

Monthly Workshop on Basics in Clinical  
Education IIUM : 11 Mac 2022

# CLINICAL SUPERVISION & ASSESSMENT

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## **Roles of a clinician educator**

**Dedicated  
teacher**

**Superior  
clinician**

**Excellent  
role model**

**Professional  
practitioners**

**Effective supervisor &  
assessor**

**Committed  
mentor**



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# Contents : CLINICAL SUPERVISION



## Definitions :

Clinician educators  
Educational & clinical  
supervision



## Reflection on own experience of :

being supervised during  
specialty training  
supervising postgraduate  
trainees



## Issues & challenges

postgraduate training  
supervision  
supervisors  
supervisees

# DEFINTION : CLINICAL SUPERVISION

The provision of **monitoring, guidance and feedback** on matters of personal, professional and educational development in the context of the doctor's care of patients.

*This would include the ability to anticipate a doctor's strengths and weaknesses in particular clinical situations in order to maximize patient safety .*



Tomlinson, J. Using clinical supervision to improve the quality and safety of patient care: a response to Berwick and Francis. *BMC Med Educ* **15**, 103 (2015). <https://doi.org/10.1186/s12909-015-0324-3>

## CLINICAL SUPERVISOR

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A clinical supervisor is a trainer who is selected and appropriately trained to be responsible for overseeing a specified trainee's clinical work and providing constructive feedback during a training placement. Some training schemes appoint an educational supervisor for each placement. The roles of clinical and educational supervisor may then be merged.

## EDUCATIONAL SUPERVISOR

An educational supervisor is a trainer who is selected and appropriately trained to be responsible for the overall supervision and management of a specified trainee's educational progress during a training placement or series of placements. The educational supervisor is responsible for the trainee's educational agreement.

*The Trainee Doctor : GMC ( July 2011)*

# Keeping the balance...



# EDUCATIONAL SUPERVISION & PATIENT SAFETY

‘The processes that ensure **patient safety** within a clinical supervision are essentially **educational** and form the backbone of the trainee’s clinical learning’



*Kilminster et al. 2000*

*Research Project - Good Supervision:  
Guiding the clinical educator of the 21<sup>st</sup> century*

# EDUCATIONAL SUPERVISION & TRAINEE SAFETY

‘ Supervisors should ensure that trainees **work within their competences** and that they are adequately supervised when acquiring new skills.’



*Kilminster et al. 2000*

*Research Project - Good Supervision:  
Guiding the clinical educator of the 21<sup>st</sup> century*

## \*\* REFLECTION

- List down THREE main characters of :
  - ▣ Your BEST supervisor
  - ▣ Your WORST supervisor
  
- List down THREE main characters of :
  - ▣ Your BEST supervisee
  - ▣ Your WORST supervisee
- Share this reflection with the person sitting next to you

# Supervisory Style : Breathing down your neck!



# Supervisory Style :

## From a distance, watching over like a hawk



# Feedback : Superior - Confrontational



# Feedback : Collegial – side by side



# Features of effective supervision

- **Direct supervision**
- **Constructive feedback**
- **Structured & regular supervision meetings**
- **Holistic** : clinical management, teaching & research, administrative and management skills, personal development, interpersonal skills & reflection
- **Provision of appraisal** based on 360 degree perspective ( patient's feedback, inter-professional team, peers)



