



Classroom Deception

Investigating,
understanding,
using and resisting
educational trickery

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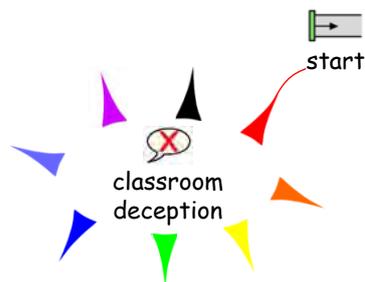
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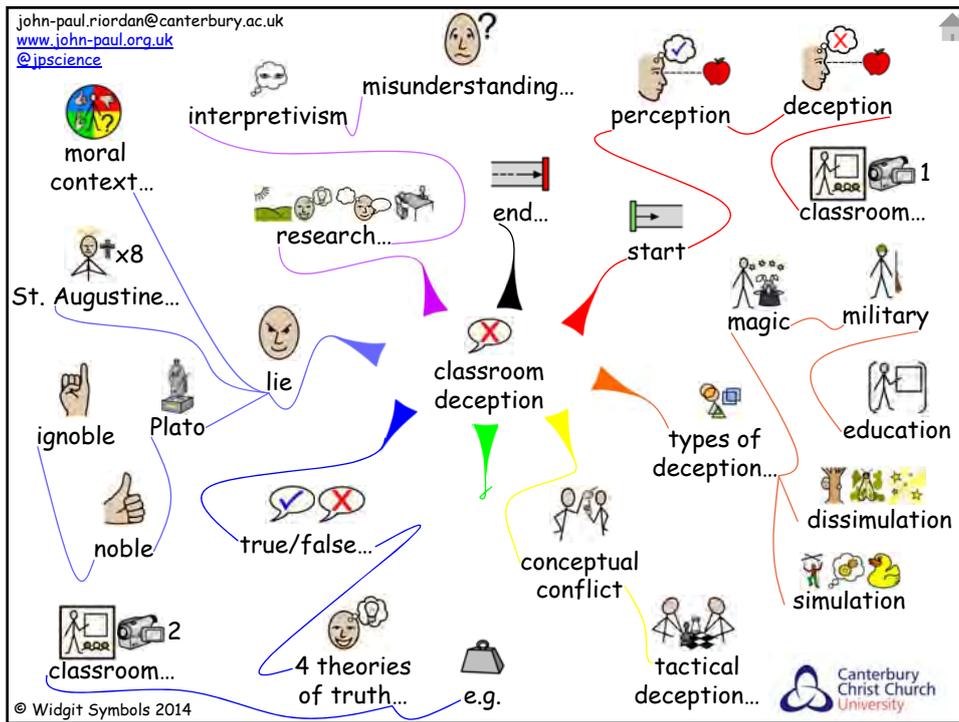
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Oh, I'm moving the torch as well.
1a:320-324



Classroom Deception (extract from Riordan, 2014)

- 1a:320 CS: [...] You're looking around - you're looking around the room and you...
 TU: **I'm looking round [mimes looking left and right without moving the torch].**
 CS: ...and you find it with the torch.
 TU: **I'm looking around [as before].**
- 1a:321 TU: **I'm looking around. Can I see teddy?**
 BN: Use the torch! [smiling]
 CS: That's what I'm trying to say.
 TU: **Oh, I'm moving the torch as well. [as if surprised]**
- 1a:322 TU: **So I'm not just looking, I'm looking and moving the torch.**
 [mimes looking left whilst shining the torch to the right, then looking right whilst shining the torch to the left].
- 1a:323 JB: [Laughs]
 BN: Wait!
 JB: You have the torch and your eyes. [miming using his pen as the torch showing torch being shone in the direction he is looking in].
 JK: Why are you [BN] doing it like that? [miming the way BN is holding the torch at arms length].
- 1a:324 TU: **So I have to keep my eyes with with the light. Why? [Pulling a face as if DD doesn't see the need for this].**



