



# Assessing competencies and how to do this online

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# Overview

## 1. Assessment in general

- What is assessment?
- Why assess?
- How to assess?
- How to assess online?

## 2. Assessment of competencies

- What are competencies?
- How to assess competencies?
- How to assess competencies online?



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- **What is assessment?**
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# What is assessment?

- Measurement of the extent to which intended knowledge/skills/competencies are met



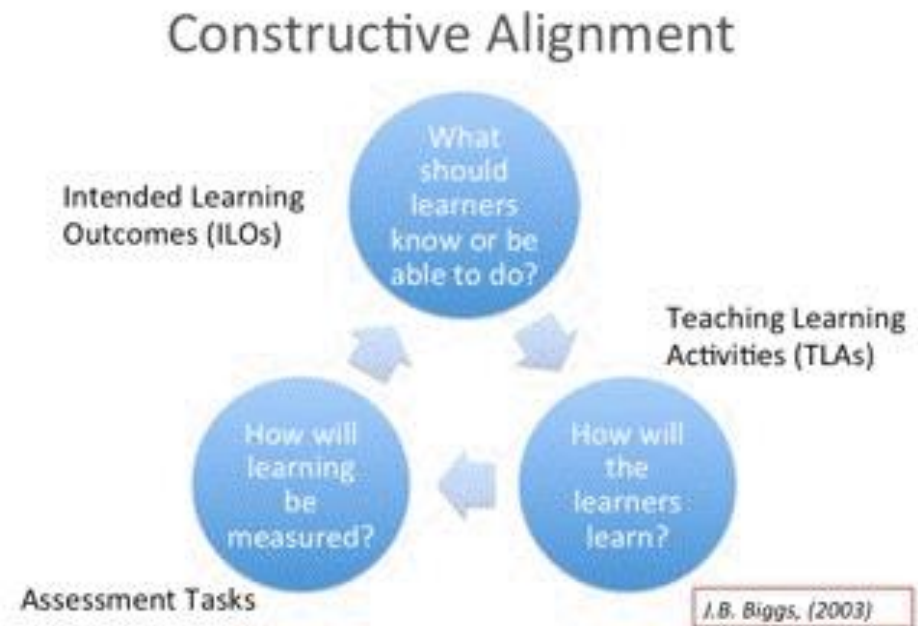
# What is assessment?

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  - Important:  
Assessment should be aligned with intended learning outcomes and teaching activities



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# Why assess?

- Formative purposes
  
  
  
  
  
  
  
  
  
  
- Summative purposes
  - Testing ‘of learning’



## Why assess?

- Formative purposes
  - Testing *'for learning'*
  
- Summative purposes
  - Testing *'of learning'*



# Why assess?

- Formative purposes
  - Testing '*for* learning'
  
- Summative purposes
  - Testing '*of* learning'
  - Provided after learning



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- Formative purposes
  - Testing ‘*for* learning’
  - Provided during learning
  
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  - Testing ‘*of* learning’
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## Why assess?

- Formative purposes
  - Testing ‘for learning’
  - Provided during learning
  
- Summative purposes
  - Testing ‘of learning’
  - Provided after learning
  - Seeing to what extent students have learned what they were supposed to learn



# Why assess?

- Formative purposes
  - Testing ‘*for* learning’
  - Provided during learning
  - Giving both teachers and students insight into their progress and aspects that warrant improvement
- Summative purposes
  - Testing ‘*of* learning’
  - Provided after learning
  - Seeing to what extent students have learned what they were supposed to learn



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# How to assess?