**Assessing clinical  
competencies  
and remediating  
gaps in practice**





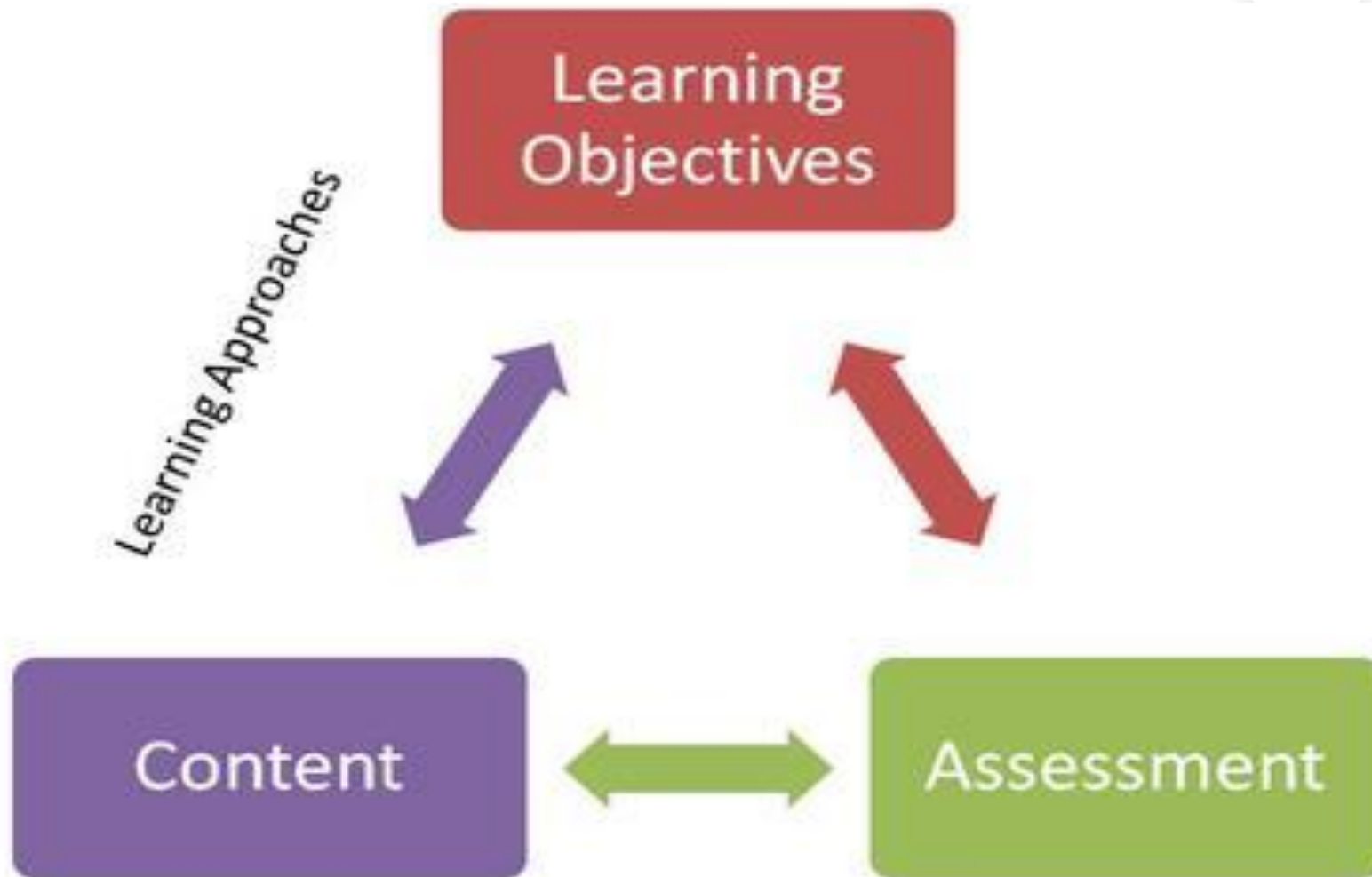
# ASSESSMENT : Introduction

- Assessment is an integral part of teaching & learning
- Proper assessment :
  - provides information that would support student learning.
  - Reveals to teachers & learners if learning has actually taken place.

A word cloud graphic with the word 'Assessment' in large red letters. Other words in various colors and sizes include 'valid', 'competency', 'competence', 'reliable', 'flexible', 'fair', 'evidence', 'methods', 'sufficient', 'must', 'assess', 'authentic', and 'current'.

flexible fair evidence methods  
sufficient reliable competence  
must **valid** **Assessment**  
assess authentic  
current

# ASSESSMENT : Introduction



# What is Assessment?

- Assessment is a collection of learning related information/data about a group or individual.
- There are various instruments that are used to collect these information :
  - Tests, exams, interviews, practical sessions, peer review

# ASSESSMENT

**"The word assess comes from the Latin *assidere*, which means to sit beside. Literally then, to assess means to sit beside the learner."**

*Evangeline Harris Stefanakis (2002)*

# PURPOSE OF ASSESSMENT



## The Purpose of the Assessment

### General purpose of the assessment

### Specific reason for the assessment

#### Administrative

- general assessment
- placement
- exemption
- certification
- promotion

#### Instructional

- diagnosis
- evidence of progress
- feedback to the respondent
- evaluation of teaching or curriculum

#### Research

- evaluation
- experimentation
- knowledge about language learning & language use

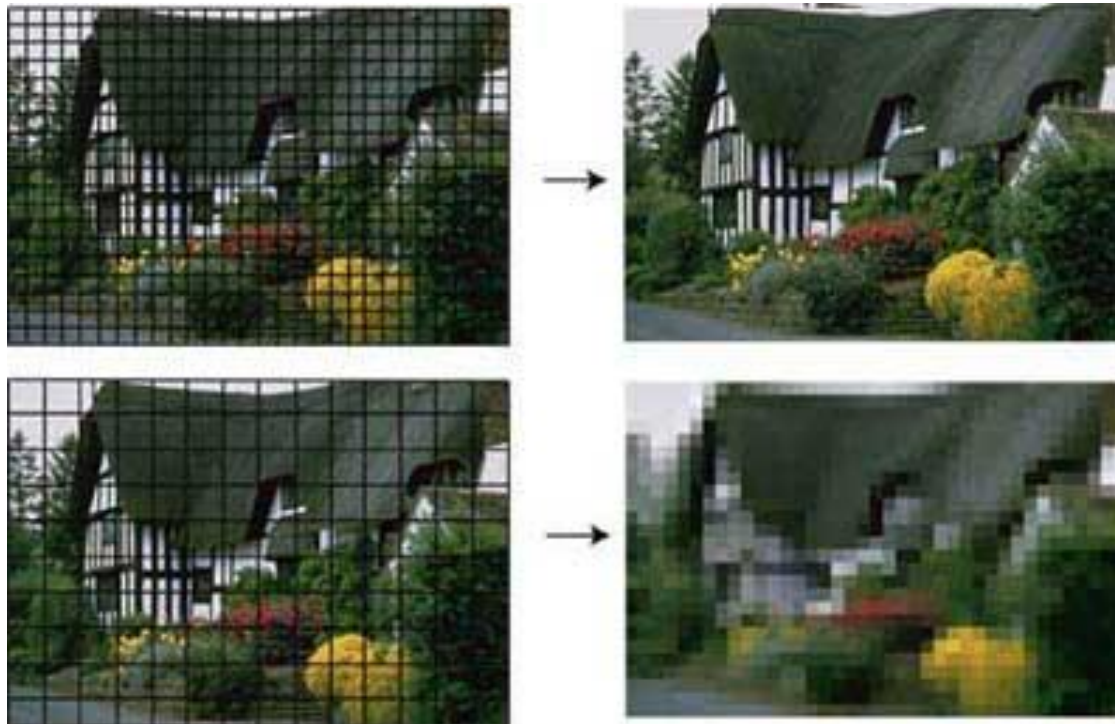
From Cohen, A.D. (1994). *Assessing language ability in the classroom*. Boston: Heinle & Heinle, p. 23.

# `Assessments are biopsies of knowledge and skills`



Associate Professor Dr Katharine Boursicot,  
Associate Dean for Assessment and Progression,  
Duke-NUS

- Assessment tools collect data points @ pixels, each representing information on the learner's competencies.
- More number of pixels will result in a clearer picture of the learner's abilities.



