



# COMPLEX ITEM TYPES: HOW CAN WE HELP STANDARD SETTING PANELISTS UNDERSTAND AND RATE THEM?

Paper presented at the National Conference on Student Assessment

Austin, TX

June 29, 2017

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# STANDARD SETTING – COGNITIVELY CHALLENGING FOR PANELISTS

- Skorupski (2012) – Focuses on four areas that present cognitive challenges for standard setting panelists
  - Panelists understanding of Performance Level Descriptors (PLDs) and Minimally Competent Candidate (MCC)
  - The standard setting method
  - The role of discussion
  - The impact of impact data

# STANDARD SETTING – COGNITIVELY CHALLENGING FOR PANELISTS

- Skorupski (2012) – Some recommendations
  - More upfront time spent on training
  - Evaluate panelists understanding of processes and procedures before they engage in critical ratings (i.e. Readiness Surveys)
  - Use only experienced panelists (1<sup>st</sup> year attendees are treated as trainees)
  - Provide continuing education credit for panelists

# STANDARD SETTING – COGNITIVELY CHALLENGING FOR PANELISTS

- A few other areas that panelists have a tendency to struggle
  - Would versus should
  - Perceived versus actual item difficulty
  - Test complexity of reading passages (or other stimuli) versus the difficulty of the items

# STANDARD SETTING – COGNITIVELY CHALLENGING FOR PANELISTS

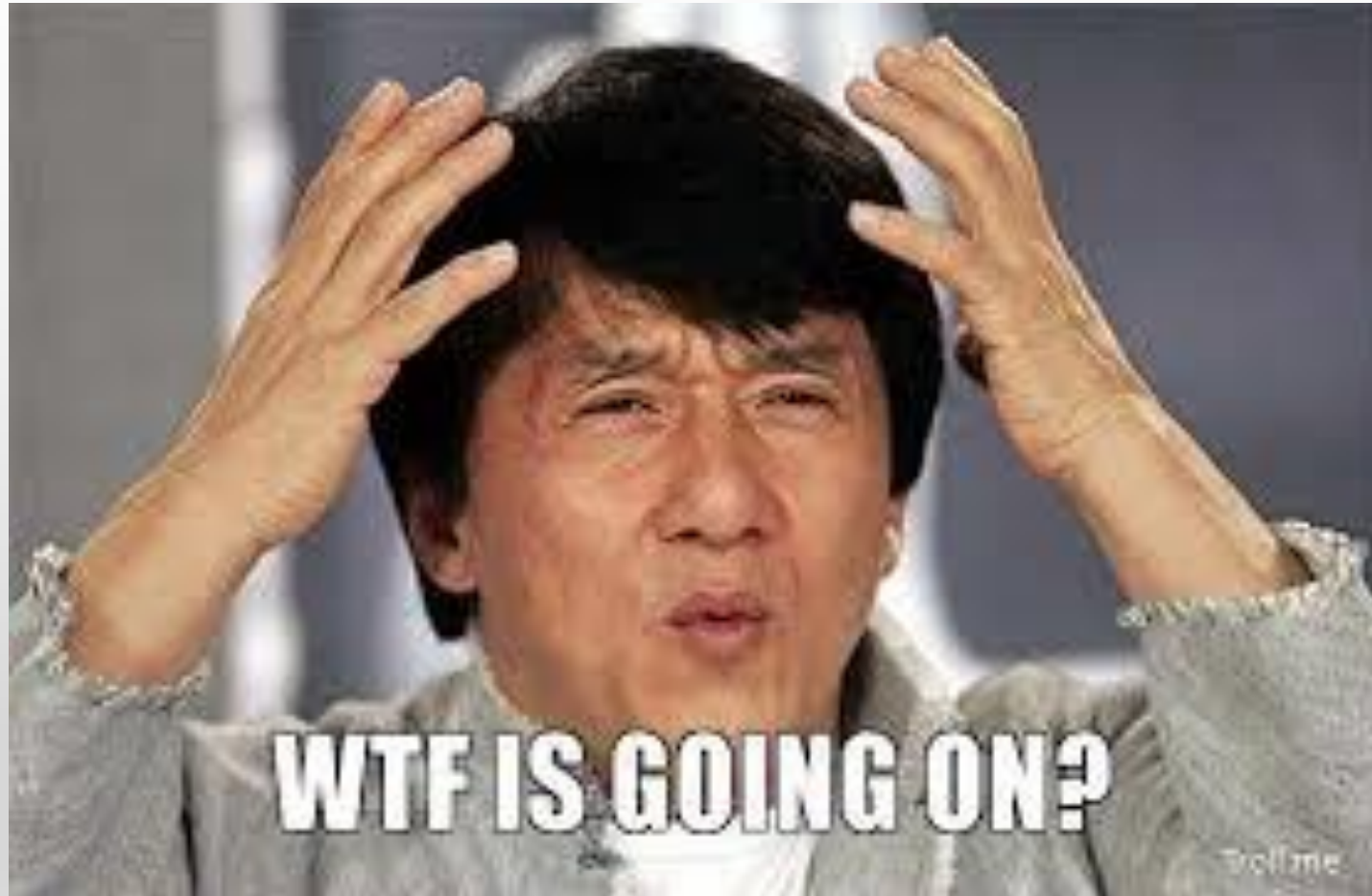
- Skorupski (2012) also highlights the challenges that panelists can face when trying to make their judgments
- The Bookmark method frequently uses a 67% probability, and teachers (or other panelists) may struggle to properly understand the value of 67% (may be confused with a D or C- minus grade)
  - Hein and Skaggs (2009) surveyed panelists and many reported initially struggling to understand the response probability criterion
  - Dawber et. al. (2002) found that panelists used slightly different strategies when making judgments from round 1 to later rounds, but did eventually feel comfortable with their judgments