- Is dictated by



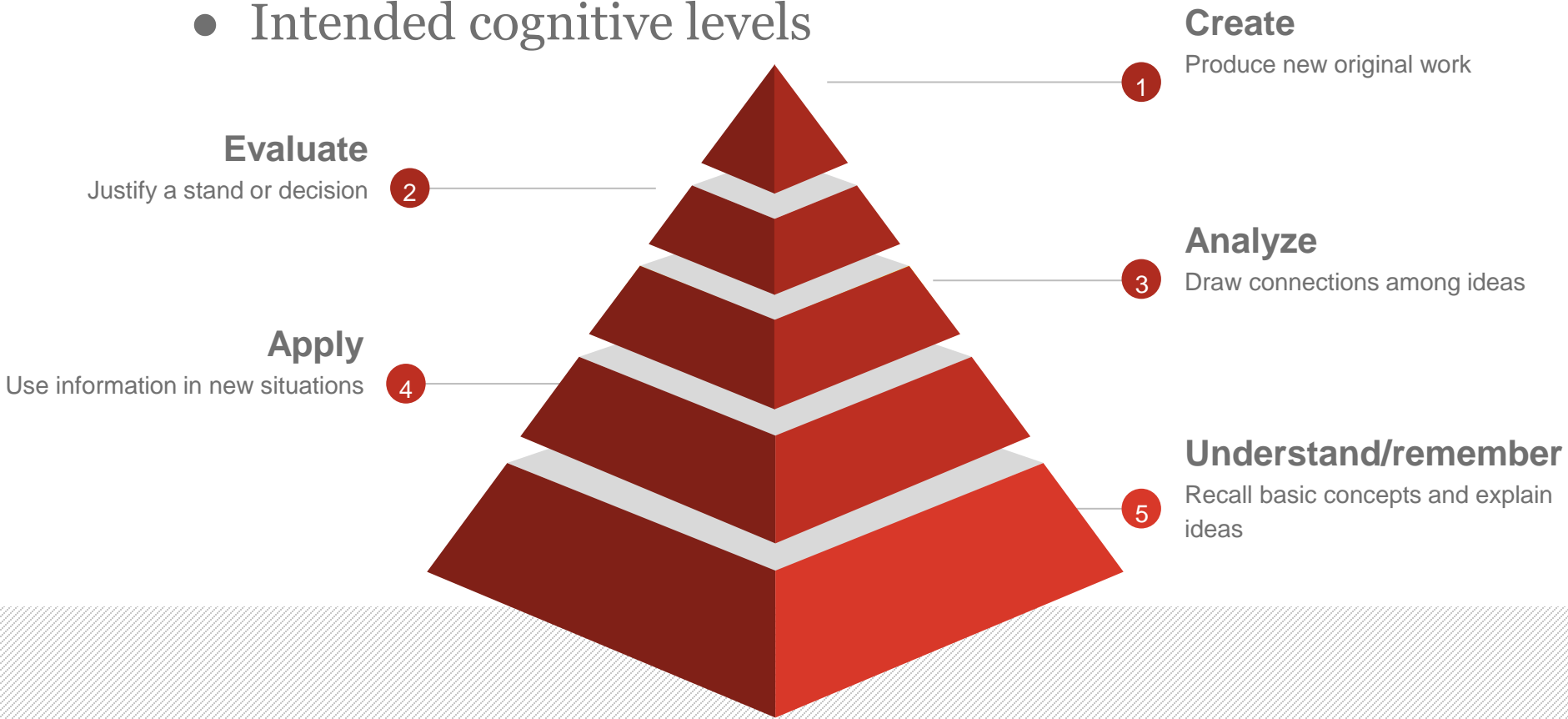
# How to assess?

- Is dictated by
  - Intended learning outcomes



# How to assess?

- Is dictated by
  - Intended learning outcomes
  - Intended cognitive levels





# How to assess?

	Remember, Understand	Apply	Analyze, Evaluate, Create
Closed-ended questions	+	±	-
Open-ended questions	+	+	+
Oral exams	±	+	+
Oral Presentations	+	+	+
Written assignments	±	+	+
Creative projects	±	+	+
Portfolio	±	±	+



## How to assess?

- Strive to maximize quality requirements



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  - Validity
    - *The extent to which you measure what you intend to measure*



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    - *Clarity towards students on aim, design and content of assessment*





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    - *The degree to which chance plays a role in the determination of assessment results*
  - Transparency
    - *Clarity towards students on aim, design and content of assessment*
  - Efficiency
    - *The invested time and resources are in proportion to the outcomes*



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# How to assess online?

- Principles remain the same



## How to assess online?

- Principles remain the same
  - Alignment remains equally important



## How to assess online?

- Principles remain the same
  - Alignment remains equally important
  - Maximizing the quality requirements



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## How to assess online?