Tim Wilkinson  
GCCT 2014



9x12



12x16



15x20



24x32



48x64



900x1200



# ASSESSMENT METHODS MUST BE :



**VALID** ((assess what they say they do)



**RELIABLE** (other assessors would make the same judgement with the same evidence)



**FLEXIBLE** (students' needs are taken into account in terms of the methods, the time and the place)



**FAIR** (allow all students to demonstrate their competence)

*<http://glennhammond.com/principles-of-assessment-and-rules-of-evidence/>*

# Assessment as a feedback process

## Students / Learners

- + Monitors progress in their learning
- + Motivates students to make improvements
- + Diagnoses students' strength and weaknesses

## Teachers

- + Provides information about learners learning
- + Review teaching and learning materials & methods
- + Evaluates teacher's ability to help their students to learn.
- + Evaluates strength & weakness of modules taught



MOVING FROM  
**FEEDBACK**  
TO  
**FEEDFORWARD**



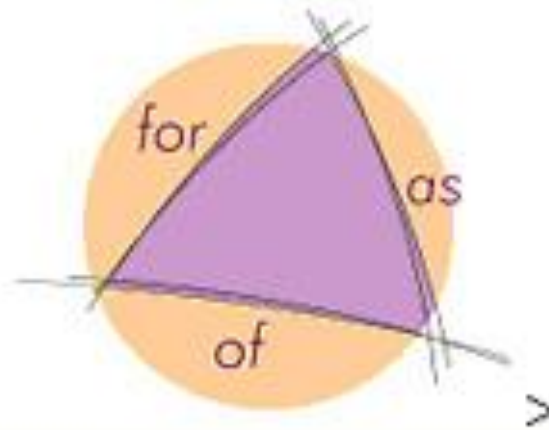
# Assessment as a feed-forward process

- Assessment provides **feed-forward** information to the future courses about a students' competency in a pre-requisite module.
- A **validation of the academic quality** of the institution to the outside world and give future graduates of the **course credibility** in terms of their competency as stated in their diploma.

# ASSESSMENT & LEARNING

## Assessment FOR learning

occurs when teachers use inferences about student progress to inform their teaching.



## Assessment AS learning

occurs when students reflect on and monitor their progress to inform their future learning goals.

## Assessment OF learning

occurs when teachers use evidence of student learning to make judgements on student achievement against goals and standards.



# O B J E C T I V E S

## Assessment for Learning

- enables teachers to use information about students' knowledge, understanding and skills to inform their teaching
- teachers provide feedback to students about their learning and how to improve

## FORMATIVE

## Assessment as Learning

- involves students in the learning process where they monitor their own progress, ask questions and practise skills
- students use self-assessment and teacher feedback to reflect on their learning, consolidate their understanding and work towards learning goals

## SELF ASSESSMENT

## Assessment of Learning

- assists teachers to use evidence of student learning to assess student achievement against learning goals and standards

## SUMMATIVE

**"THE STANDARD  
YOU WALK BY IS  
THE STANDARD  
YOU ACCEPT."**

**Lieutenant General David Morrison**

2016 Australian of the Year



**MEANING :**  
*Letting things slide –  
whether that be  
degrading other people  
personally or letting  
slipshod practice go  
unchallenged – sets the  
standard of  
acceptability in the  
organization.*



# Types of Standardized Assessment

Formative & Summative

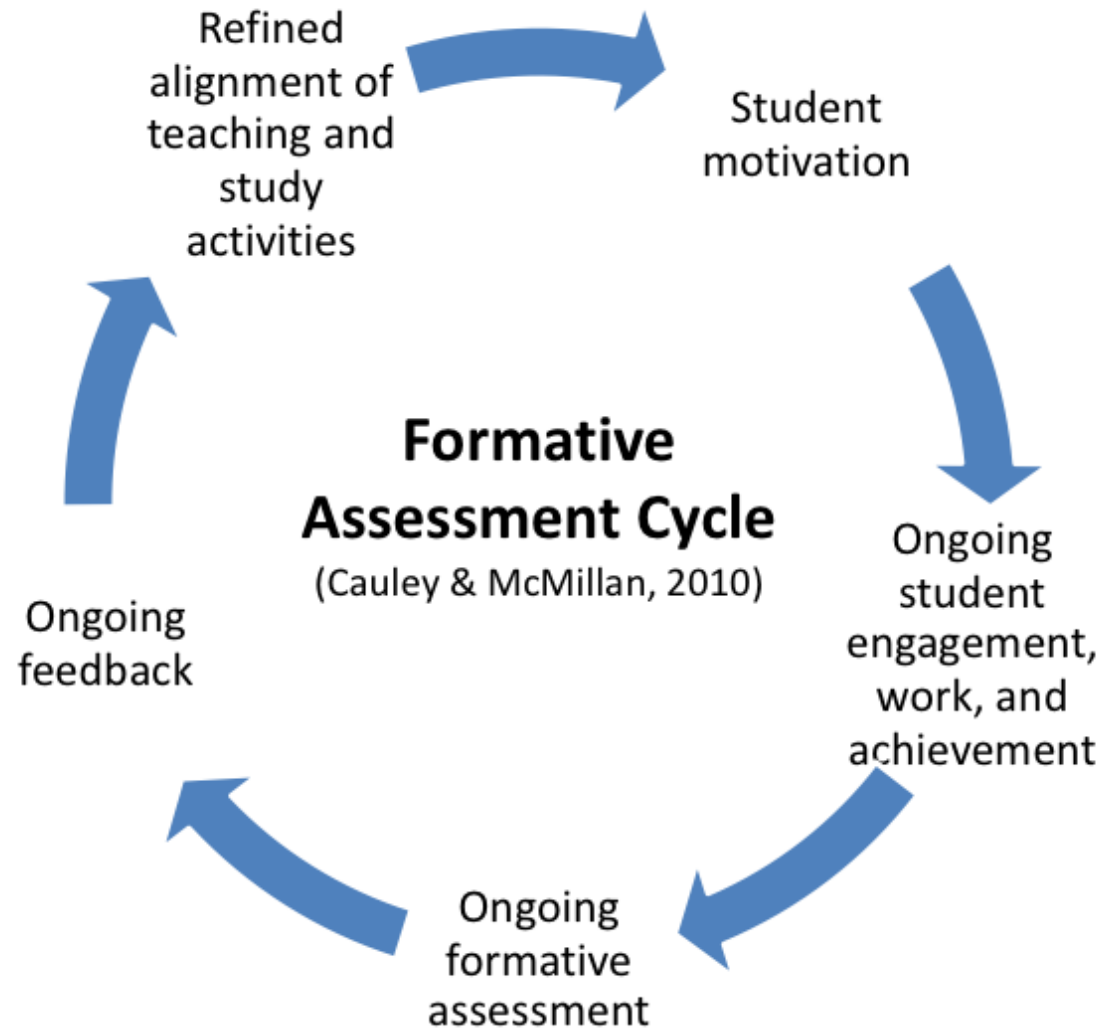
# Formative assessment

- An educational measurement that is used to inform the teaching and learning process.
- Objective is to gain as much information as possible in respect of :
  - what the student has achieved
  - what has not been achieved
  - what the student requires to best facilitate further progress

