

# Self-judgment of professional practice:

## Promoting insight in students and clinicians

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# Self-judgment

- Why are medical educators interested?
- What does the research literature tell us?
- How can we use it to improve performance?



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# A crucial concept

- Almost every model of continuing professional development includes the same basic concept:

**The ability to self-assess is a  
cornerstone of professional self-  
regulation**

(Peck, 2000; BMJ)

**CBC INVESTIGATES**

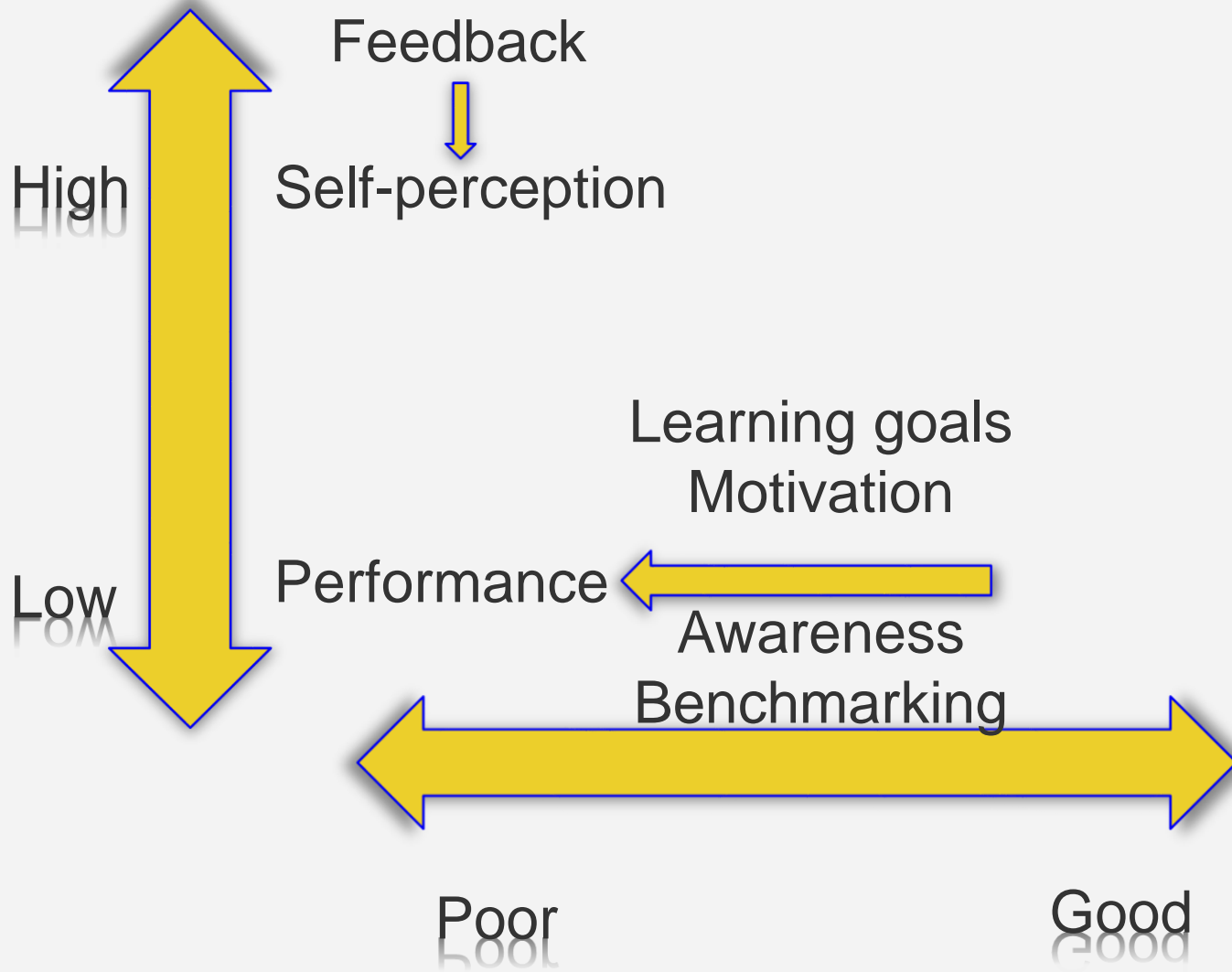
# Prominent B.C. surgeon accused of 'arrogance,' lying in wrongful death lawsuit



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# Self-judgment enabling lifelong learning



# Self-judgment

- Why are medical educators interested?
- What does the research literature tell us?