- Principles remain the same
  - Alignment remains equally important
  - Maximizing the quality requirements
- Some assessment methods work equally well online, others are less suited
  - Particularly those targeting the lower cognitive levels or highly practical skills
    - Consider (a combination of) alternative assessment methods



## How to assess online?

<b>Activity</b>	<b>Online tool</b>
written assignment	Google Doc
online discussion	Online Discussion Board, blog, wiki
presentation, oral exam	Zoom, Teams, Google Hangout, etc.
self-assessment, peer assessment	Peerception, FeedbackFruits
Quiz/poll	PollEverywhere, Mentimeter, Socrates, Kahoot



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# What are competencies?

- Example:
  - Radiation protection expert





# What are competencies?

- Example:
  - Radiation protection expert
    - How confident would you feel about someone's ability to manage a crisis situation in the field if...





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      - They passed a multiple choice exam





# What are competencies?

- Example:
  - Radiation protection expert
    - How confident would you feel about someone's ability to manage a crisis situation in the field if...
      - They passed a multiple choice exam
      - They have shown during a practicum that they have strong communication skills







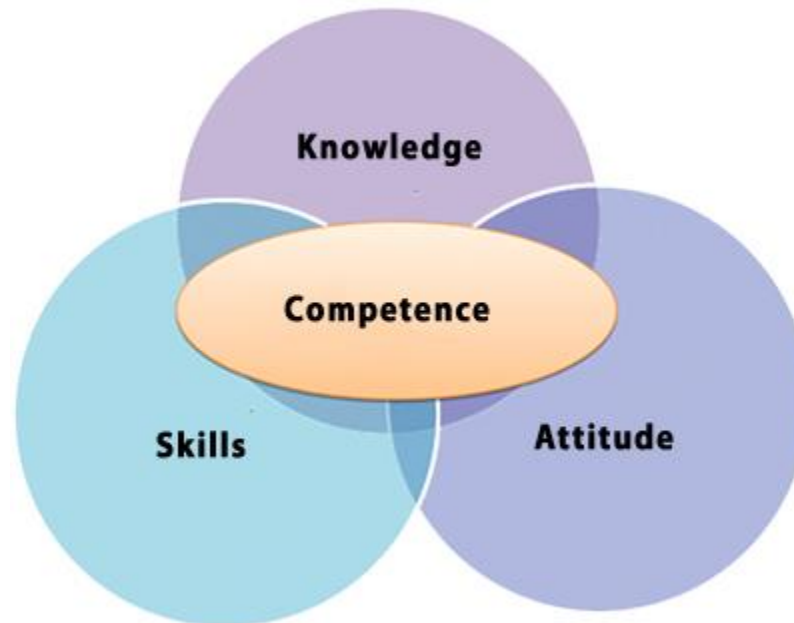
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- Competencies
  - The ability to apply knowledge, skills and attitudes effectively within a specific context