# Formative assessment

- Both teacher and student gains information from the assessment - to plan collaboratively for future learning activities.
- A good teacher practises formative assessment constantly on an **informal basis** through classroom observation and interaction.
- As this type of assessment is low stakes, there is less need to establish processes to ensure the reliability of the assessment.

# FORMATIVE ASSESSMENT



# Summative assessment

- Measures the outcome of an educational programme.
- Results of summative assessment are the primary focus of attention.
- Typically used for credentialing (awarding of qualifications), selection (for jobs or university places, for example), or as accountability measures for educational providers.
- Has “Pass” and “Fail” associated with them which distinguishes them from formative assessment.

# Summative assessment

- High stakes - fairness of the assessment process is a very important concern.
- Usually leads to **superficial approach of teaching & learning**:
  - Educator tends to narrow the focus of teaching to ensure good performance in the assessment.
  - Students can narrow their focus, or lose intrinsic, curiosity-driven motivation - simply want to pass the exams.

# Summative & Formative Assessment

- Summative assessment intended to summarise student achievement at a particular time, whereas formative assessment is intended to promote further improvement of student attainment (Crooks, 2001).
- **Summative assessment can also be used formatively**, if it provides feedback to the student, teacher, school leader, Board of Trustees or Ministry of Education, so as to lead to further improvement.

## Formative

**Help students to learn and practice**

**When**

Throughout the course

**Why**

Identify gaps and improve learning

**How**

Via approaches that support specific student needs

## Summative

**Assess student performance**

**When**

At the end of the instructional period

**Why**

Collect evidence of student knowledge, skill or proficiency

**How**

Via exit learning products or a cumulative assessment

# Assessment : A continuum



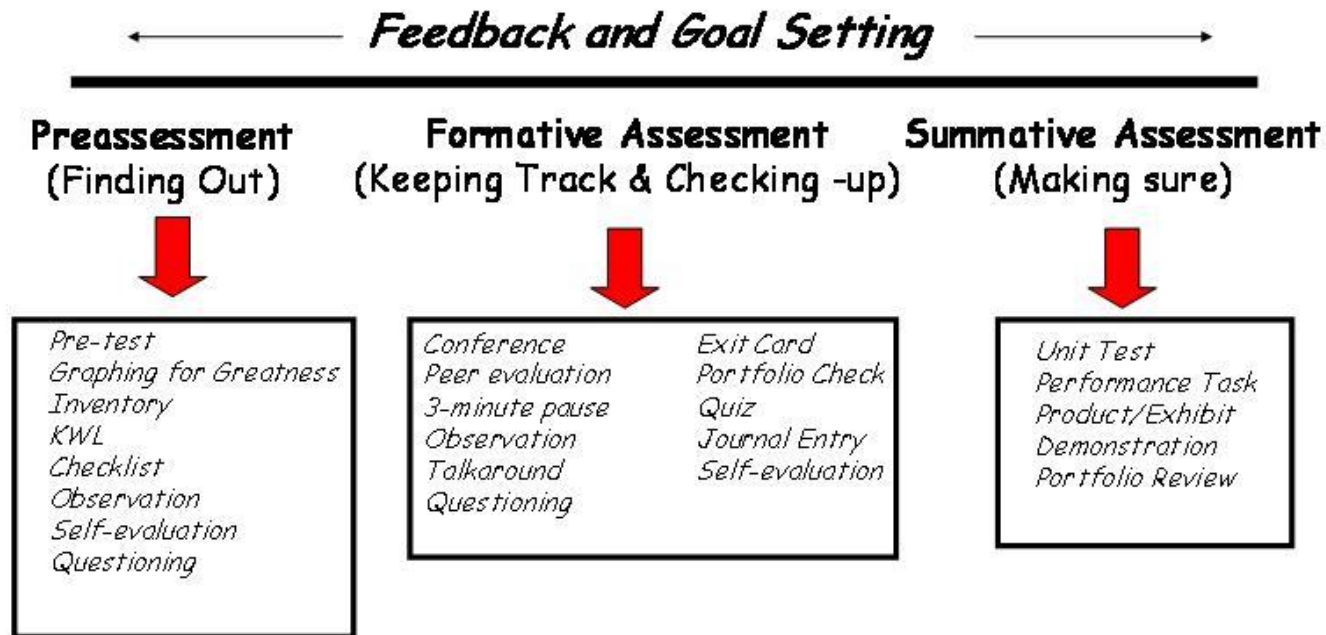
## FORMATIVE

Diagnostic  
Feedback from  
teachers  
Low stakes

## SUMMATIVE

Credentialing  
Outcome : Pass or Fail  
High stakes

# On-going Assessment: A Diagnostic Continuum



[http://theibproject.weebly.com/uploads/3/1/3/1/3131138/3675796\\_orig.jpg](http://theibproject.weebly.com/uploads/3/1/3/1/3131138/3675796_orig.jpg)

## The garden analogy

If we think of our children as plants...

**Summative assessment** of the plants is the process of measuring them. It is interesting and important to compare and analyse measurements but, in itself, this does not affect the growth of the plants.

**Formative assessment**, on the other hand, is the equivalent of feeding and watering the plants appropriate to their needs – directly affecting their growth.





Summative assessment of the plants is the process of measuring them. It is interesting and important to compare and analyse measurements but, in itself, this does not affect the growth of the plants.