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The background is a vibrant green digital rain effect, reminiscent of the Matrix. The rain consists of numerous vertical lines of varying lengths and thicknesses, creating a sense of depth and movement. In the center, there is a perspective view of a hallway or tunnel that recedes into the distance. The walls and floor of this central path are also composed of the same digital rain, but they are slightly more defined and brighter than the surrounding area, drawing the eye towards the vanishing point. The overall effect is a surreal, high-tech environment.

**DON'T FEAR THE MATRIX**

**IF YOU CAN SEE  
THROUGH THE ILLUSION  
THEN YOU ARE THE SOLUTION**

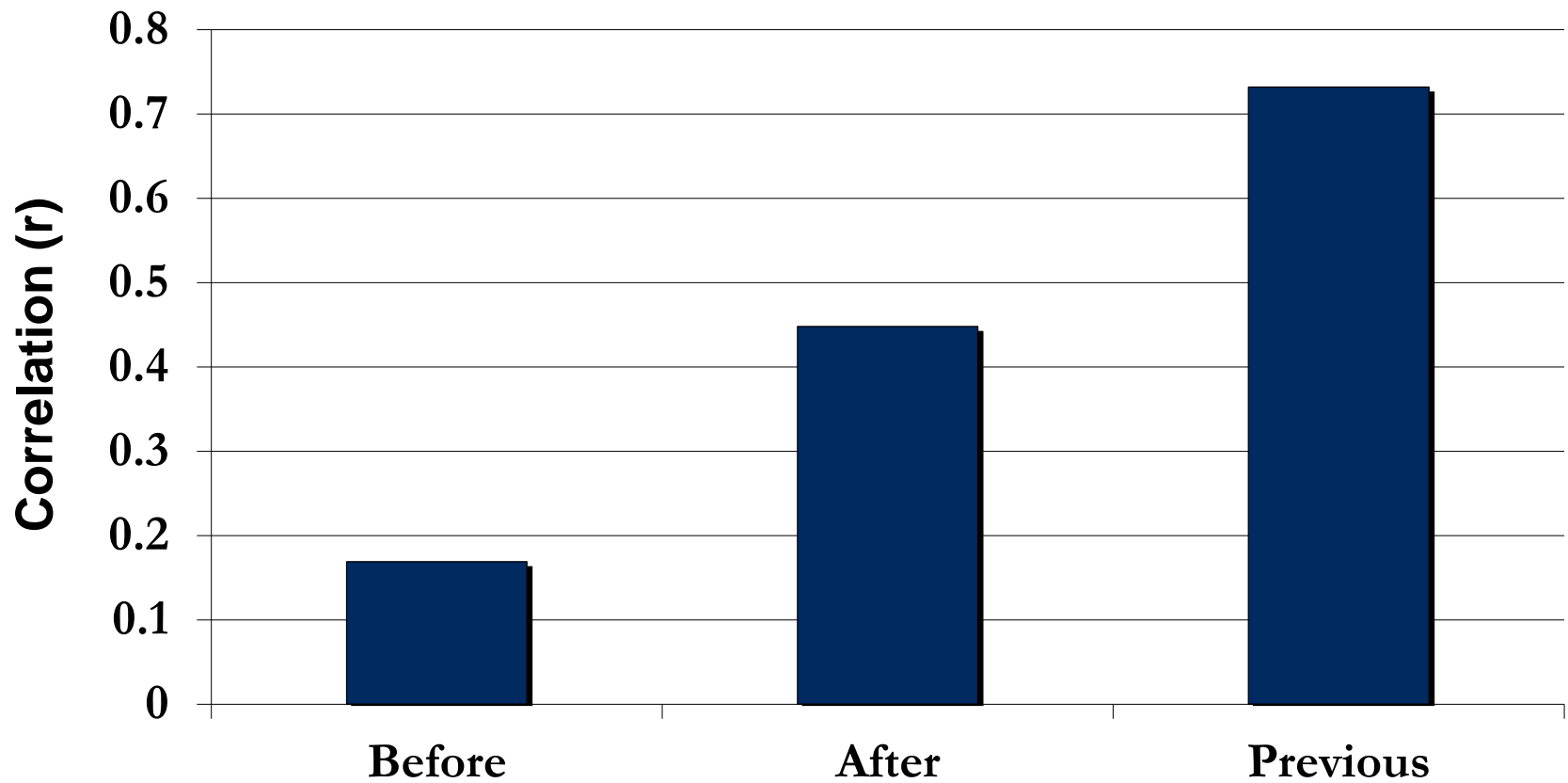


# Illusion 1:





# Eva et al. (2004)



# Typical Responses

- Disbelief
  - The methodology was wrong
- Challenge
  - I know I'll never play professional football
- Action
  - We need to develop ways to teach it
- Sympathy
  - I've met people like that

