



Using magic performance to conjure up critical thinking skills

ALDinHE2021

The Workshop

Students watch a video with a story about a man who can walk through walls

Students watch a card trick, where a card appears to move through the pack to the top of the deck

Students analyse the narrative and trick

Students determine links to critical thinking

Smoke and mirrors

Memory (fallible)

Perception (fooling the eye)

Reasoning (deception)

Psychology (need to believe)

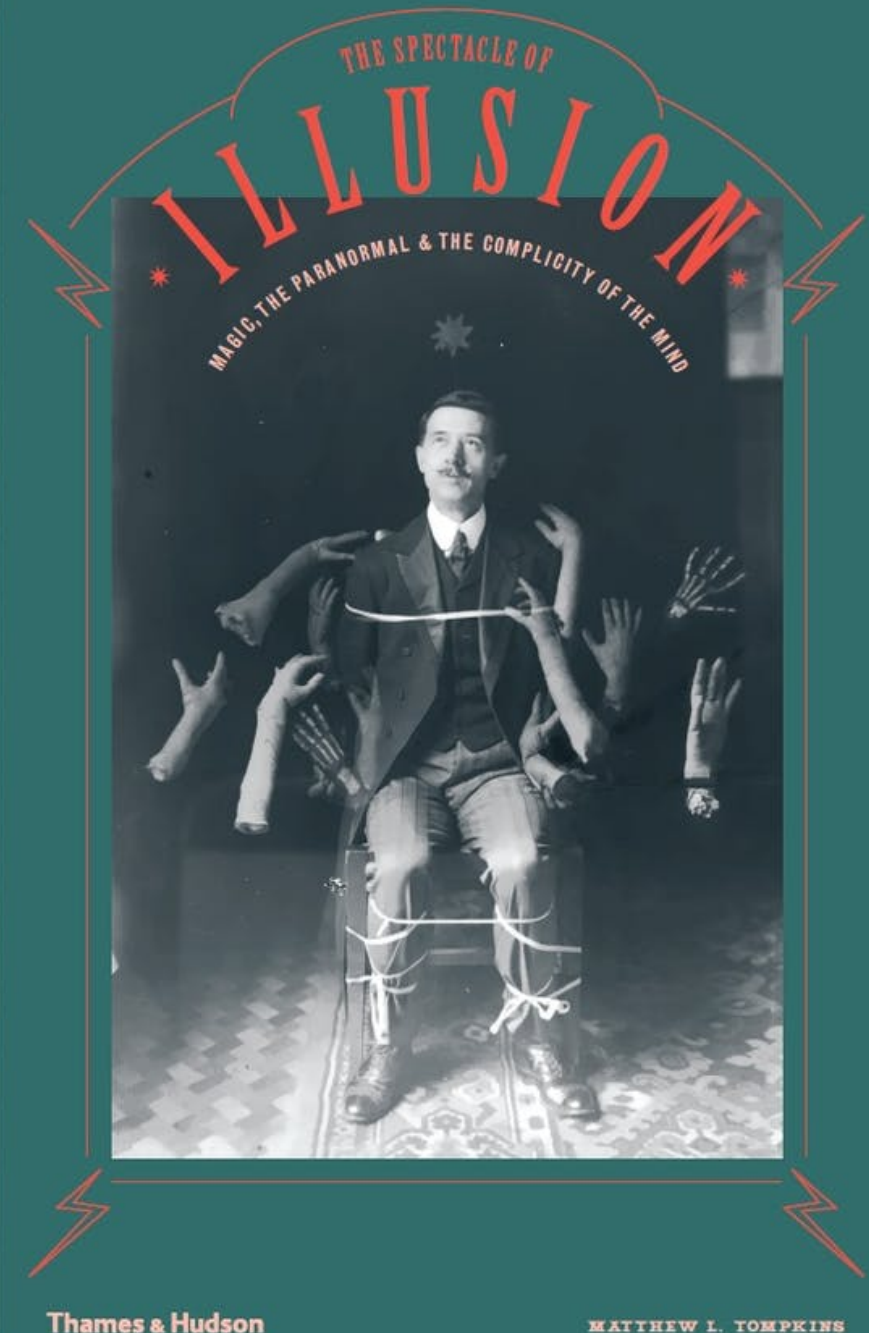
I was able to see two things very clearly:

A)How people can be fooled

B)How they fooled themselves...