# INCREASING USE OF INNOVATIVE ITEM TYPES/TECHNOLOGY

## ENHANCED ITEMS

- Drag and Drop
- Multiple Selection
- Drop down Menus
- Equation Builders
- Multi-part answer
- Scoring on multiple domains

# STANDARD SETTING PANELISTS – STATE OF CONFUSION



# STANDARD SETTING WITH TEIs

- Many of our traditionally used procedures can accommodate the use of TEIs, but do we need to stop and determine how well *the panelists* can work with and understand these items
- For constructed response items, we traditionally have identified the position on the scale where a student has a (.67) probability of getting that score point or higher
- Many panelists (at least in my experience) struggle with understanding how they should work with the constructed response items and how they are lined up next to the tradition MC items



## SOME PRINCIPLES TO AID THE PANELISTS

- Provide information early and often
- No decoder rings allowed!
- Use terminology that is comfortable for panelists and provide an appropriate level of specificity

# PROVIDE INFORMATION EARLY AND OFTEN

- Mention TEIs in the general session, even if at a surface level
  - Highlight the values and benefit that come with the TEIs (i.e. assessing what students really should know)
- During content specific training
  - Allow panelists to see a complete item, along with the scoring rubrics to help them see how the comprehensive item is being used and scored
  - Walk the panelists through how the item is being deconstructed in your standard setting and how it will be represented
  - Remind panelists of these procedures as each round of ratings occurs
- Evaluations
  - Can ask questions targeted to these questions in any Readiness Surveys
  - Ask specific questions about comfort working these items in all evaluation surveys

# NO DECODER RINGS!

Item ID	Translation
MC225561	Multiple-choice item

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CR225564_2	Constructed response item, 2 <sup>nd</sup> score point

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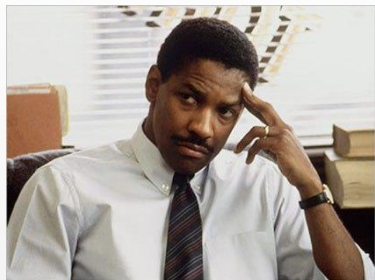
Item ID	Translation
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CR225567_C_2	Constructed response items, multi-domain item, Cohesion domain, 2 <sup>nd</sup> score point

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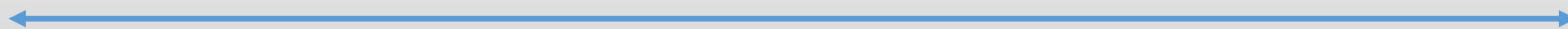
Item ID	Item Type	Single or Multi	Domain	Score point
MC225561	MC	Single	--	1
CR225564	CR	Single	--	2
CR225567	CR	Multi	Cohesion	2

# USE APPROPRIATE LANGUAGE – THE WILEY LANGUAGE SCALE



Now, explain it to  
me like I am a  
four-year old

Psychometricians  
speaking  
amongst  
themselves



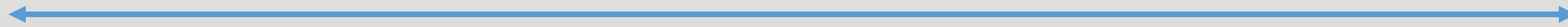
# USE APPROPRIATE LANGUAGE – THE WILEY LANGUAGE SCALE



Now, explain it to  
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Psychometricians  
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Teenagers  
speaking  
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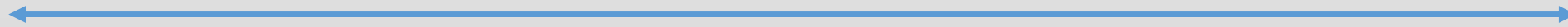


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# USE APPROPRIATE LANGUAGE

- Beta test or pilot some of the explanations
- Essential that targeted appropriate facilitator scripts are utilized
- Take advantage of the content experts that are frequently in attendance
- Training for all facilitators; make sure they understand all aspects of the TEIs and how they are represented

## WRAP-UP

- We are asking standard setting panelists to complete a task (for most of them) they have never heard about or thought about before
- They need to juggle not only the requirements of the standard setting methodology, but also their previous experience with students and the implications they know will result from the process
- The last thing needed is adding more cognitive complexity into the process, and we should find better ways to make the panelist task easier if at all possible

# THANK YOU!

- Questions?
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