# The self-assessment literature

- Hundreds of articles
- Many literature reviews
- One conclusion

**Self-assessment ability  
is generally poor**

(See Eva and Regehr, 2005; Davis et al., 2006)

# Why can't we self-assess?

- Imagine yourself driving
- It's easy to do ...
  - ... but details are inevitably left out
  - ... and those details are crucial to determining the outcome of the actual experience

(Vallone, et al., 1990)



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# Why can't we self-assess?

- Furthermore ...
- Did anyone imagine themselves having difficulty driving?
- When it's easy to imagine an event we tend to overestimate its likelihood

(The availability heuristic: Tversky and Kahneman, 1973)



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# The general point

- When we introspect we do so by drawing inferences....

...just as we do when we make judgments about others ...

...and, as a result, they're just as fallible



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(Eva et al., 2012)

## Illusion 2:

WHAT SEEMS  
TO US AS  
BITTER TRIALS  
ARE OFTEN  
BLESSINGS  
IN DISGUISE.

# Self Efficacy

- Influenced by feedback, but also influences future performance
- Not merely a passive reflection of performance, but part of a self-fulfilling prophecy that affects performance

(see Bandura, 1977)



“Physician agreement  
with colleagues’  
scores correlated  
positively with overall  
mean scores from  
colleagues ( $R=.48$ )”

Sargeant et al. (2003)



# Discounting the negative

“Some days I’ll go home and say I was a really good doc today and feel good about what happened in the day. And then other days you know, if I have a headache, maybe I wasn’t so good today.”

(Eva, et al. 2011; AHSE)

# Seeking the positive



(Harrison, et al., 2013; Med Educ)

# Cognitive Dissonance





# Protecting Self Efficacy

“But in actual fact if something goes badly you don’t wanna think about it. You know, taking blood with this patient went really badly, I didn’t get the blood and there was a mess. I just don’t want to think about it.”

Sargeant et al. (2010)

# Self-judgment

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# What should we, as educators, do?

- Keep in mind whose opinion matters most



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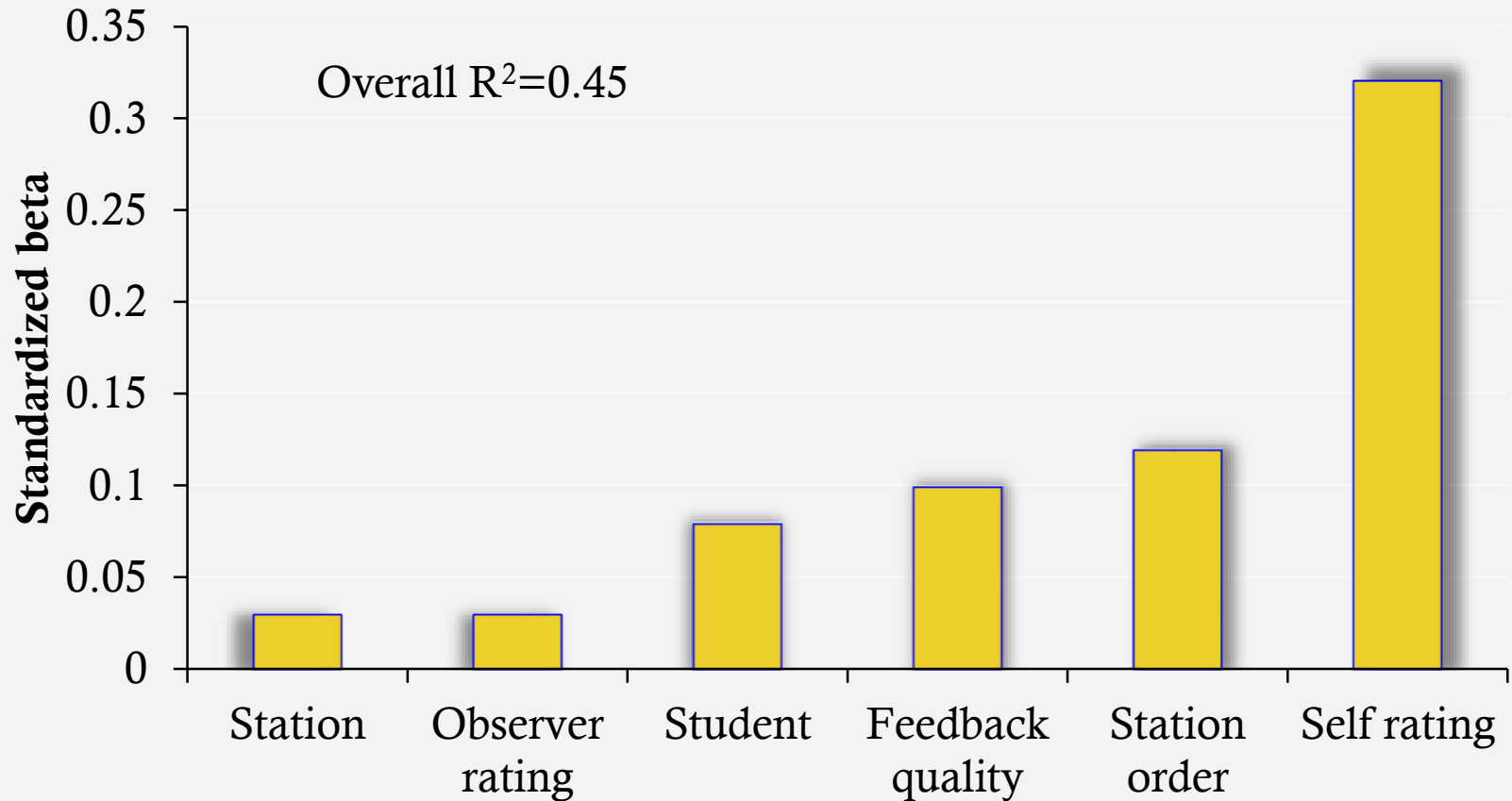