The second is far more important

Randi , 2007 cited in Tompkins,2019,p.193.



Critical thinking

- Memory (fallible)
- Perception (fooling the eye)
- Reasoning (deception)

- Psychology (need to believe)





Magic used in education

Edutain, engage
Leveller
Key ideas
Encourage debate
Analysis

Landman (2018) uses magic performance to help HE students explore a range of complex philosophical and academic ideas.



The...

trick
experience
magician

...is a(n)...

metaphor
analogy

...for...

critical thinking
an article
an author
the experience of reading
a problem
information

LOTS of talking later...

The...

experience

...is an...

analogy

...for...

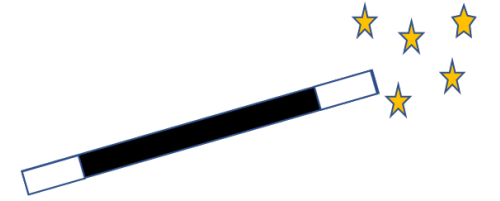
what you do with
information.

Metaphor/analogy

Benefits	Concerns
“exciting and understandable” (Low, 2008, p.212)	We assume “metaphoric competence” (Low, 2008, p.221).
“facilitating problem solving capabilities” (Durkee, 2011, p.41)	Implications of cultural differences and interpretations (Littlemore, 2003).
“diverse range of students...to access the abstract concepts” (Power <i>et al.</i> , 2007, p.A20).	Messy metaphor distinctly unhelpful! Potentially makes things worse rather than better. Clarity is key.



Pre-session



Video

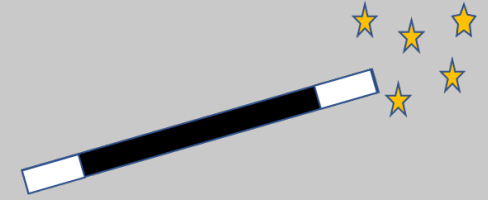
Questions:

What was your reaction when you watched the trick?
What thoughts crossed your mind?

Did you believe the story of Fin King? Give reasons to justify your answer. Was the story linked to the trick? If so, how? If not, how or why?

Why do you think the magician told the story in the way he did?

In-session



- Padlet
- Review, respond, discuss

- Making connections, clarifying, applying
- Self-assessment current skills and confidence

- Critical thinking steps model
- Questions/review/consolidate

Padlet:

- Visible, enthusiastic engagement from students.
- Excitement and energy

Questioning

Justifying

Evaluating

Research: Finlay
King/statue

Identifying
connection with
critical thinking

A magnifying glass with a wooden handle is positioned over the word "Results". The lens of the magnifying glass is focused on the first few letters of the word, "Re", which appear significantly larger and more detailed than the rest of the word. The word "Results" is written in a bold, black, sans-serif font. The magnifying glass has a black frame and a light brown wooden handle. The background is a light gray circle with a subtle gradient.