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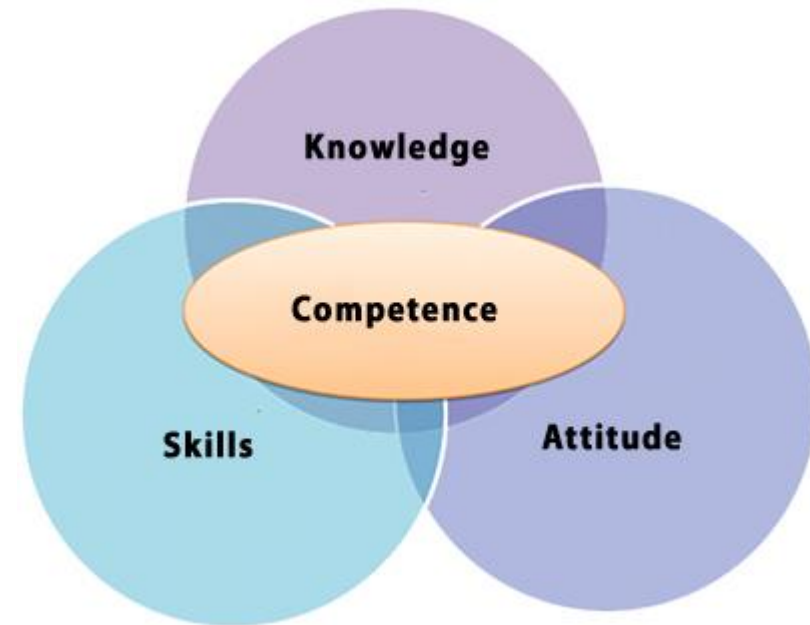
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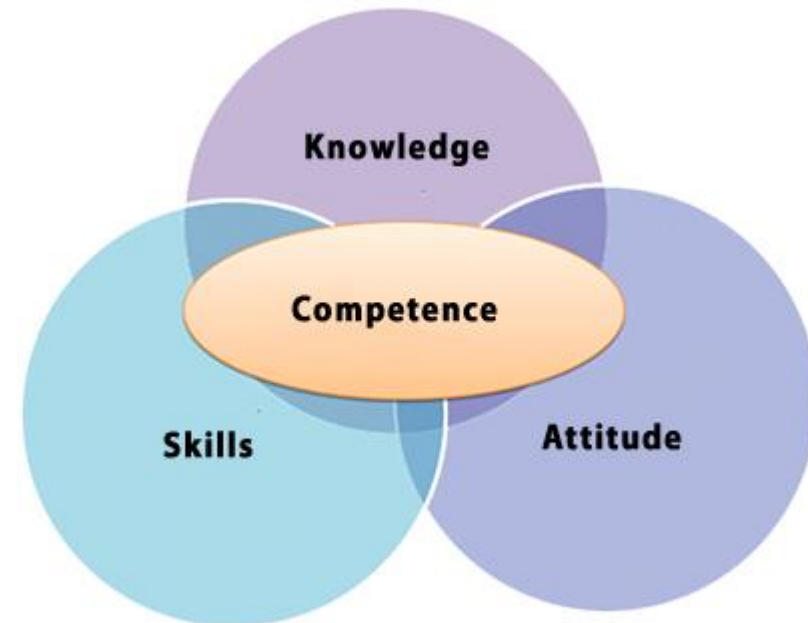
- Competencies
  - The ability to apply knowledge, skills and attitudes effectively within a specific context
  - Broader, overarching concept





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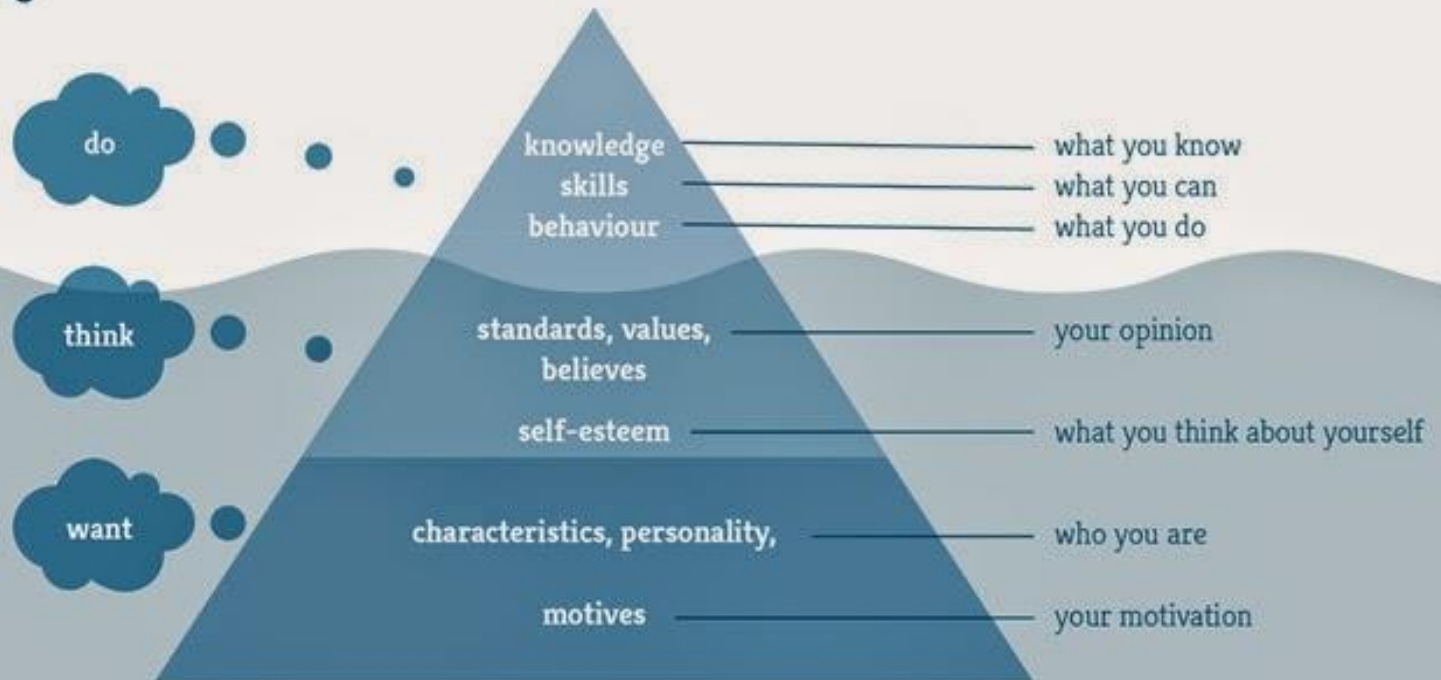
- Competencies
  - The ability to apply knowledge, skills and attitudes effectively within a specific context
    - Broader, overarching concept
    - Targeting a specific context