- "Deception is the **distortion of perceived reality.**" (Whaley, 1982, p. 182)
- Two kinds of deception are possible according to Whaley (1982): **dissimulation (hiding the real)** and **simulation (showing the false)**; both of which can be further subdivided.
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"tactics is the theory of the use of military forces in combat.
 Strategy is the theory of the use of combats for the object of the War."
 (Clausewitz, [1832]/1982, p.172).



techniques



tactics



strategy



tactical
deception...



décei've (-sē'v) *v.* 1. *v.t.* persuade of what is false, mislead purposely [...]

(OED)



true/false



- **Correspondence**
 - If I think the proposition, "There is an apple on the table." Then that proposition only accurately pictures the world if and only if there is an apple on the table. This is [Wittgenstein's](#) Picture Theory from the *Tractatus* (Kenny, 2005).
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 -
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4 theories of truth... e.g.



The process they're
 going through is more
 valuable than any test
 will ever pick up
 1c:22-25

Dissimulation

- 3c:22 JR (researcher): Just there you used that word, "Not telling." Are you conscious of things that you're not telling them deliberately.
- 3c:23 TW (teacher): Oh I'm deliberately not telling them lots of things. Because you have a desperate urge to just go, "No, no a tree [is] living." ... Because you want them to have the science right. In the back of your mind you're always thinking, not in this case, but generally, "Oh, they're going to have a test soon". ... they can't be writing that a [tree] has got a brain, because that is wrong. However, the process they're going through is more valuable than any test will ever pick up on. So I'm acutely aware of - and it is not an accident that I haven't just gone, "No, you're wrong." ... I think on occasion if something is absolutely wrong you do have to point that out, because you're not doing anyone any favours by going, "Think that still." But it doesn't create learning to just go, "No, that's wrong. This is what you've got to do."

Simulation

- 3c:24 JR: And in sort of parallel with that question, not showing something, do you think sometimes teachers might show things they know not to be right as part of the...
- 3c:25 TW: Oh yes. ... a test paper said this the other day. You drop a hammer and a feather at the same time, which, if either [TW says 'if either' with a sly tone and expression on her face], will hit the ground first? Based on Galileo's thing. Well it is a trick question. And the kids are all saying, "Is this a trick question?" Because they've seen one or two trick questions. You do because then you can have a whole discussion on, "Well, actually..." And so on and so on. But yes, teachers do deliberately... I don't think they're trying to mislead, because they would never then go, "Carry on thinking that." They'd always address the misconception, ... So yes, I think teachers definitely do that. [TW laughs].

 x8


1. The lie whilst teaching religion.
2. The lie which injures someone unjustly and helps no one.
3. The lie which benefits someone, whilst harming another.
4. The lie for the pleasure of lying ["the real lie" Augustine quoted in Kerr, 1990, p. 33].
5. The lie told from a desire to please others.
6. The lie which benefits someone, without harming another, "for instance, when a person, knowing that another's money is to be taken away unjustly, answers the questioner untruthfully and says that he does not know where the money is." (*ibid.* p. 34)
7. The lie which benefits someone, without harming another, "as happens when a person lies because he is unwilling to betray a man sought for capital punishment, that is, not only a just and innocent person but even a criminal, because it belongs to Christian discipline never to despair of the conversion of anybody and never to block the opportunity for repentance."
8. The lie which benefits someone by protecting them from physical defilement (e.g. for Jewish people it is a defilement to eat with unwashed hands), without harming another.



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moral context...

- Professional scientists frequently afford themselves the use of a variety of theories of truth (for example when considering mass from relativistic and Newtonian paradigms).
- Deception and lying may carry different meanings for participants in any study (Cf. typicality - Rosch, 1975).
- Might theories of truth, and be helpful in interpreting the behaviour of **child scientists**, and **science teachers**, in the classroom?
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-






research...