ReResults

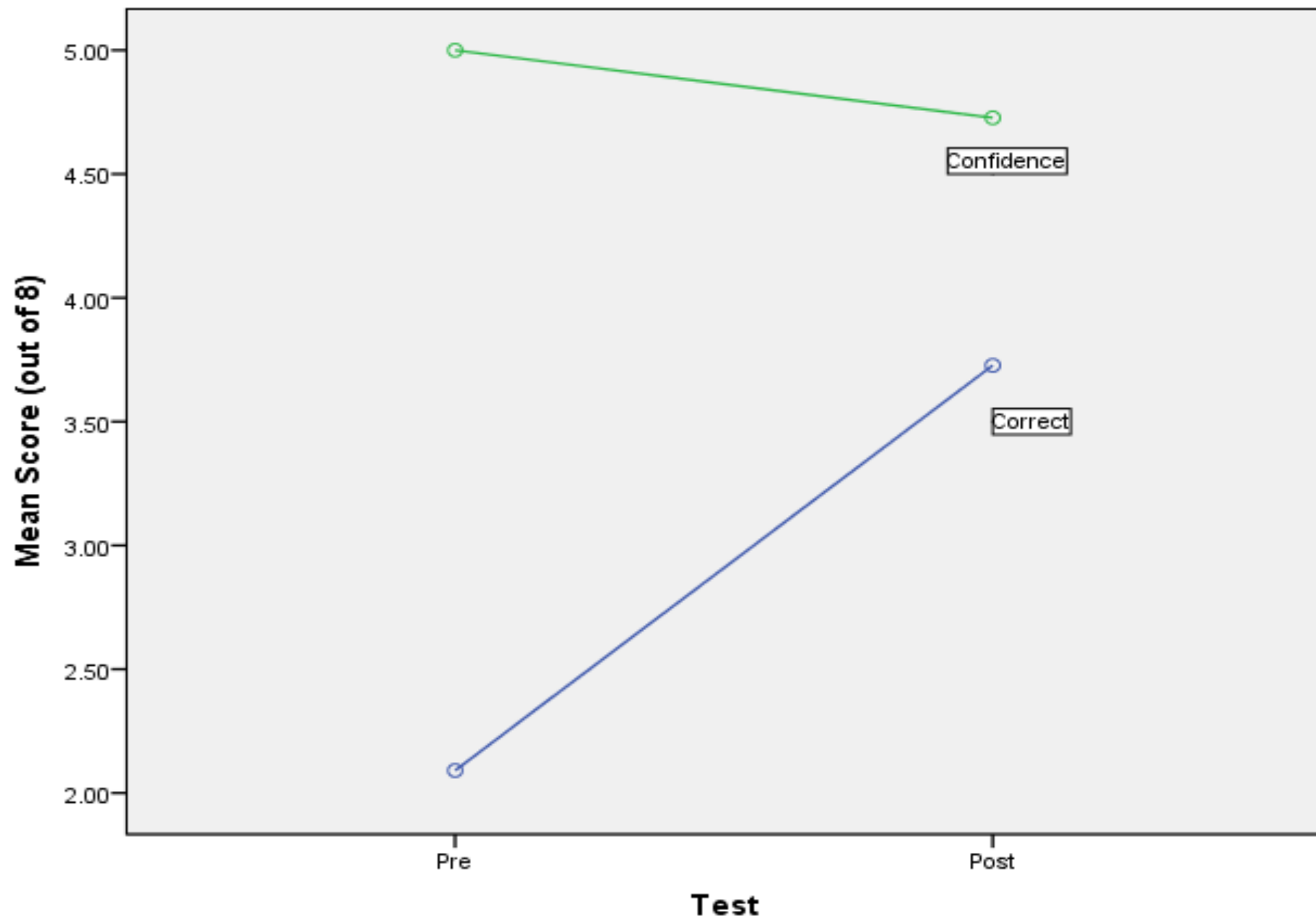
Pre-Post Test

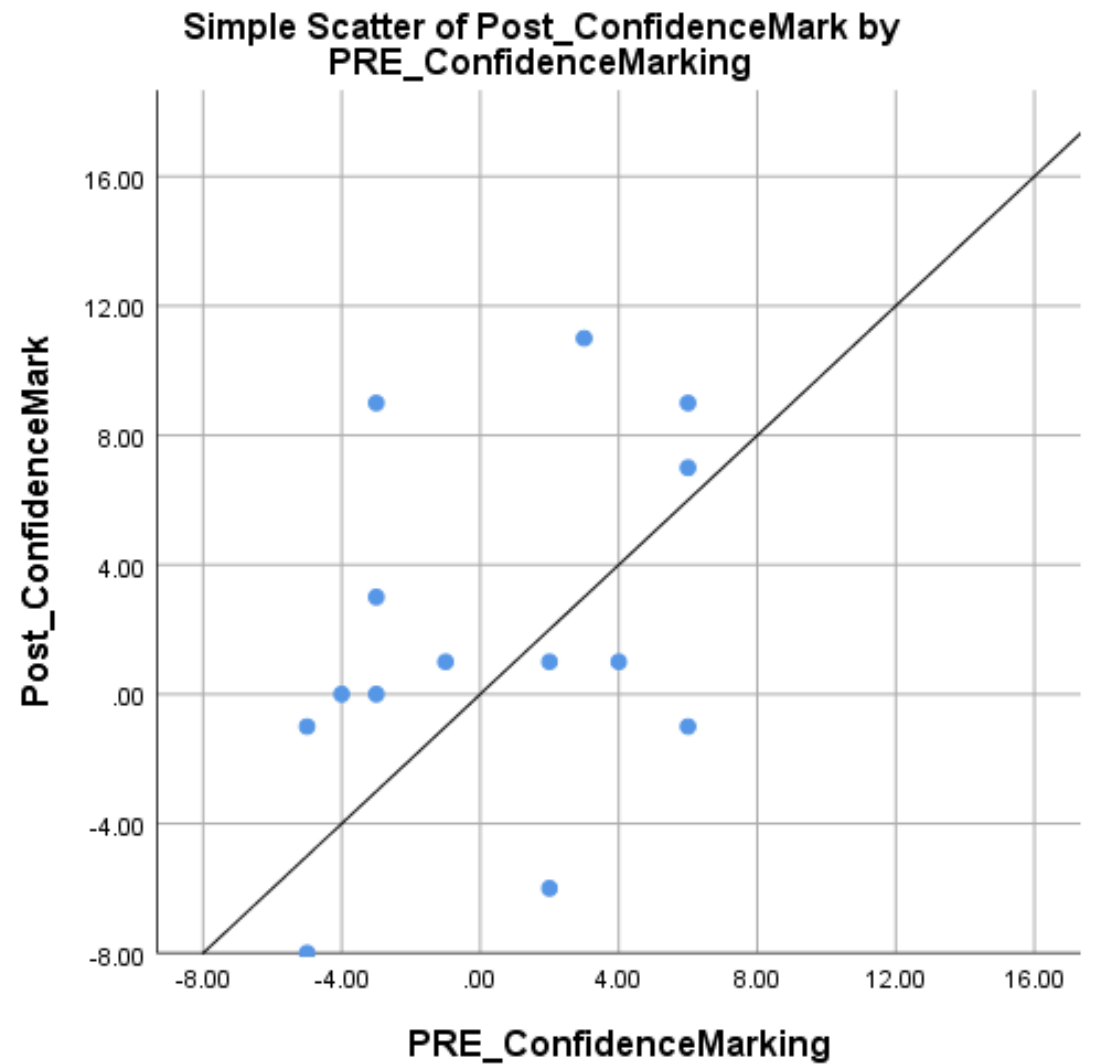