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# What predicted generation of learning goals?



NOTE: Absolute values illustrated for ease of comparison (Eva, et al., 2010)

# Illusion 3:

**WE LOVE IT  
WHEN YOU  
FEEDBACK  
SO WE CAN  
IMPROVE  
FOR YOU**

# Shute (2008)

“formative feedback has been shown ... to improve students’ learning and enhance teachers’ teaching to the extent that the learners are receptive and the feedback is valid, objective, focused, and clear.

[BUT] there is no “best” type of formative feedback for all learners and learning outcomes



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# Shute (2008)

...to the extent that  
the learners are  
receptive...



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# Credibility

Of relationships:

Engagement and awareness

Of the process:

Validity and authenticity

Of intent:

Beneficence and non-maleficence



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(Sargeant, et al., 2010)

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# Credibility

“If you feel bad and you feel uncomfortable, you’re gonna not have the confidence to talk about mistakes ...you don’t get any kind of constructive feedback because ...you’re not comfortable saying it”

(Eva, et al., 2012; AHSE)

# What should we, as educators, do?

- Keep in mind whose opinion matters most
- Focus on skill development rather than self-assessment ability
  - Stop treating self-assessment as a generic skill that can be taught



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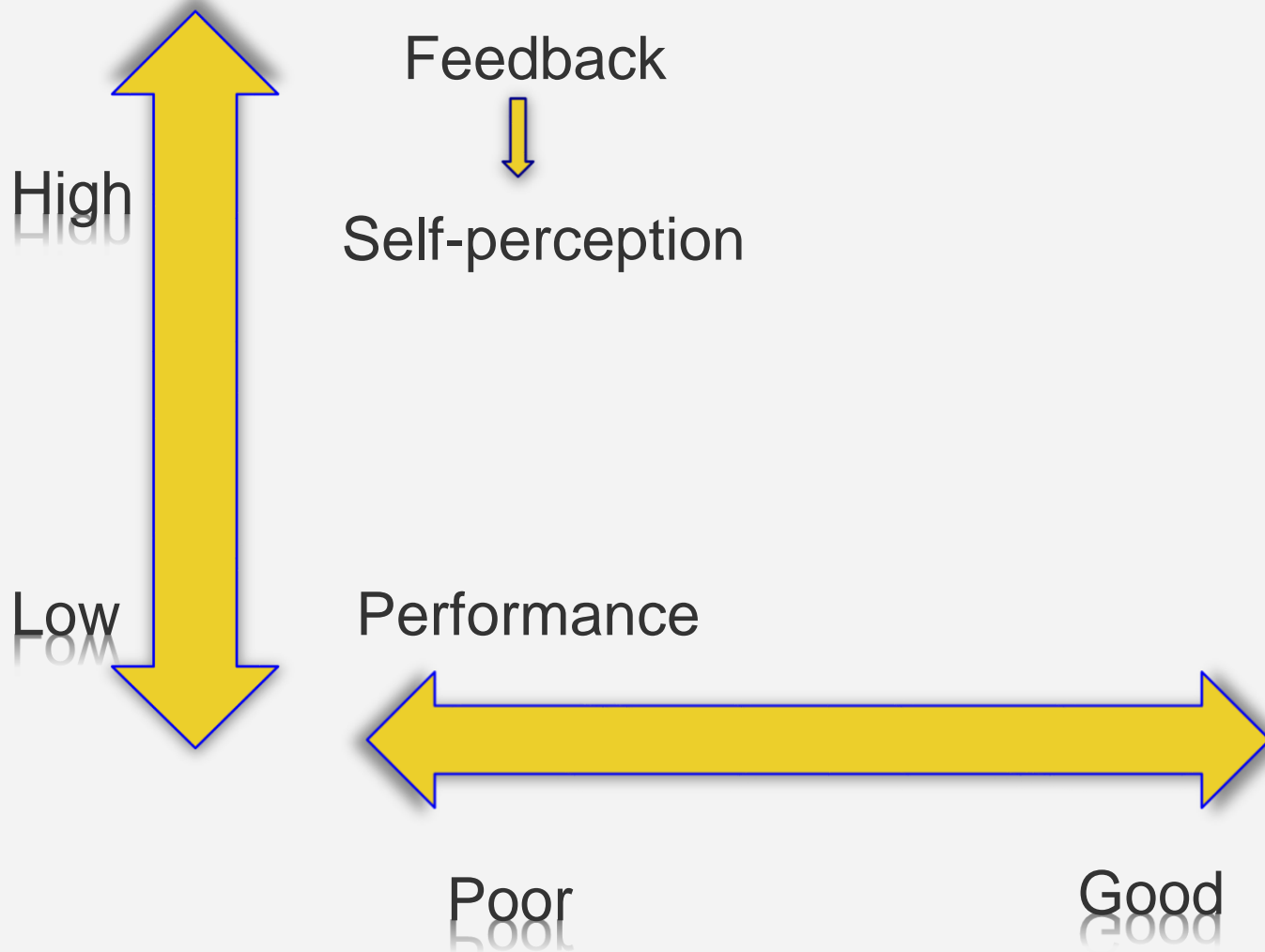


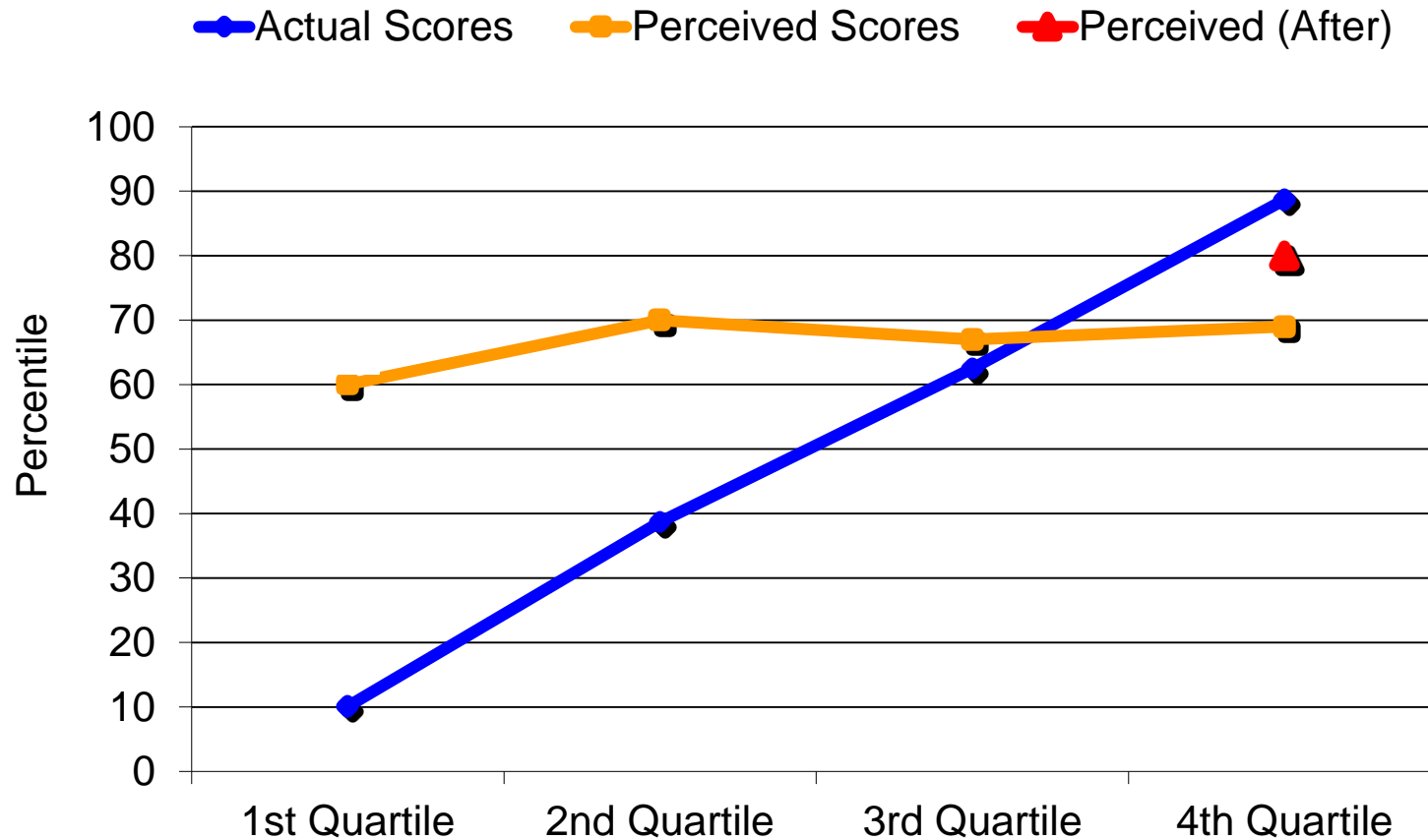
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# A revised model in HPE