## The Garden Analogy : SUMMATIVE ASSESSMENT





## The Garden Analogy : FORMATIVE ASSESSMENT

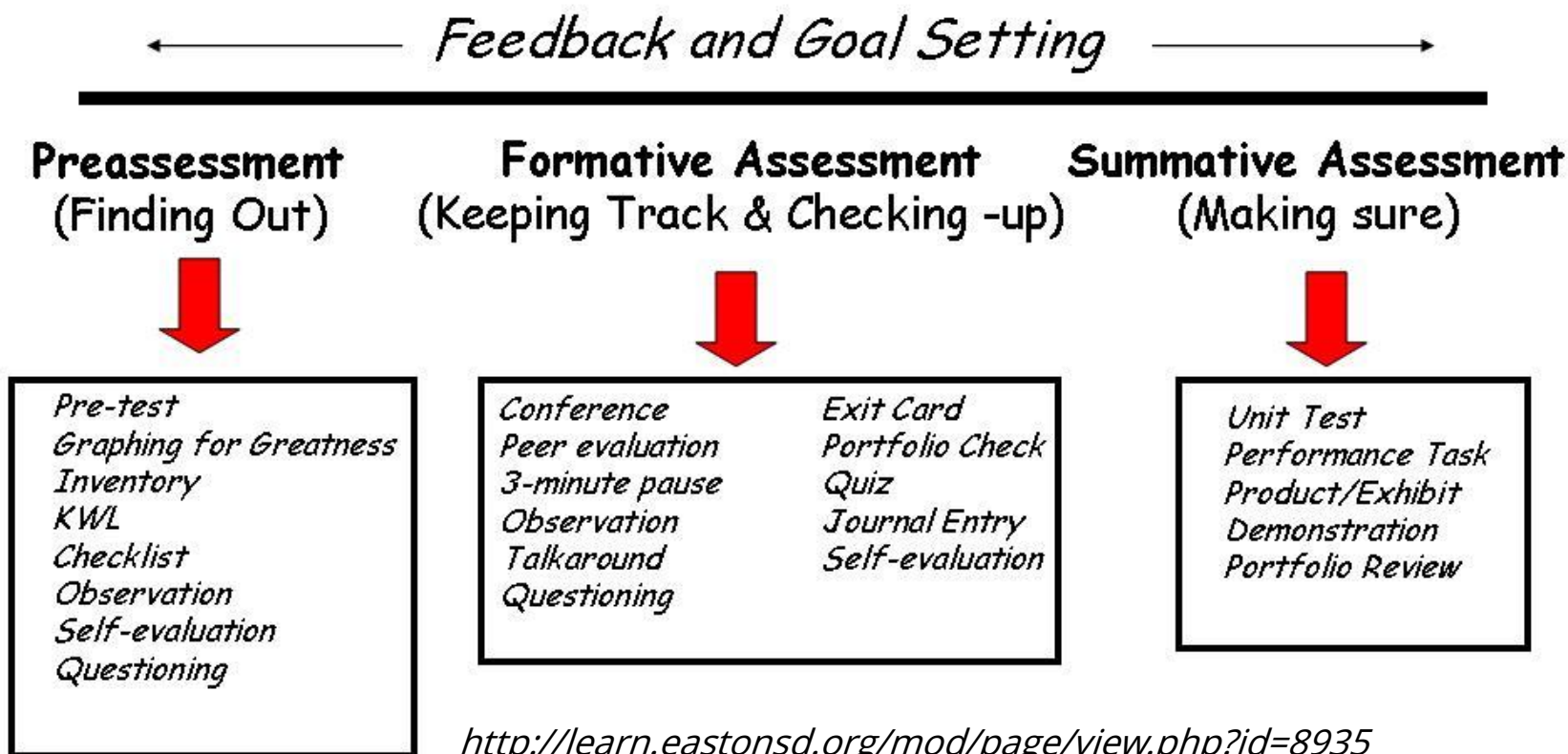
Formative assessment, on the other hand, is the equivalent of feeding and watering the plants appropriate to their needs – directly affecting their growth.



**W**hen the  
cook  
tastes the  
soup, that's  
formative;  
when the guests  
taste the soup,  
that's summative.  
— Robert Stake



# On-going Assessment: A Diagnostic Continuum



<http://learn.eastonsd.org/mod/page/view.php?id=8935>

# Types of Standardized Assessment

Norm-referenced Tests (NRTs)  
Criterion – referenced Tests (CRTs)

**Norm -  
referenced**  
means comparing a student's  
performance with the typical  
range of performances



<http://www.slideshare.net/RonaldQuileste/criterion-and-norm-referenced-interpretations>

# Norm-referenced Tests (NRTs)

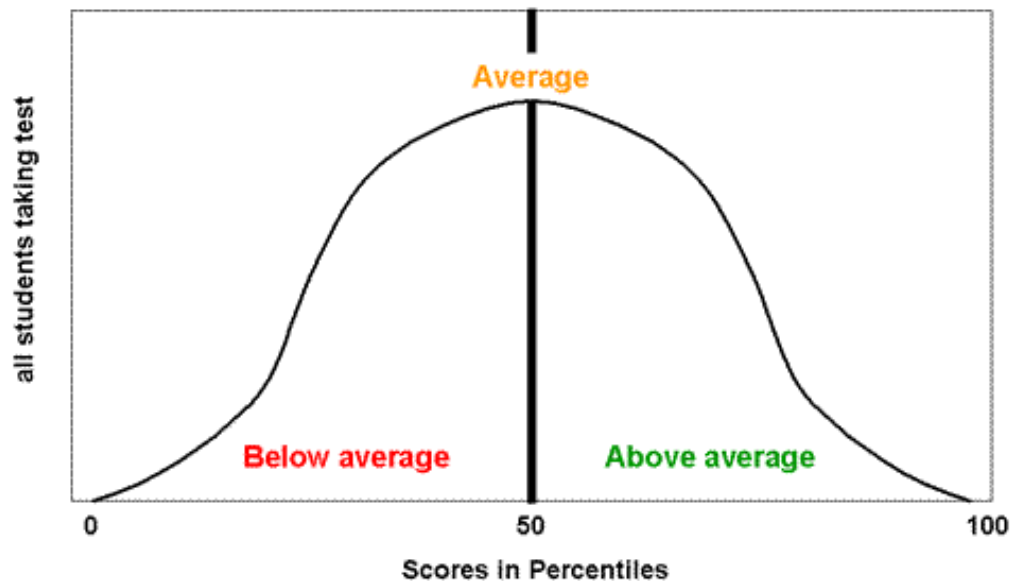
- + Norm-referencing is basically competitive: it is a ranking exercise.
- + Out of any given group, the top 5% get "A"s, the next 10% get "B"s, etc. and the bottom 50% fail. (*The figures are of course arbitrary*)
- + This may be fair enough when the purpose is to **select for a fixed and limited number of positions, such as jobs or places on a course or a sports team.**
- + The quality, however, can vary widely from group to group of candidates.