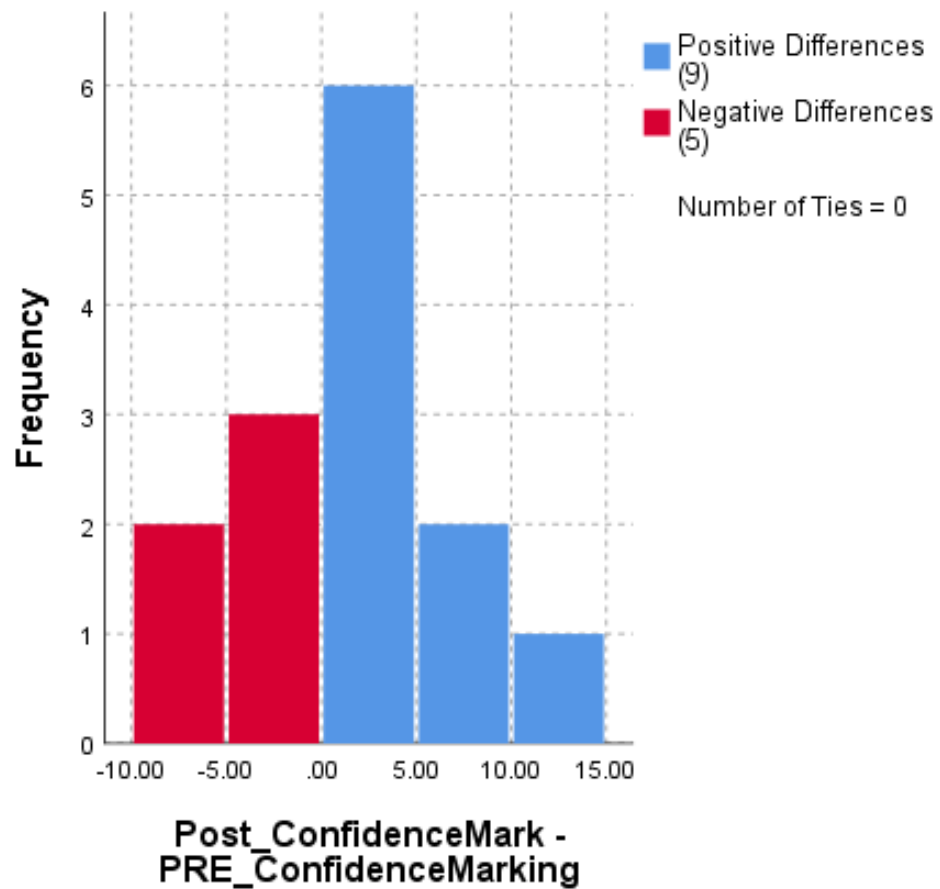
This test contained 4 sections; each of which contains 2MCQ