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(Kruger and Dunning, 1999)

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# What should we, as educators, do?

- Keep in mind whose opinion matters most
- Focus on skill development rather than self-assessment ability
- Emphasize accurate assessment rather than accurate self-assessment
  - Create opportunities for students to discover the boundaries of their knowledge



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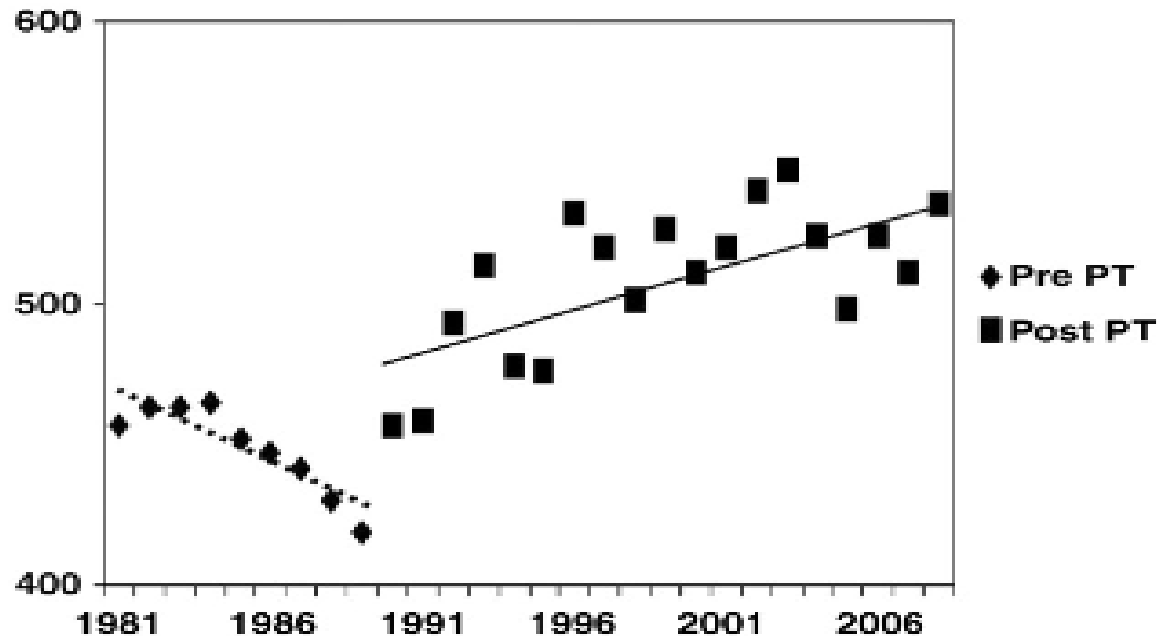
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# Mean Licensing Exam Scores



**Figure 1.** Mean score on licensing examination of McMaster graduates 1981–2008.

*Note:* Fitted lines are from regression analysis in Table 1.



