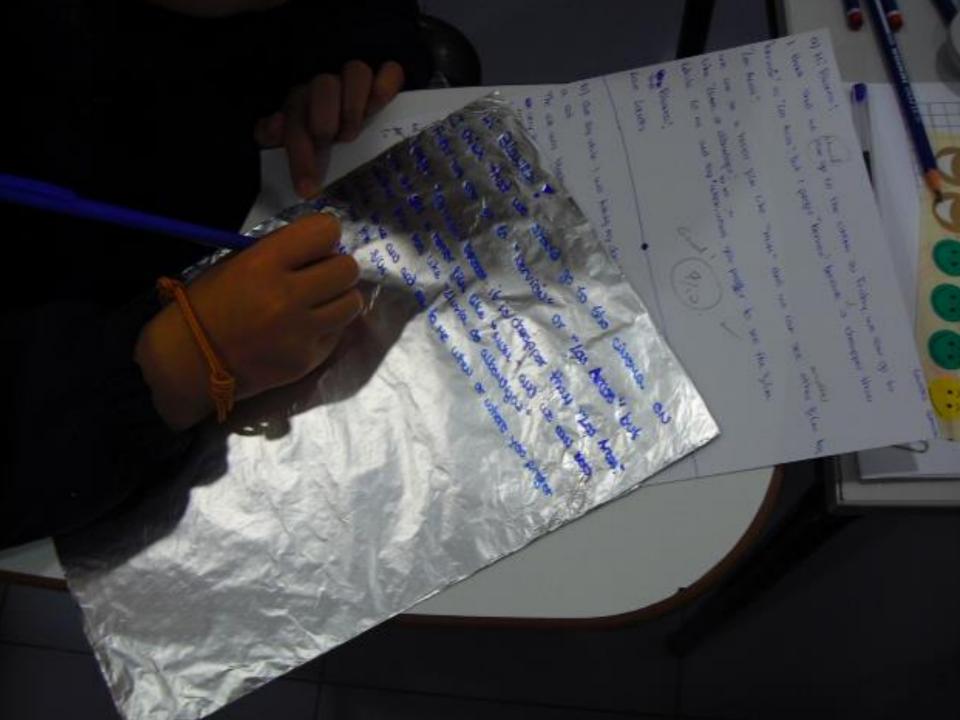
We have simply changed the surface to add a novelty element.











on? It don't know. there takes must to see the prem? We can much the winter Which day can we see the prem? Head wants, I need you arrang, and yes I can go to And when in the support of the stand and with the cinema what them can we seed

Low Cristing.

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chisten is combrated on us of Occamber, with your micy or with was. They very beautiqued! And the ç

noise, like a door that that's opening. mack to took (taked) the clos, the and Helb Maria: FOO How are you? I'm very good! have exams, out And lam studying hard for them and jou? Going to the cinema, yes I can but remember W have a Lot of exams on saturday I can at mi th. 8 o'clock, in the big, blue door op ma cine mo I want to watch 'The Hunger Games' or resordie one or is you wont to an other film tell me, it isn't a prokiem I Love you, Ang вуе. One day while I was +aking my doe for a walk, I baw



## the micromechanics of time up

I do quite a lot of observing these days and from time to time I come across shouting clock syndrome too. You've got two minutes left! It doesn't matter if you don't finish! Well it probably does. In what other real life situation would we find anything like that? Someone comes to fix your washing machine. You've got two minutes left! It doesn't matter if you don't finish! Doesn't it. Oh well f\*ck it then, I'll go home now. You've taken your best friend out to dinner and you're on the main course. You've got two minutes left! It doesn't matter if you don't finish! And they're there trying to stuff as much in there as they can. But I want to! It's good food. You're in bed with your partner. You've got two minutes left! It doesn't matter if you don't finish!

Doesn't matter to who?

My point is with this slightly cheeky analogy that there's little point moving students off a perfectly productive task just for the sake of getting what's on our lesson plan done...

...but don't tell that to your Diploma, CELTA, Cert or DELTA tutor!

## the micromechanics of what students remember

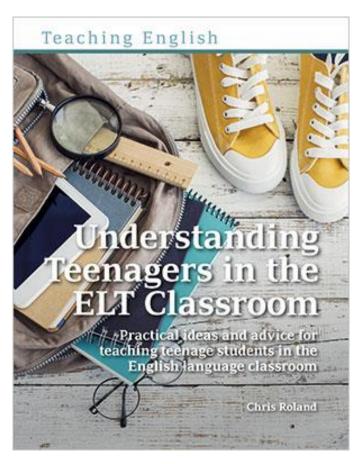
I'm 45. I've been doing this job for 20 years now. To a newbie teacher that might sound a lot but that's still makes me a relatively newcomer in some respects. But I'm getting to the point where I'm walking round the streets of Seville - which is where I started and where I am back teaching right now - and I run into people, adults, that were half my height when I last taught them.

And what I'd love them to say is: Chrissy Boy, before I had you, I'd never understood the future perfect tense. Or// Chrissy Boy you really opened my eyes to the importance of reference and substitution within a text.

What they end up saying is often: Oh your classes were so good. I remember when you brought in your photo album and showed us you with blue hair at university. Or// Oh yeah, you got us to write on weird objects like tin foil and potatoes. Or// I remember when you brought in those cardomom pods and gave us them to suck on whole because when you get to the seeds inside they were like natural breath fresheners.

So whilst we're busy on a technical level trying to improve our students language, let's not forget that freaky peripheral stuff has a certain value too.

Most of the ideas you have seen here are discussed in more detail in the book. I'd recommend it for anyone wanting a more systematic treatment of the subject matter. Good luck with your teaching!



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