[HTTP://WWW.LEARNINGANDTEACHING.INFO/TEACHING/ASSESSMENT.HTM#IXZZ3UCJMQGKA](http://www.learningandteaching.info/teaching/assessment.htm#ixzz3ucjmqgka)

# NORM-REFERENCED TESTS (NRTs)

## The Bell Curve

Norm-referenced Tests (NRTs) are designed to compare student performance to other students



These tests are designed to compare individual students' achievement to that of a "norm group," a representative sample of his or her peers. The design is governed by the normal or bell-shaped curve in the sense that all elements of the test are directed towards spreading out the results on the curve (Monetti, 2003; NASBE, 2001; Zucker, 2003; Popham, 1999). The curve-governed design of norm-referenced tests means that they do not compare the students' achievement to standards for what they should know and be able to do—they only compare students to other students who are assumed to be in the same norm group.

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This summary is based on a guide prepared by Ruth Mitchell for the Center for Public Education. Mitchell, a freelance consultant and writer, specializes in education research and policy.

<http://www.centerforpubliceducation.org/Main-Menu/Evaluating-performance/A-guide-to-standardized-testing-The-nature-of-assessment/Guide-to-standardized-tests-Bell-curve.html%20>

# Criterion - referenced

means that a score is being  
**interpreted in terms of  
the skills the test measures.**



<http://www.slideshare.net/RonaldQuileste/criterion-and-norm-referenced-interpretations>

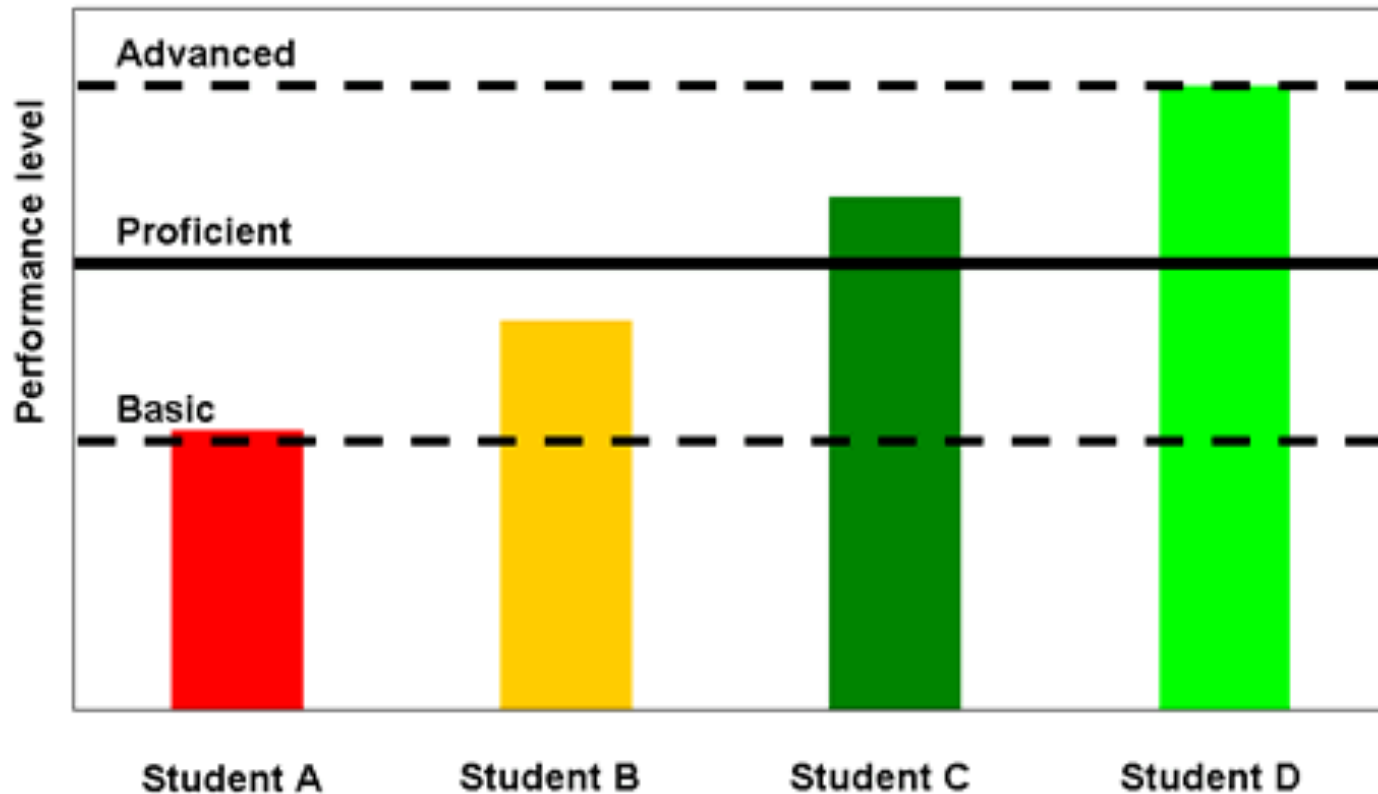
# Criterion-referenced Tests (CRTs)

- + Tests term used for assessment against fixed criteria @ standards.
- + The most used Criterion Referenced Test is the driving test.
- + The criteria for passing has been determined prior to the test and you normally know whether you have passed or failed immediately