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(Norman et al, 2010)

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# Informed self-assessment

- Using external data to guide one's perceptions of one's strengths and limitations
  - *Practice Improvement Models - ABIM*
  - *Communities of Practice - FMPE*
  - *MOCA Minutes - ABA*



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# “Desirable difficulties”

Creating situations that will enable learners to discover the limits of their knowledge and ability

(see Eva, 2007 (BMJ); 2009 (AHSE))



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# What should we, as educators, do?

- Keep in mind whose opinion matters most
- Focus on skill development rather than self-assessment ability
- Emphasize accurate assessment rather than accurate self-assessment
- Nurture more refined understanding of feedback practices
  - Those that prioritize relationship-centred education



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“Studies that augmented feedback with consultation produced substantially larger differences, but other methodological variations had little effect”

(Marsh and Roche, 1997)





# Delivering feedback well

- Discuss the basis for evaluation
- Use non-judgmental language
- Focus on changeable behaviour
- Limit to a few points
- Mix positive and negative, etc.



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Westerberg and Jason (1991)

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# Illusion 4:



How to Deliver a  
'You Suck Sandwich'

# Feedback: much more than a tool

Stéphane Voyer & Daniel D Pratt

*Feedback is, inevitably, a social and normative phenomenon, framed by social roles and relationships*

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# Educational alliances

- Supervisors “formed educational alliances with resident doctors that provided a foundation for learning.”
- Residents needed a balance of challenge and support
- Supervisors “assessed learning needs, facilitated learning, monitored the content and process of learning and the **well-being** of residents”



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(Wearne, et al., 2012)

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# Educational alliances

“Use of this framework may also help to reorient discussions of the feedback process **from effective delivery and acceptance** to negotiation in the environment of a **supportive educational relationship.**”



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(Telio, et al., 2015)

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# What should we, as educators, do?

- Nurture a culture of self-regulation that amounts to understanding that we can't rely on ourselves and leads learners (at all levels) to ...
  - Seek data that will help inform their practice
  - Identify cues that are indicative of the limits of one's ability
  - Remain receptive to the information presented



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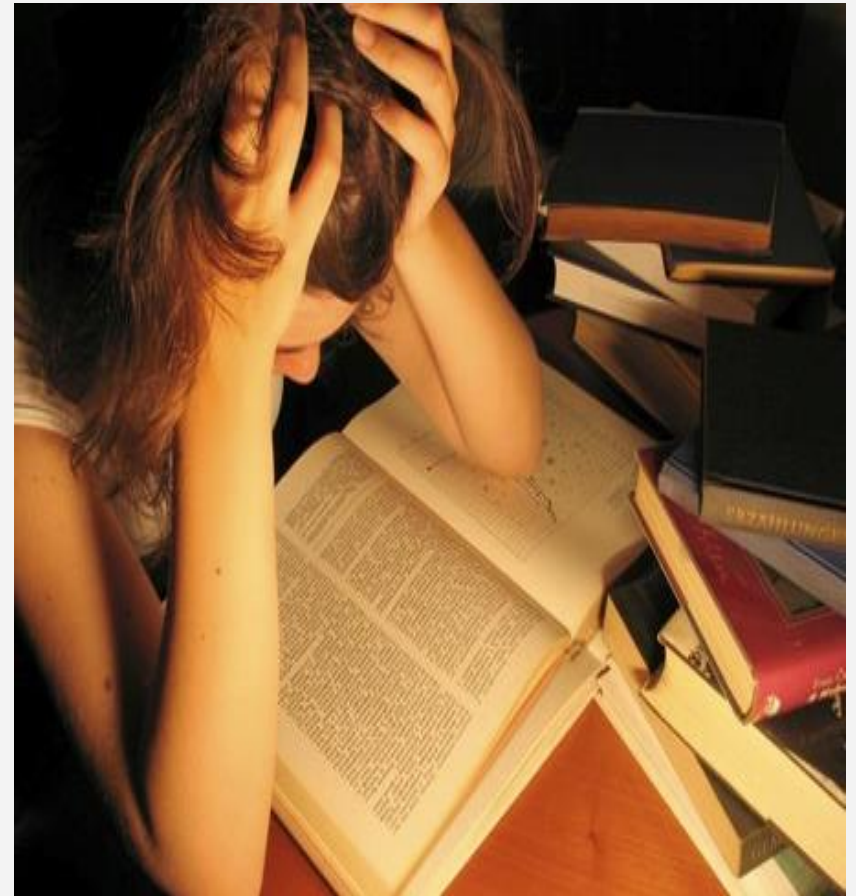