Epistemology
Social Constructionism

➔

Theoretical perspective
Interpretivism
➔ Symbolic interactionism

➔

Methodology
Ethnography
➔ Grounded Theory

➔

Methods
Expert Microteaching
Verbal Protocols
Retrospective debriefing

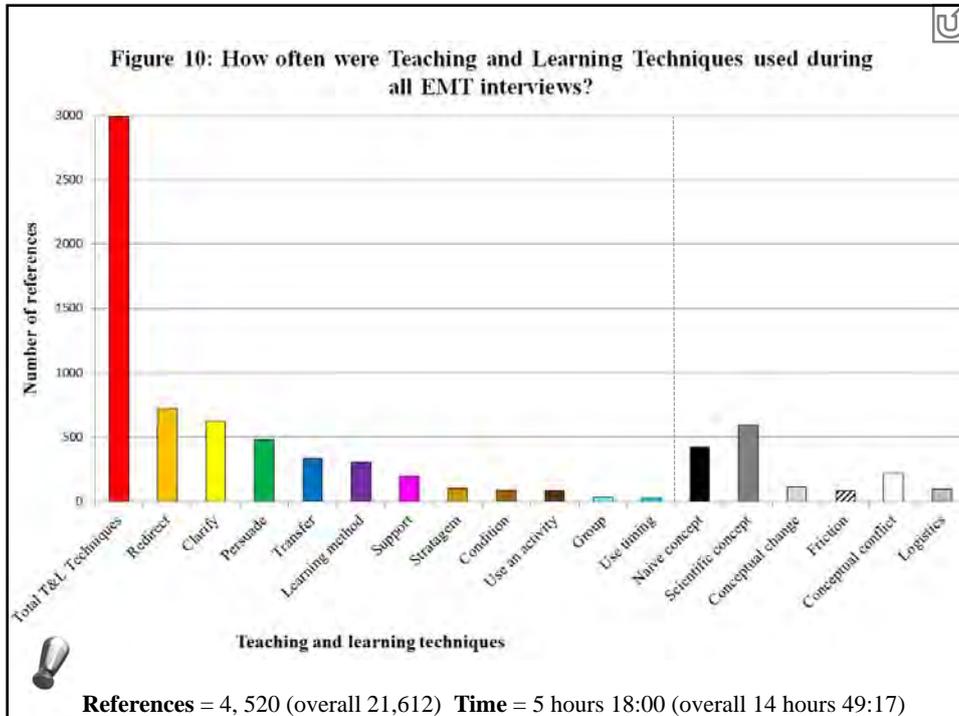
Adapted from Crotty (1998, p.5)

How is the data analysed?
 NVivo 9 software was used to help manage and analyse this large data set.

The screenshot shows the NVivo 9 interface with several key components highlighted by red arrows and labels:

- 3) Coding grid:** A table at the top showing 'Tree Nodes' with columns for Name, Sources, References, Created On, Created By, Modified On, and Modified By. It lists nodes like 'Conceptual change' and 'Learning strategy'.
- 1) Video:** A video player window showing a scene of people sitting around a table.
- 2) Transcript:** A text window displaying a transcript of a conversation with timestamps and speaker initials (e.g., DD, BN, CS).
- 4) Model:** A 'Coding Density' chart showing colored bars representing different codes over time.
- Coding stripes:** A horizontal bar at the top of the transcript window showing colored segments corresponding to the coding grid.

1) Video recorded from two different angles.
2) Transcript made from the videos. **15 hours of video**
3) Coding grid developed from the transcript.
4) Model developed using the transcript and coding grid.



**What is constructionism?**

"**Constructivism** [involves] epistemological considerations focusing exclusively on 'the meaning-making activity of the individual mind' [in contrast to]... **constructionism** where the focus includes 'the collective generation [and transmission] of meaning.'" (Crotty, 1998, p. 58)

**What is interpretivism?**

"[Interpretivism] looks for culturally derived and historically situated interpretations of the social life-world." Crotty (1998 p. 66)

What is symbolic interactionism?