# What are competencies?

McClelland's Iceberg





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# How to assess competencies?

- Challenges for assessment





# How to assess competencies?

- Challenges for assessment
  - Avoiding focusing on each component of a competency individually



# How to assess competencies?

- Challenges for assessment
  - Avoiding focusing on each component of a competency individually
  - Operationalizing aspects in an authentic manner



# How to assess competencies?

- Example
  - Radiation protection expert





# How to assess competencies?

- Example
  - Radiation protection expert
    - Competency: needs to be able to manage a (looming) crisis situation adequately





# How to assess competencies?

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  - Radiation protection expert
    - Competency: needs to be able to manage a (looming) crisis situation adequately
      - Knowledge: needs to know crisis protocols, decontamination methods, risks of exposure





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- Example
  - Radiation protection expert
    - Competency: needs to be able to manage a (looming) crisis situation adequately
      - Knowledge: needs to know crisis protocols, decontamination methods, risks of exposure
      - Skills: needs to be able to apply this knowledge, communicate effectively, stay in control





# How to assess competencies?

- Example
  - Radiation protection expert
    - Competency: needs to be able to manage a (looming) crisis situation adequately
      - Knowledge: needs to know crisis protocols, decontamination methods, risks of exposure
      - Skills: needs to be able to apply this knowledge, communicate effectively, stay in control
      - Attitude: needs to be able to effectively deal with stress, calm others down





# How to assess competencies?

- Common assessment methods
  - Simulations (business game, in-basket)
  - Competency-based interviews
  - Psychological tests
  - Analysis exercises





# How to assess competencies?

	General interview	Competency based interview	Simulation (presentation)	Simulation (in-basket)	Psychological tests
Oral communication	++	++	+		+
Sensitivity	+	+		+	+
Performance/ action	++	+	++		+
Plan/organize			+	++++	+
Judgement			++	++	++
Initiative	+	++	+	++	++
Stress resilience		++	+	++	++++



# How to assess competencies?

- Important



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  - Key to good competency assessment is often combining different assessment methods



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  - Continuous assessment is essential for competency development (so both formative and summative)



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- Important
  - Key to good competency assessment is often combining different assessment methods
  - Continuous assessment is essential for competency development (so both formative and summative)
  - Do not lose track of general principles of good assessment



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# How to assess competencies online?

<b>Assessment method</b>	<b>Online option</b>
Simulation - business game	± (VR)
Simulation - in basket	+
Competency based interview	+++ Zoom, Teams, Google Hangout, etc.
Group discussion with/without assigned roles	
Analysis exercise	++ Take home assignment & presentation in Zoom, Teams, Google Hangout, etc.





# How to assess competencies online?

- Biggest challenge: assessing authentically



# How to assess competencies online?

- Biggest challenge: assessing authentically
- A combination of methods is often the best solution



## How to assess competencies online?

- Biggest challenge: assessing authentically
- A combination of methods is often the best solution
  - Allows you to cover each component of the competency, in as authentic a way as possible



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Thank you very much for your attention!

*Questions now?*

Feel free to use the chat

*Questions afterwards?*

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