- 2 slides of summary
- 2 slides of discomfort

“Education is  
learning what you  
didn’t even know you  
didn’t know”

(Boorstin, 1914)



# Moving beyond the script

Things to do:

- Avoid normative comparisons
- Use praise wisely
- Different styles for different tasks

(see Shute, 2008)

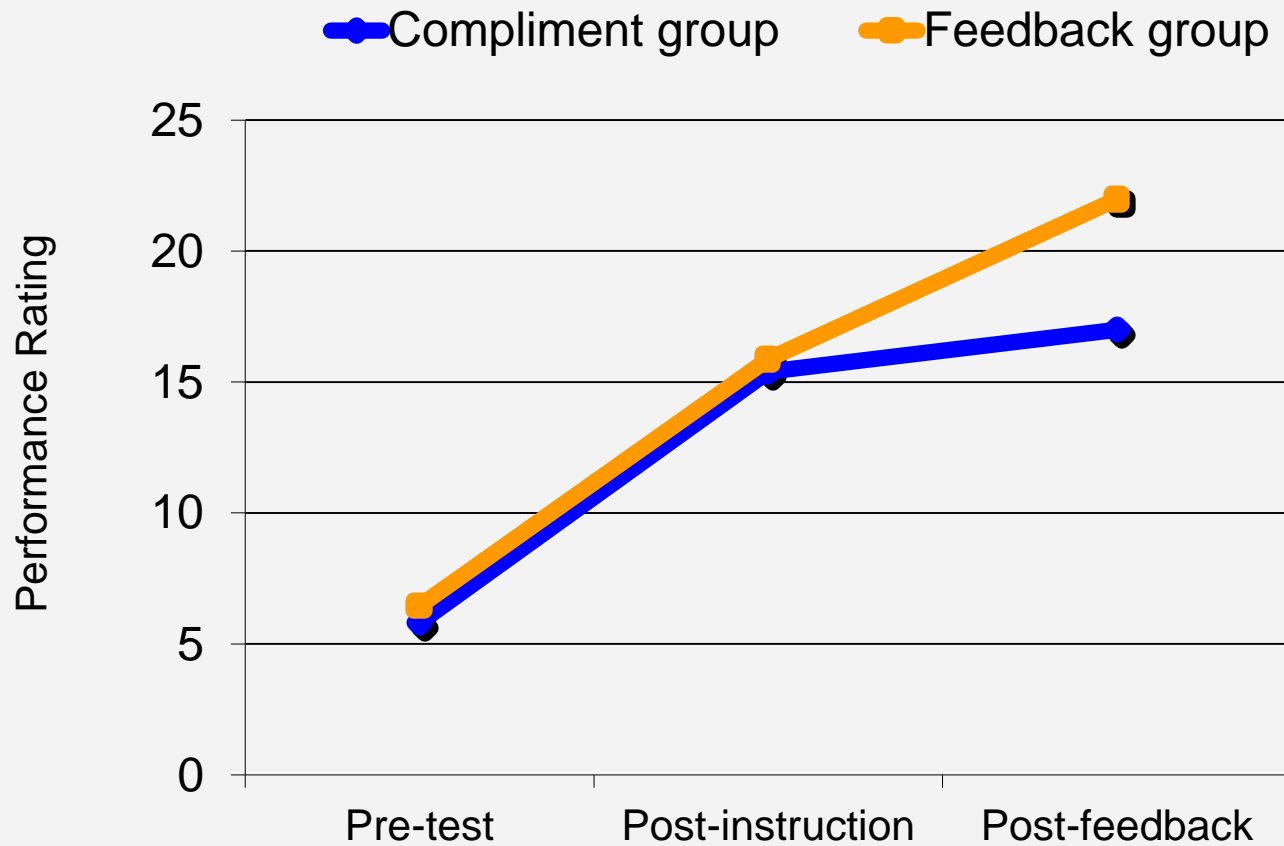
- Keep the relationship/dialogue in mind

# Feedback as Improv

“The dialogue, action, story, and characters are created collaboratively as the story unfolds.”

Play has rules and structure. Within them, anything can happen

# Boehler, et al. (2006)



# Thanks

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