"...human beings interpret or 'define' each other's actions instead of merely reacting to each other's actions. Their 'response' is not made directly to the actions of one another but instead is based on the meaning which they attach to such actions." Blumer (1969, p. 19)

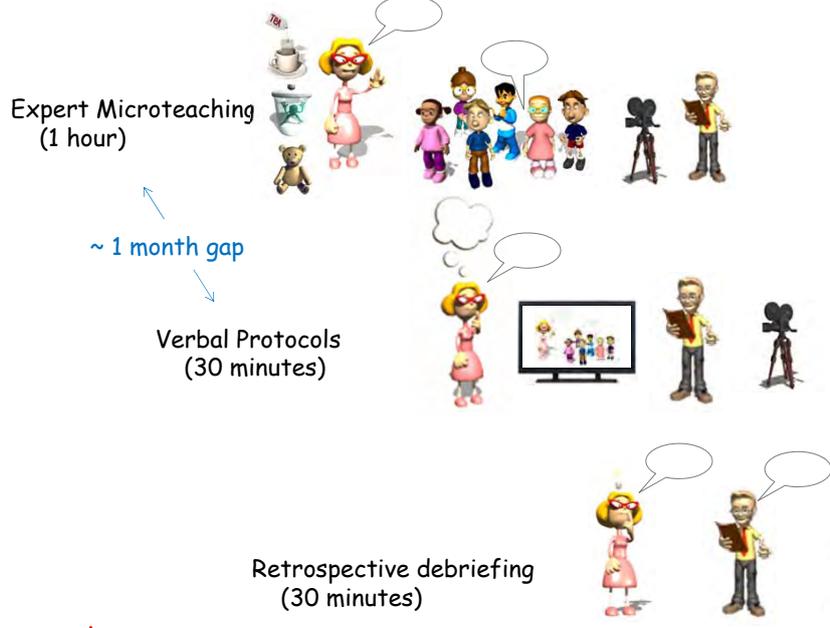


What is *Grounded Theory* (GT)?

"[A] systematic set of procedures to develop an inductively derived grounded theory about a phenomenon" (Strauss & Corbin, 1990, p.24)



What are the research methods?



The diagram illustrates the research methods in three stages:

- Expert Microteaching (1 hour):** A teacher character is shown with a group of student characters, a coffee pot, a teddy bear, and a camera on a tripod.
- ~ 1 month gap:** A blue double-headed arrow indicates the time interval between the first and second stages.
- Verbal Protocols (30 minutes):** The teacher character is shown with a thought bubble, a monitor displaying the student group, and a camera on a tripod.
- Retrospective debriefing (30 minutes):** The teacher and student characters are shown with speech bubbles and a camera on a tripod.

Important questions from the questioning route
(for the Expert Microteaching Interviews):



Please tell me what is happening to the hot tea and the cold ice cube in as much detail as you can.



Please sort these cards onto the spaces on the two mats quickly: one for living things and the other for non-living things.



Please imagine you walk into a completely dark room with that torch on and you see teddy. Please make a quick sketch showing the torch, teddy and your eye which explains how you can see the bear.



misunderstanding...



"The central feature of understanding ... is [it] requires the grasping of explanatory and other coherence-making relationships in a large and comprehensive body of information. One can know many unrelated pieces of information, but understanding is achieved only when informational items are pieced together by the subject in question." (Kvanvig, 2003, p.192)

A short bibliography:

Bok, S. ([1978]/1999) *Lying: Moral choice in public and private life*, New York: Vintage Books.

Riordan, J. P. (2014) *Techniques, tactics and strategies for conceptual change in school science*. PhD Thesis. Canterbury Christ Church University. Unpublished.

Whaley, B. (1982) 'Toward a General Theory of Deception', *Journal of Strategic Studies*, 5 (1), pp. 178-192.

For a full bibliography please email me

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