- to **identify conclusions** in arguments.
- to **draw conclusions**.
- to **identify evidence** that would **weaken** an argument.
- to **identify evidence** that would **strengthen** an argument.

Confidence marking

- If your answer is **correct** and you have ticked the **confidence box** you will score **2 points**.
- If your answer is **correct** you will score **1 point**.
- If your answer is **wrong** you will score **0 points**.
- If your answer is **wrong** and you have ticked the **confidence box** you will lose **1 point**.





Loved it, very engaging and a great way to get us thinking about critical thinking that is not "the norm". When it's more exciting and interactive, it makes it better to listen, learn and engage!

Understanding how we questioning the magic trick and story was me critical thinking

I really enjoyed it, it got us thinking and well engaged, also it made us think of every possible way the trick worked.

The session was useful and memorable.

It was a good concept to get everyone thinking and involved in the class. But did take a while to understand what was going on.

Moving forward:

- Continue to collect data with the online session
 - Explore alternative stories to decolonise the session
 - Teach session with variety of cohorts
-
- Embrace trying something bold
 - Be completely clear and settled on the concept

References:

Durkee, D. (2011) Teaching with metaphor: the case of Alice in Gaap Land. *Academy of Educational Leadership Journal*. **15**(1), pp.39-56.

Landman, T. (2018) 'Academic Magic: Performance and the Communication of Fundamental Ideas', *Journal of Performance Magic*, **5** (1), doi: <https://doi.org/10.5920/jpm.2018.02>.

Littlemore, J. (2003) The effect of cultural background on metaphor interpretation. *Metaphor and symbol*. **18**(4), pp.273–288.

Low, G. (2008) Metaphor and education. In: Gibbs, Jr., R. W. (ed.) *The Cambridge handbook of metaphor and thought*. New York: Cambridge University Press, pp.212-231.

Power, C., Carmichael, E., and Goldsmith, R. (2007) Parrot poo on the windscreen: metaphor in academic skills learning. *Journal of Academic Language and Learning*. **1**(1), A18-A32.

Tompkins, M L. (2019) *The Spectacle of Illusion ; Magic, the paranormal & the complicity of the mind*. London : Thames & Hudson.