# CRITERION-REFERENCED TESTS (CRTs)

## Standards-Based Tests

Standards-based or Criterion-referenced tests (CRTs) compare student performance to established criteria for learning



<http://www.centerforpubliceducation.org/Main-Menu/Evaluating-performance/A-guide-to-standardized-testing-The-nature-of-assessment/Standards-based-tests->

## Assesment : Criterion-referenced vs Norm-referenced

Dimension	Criterion-Referenced Tests	Norm-Referenced Tests
Purpose	<ul style="list-style-type: none"><li>• To determine whether each student has achieved specific skills or concepts.</li><li>• To find out how much students know before instruction begins and after it has finished.</li></ul>	<ul style="list-style-type: none"><li>• To rank each student with respect to the achievement of others in broad areas of knowledge.</li><li>• To discriminate between high and low achievers.</li></ul>

## Test Achievement: How is it measured?

### NORM-REFERENCED

- scores a test by **comparing** student performance
- **GOAL:** rank students based on test score
- Useful for "big picture" of what student knows
- Summative data measure



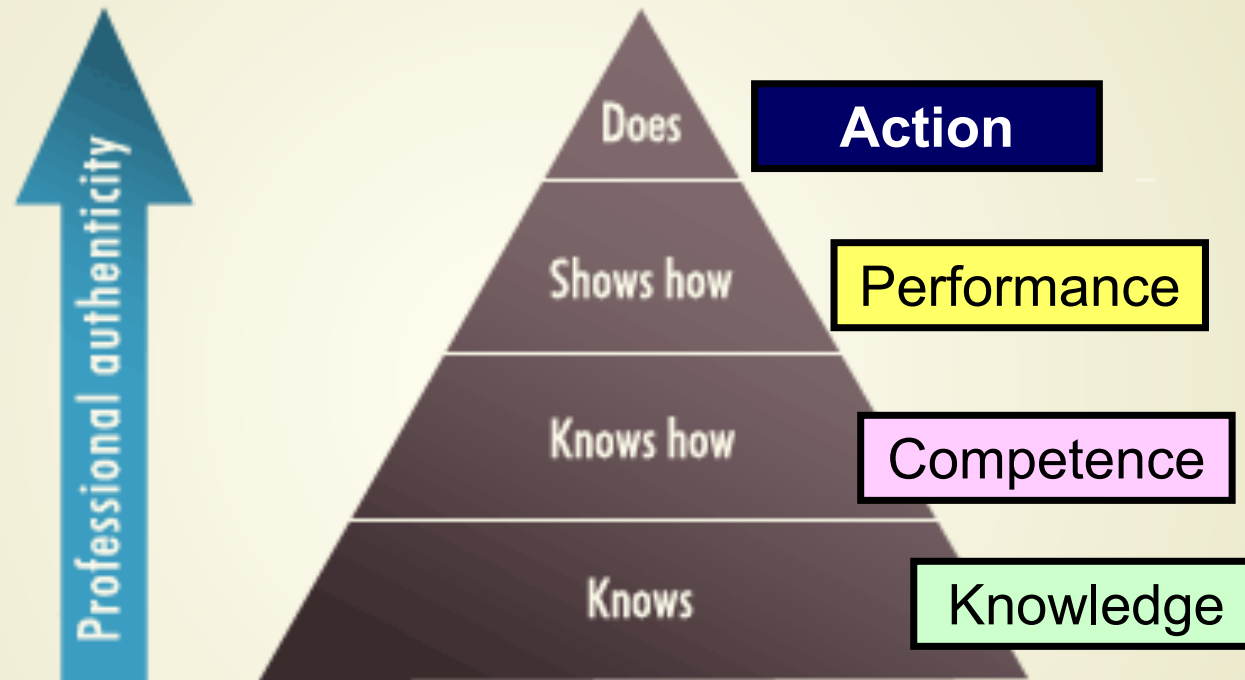
### CRITERION-REFERENCED

- student's score is based on **percent correct**
- **GOAL:** measure skills and knowledge at mastery levels
- Useful for planning instruction and differentiation
- Formative data measure



**Be Informed! Know what the data is saying to you and be MINDFUL of how this information is used.**

## A simple model of competence

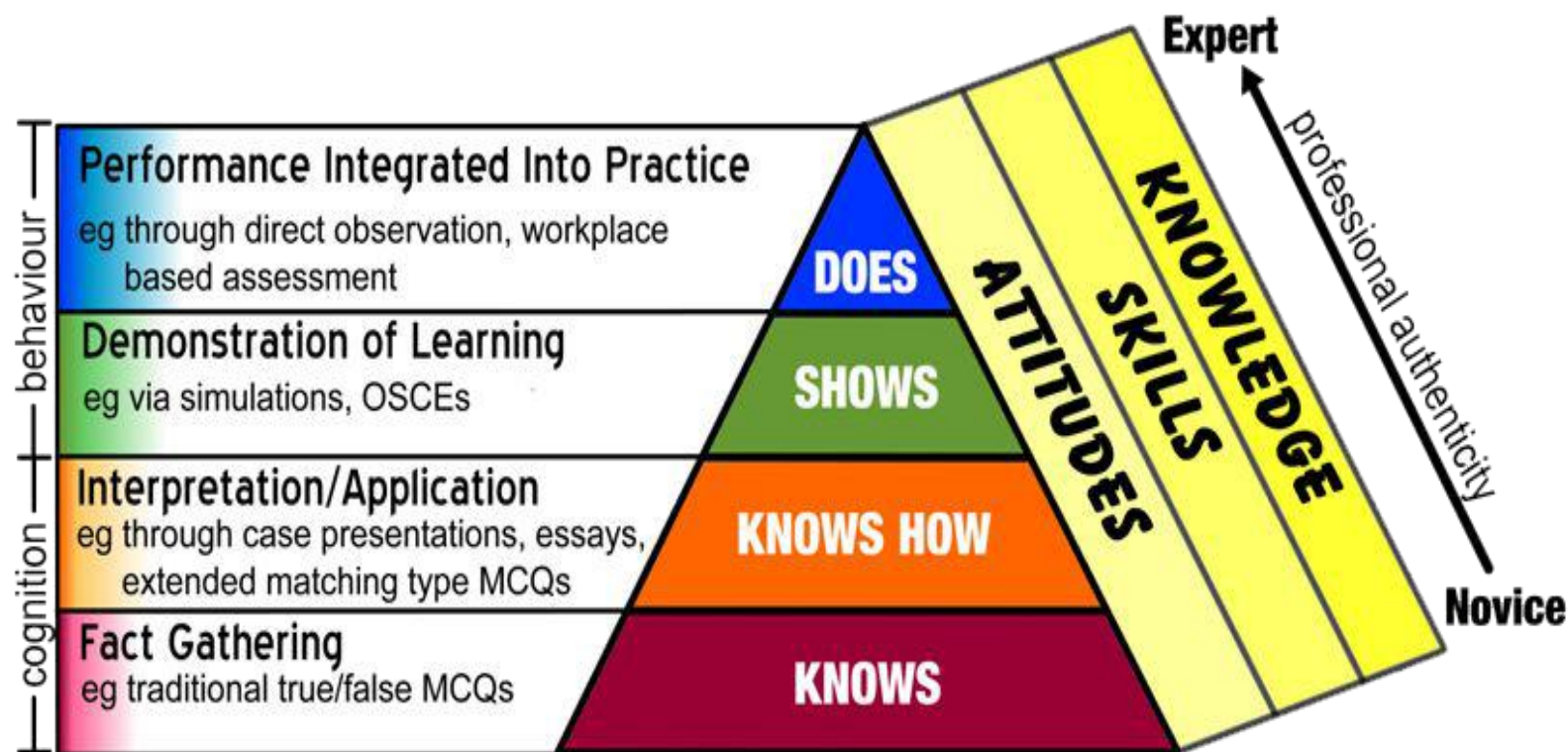


Miller GE. The assessment of clinical skills/performance.  
*Academic Medicine (Supplement)* 1990; 65: S63-S7.

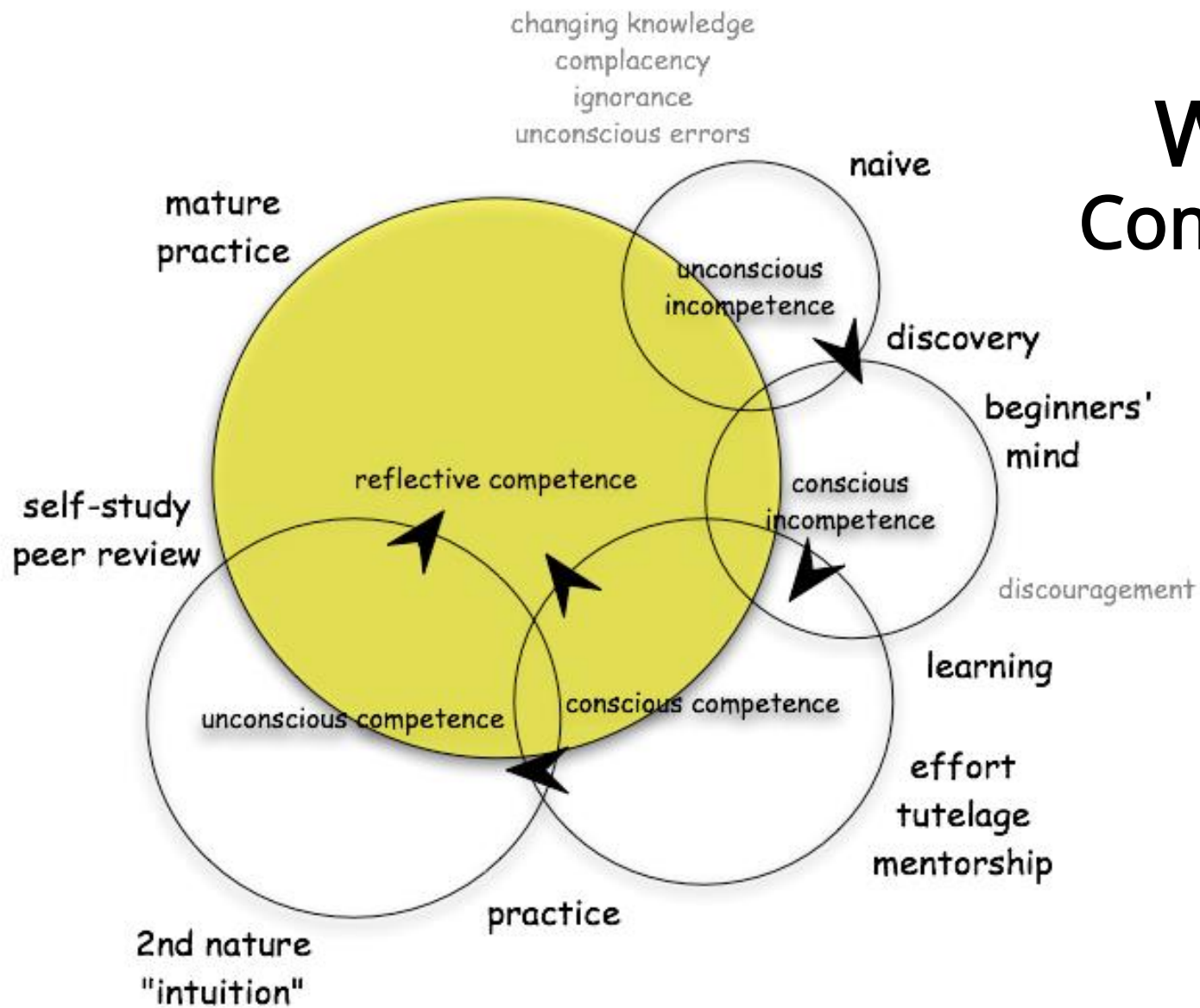
**Miller's Pyramid of Competence  
(Miller, 1990)**

## MILLER'S PRISM OF CLINICAL COMPETENCE (aka Miller's Pyramid)

it is only in the "does" triangle that the  
doctor truly performs

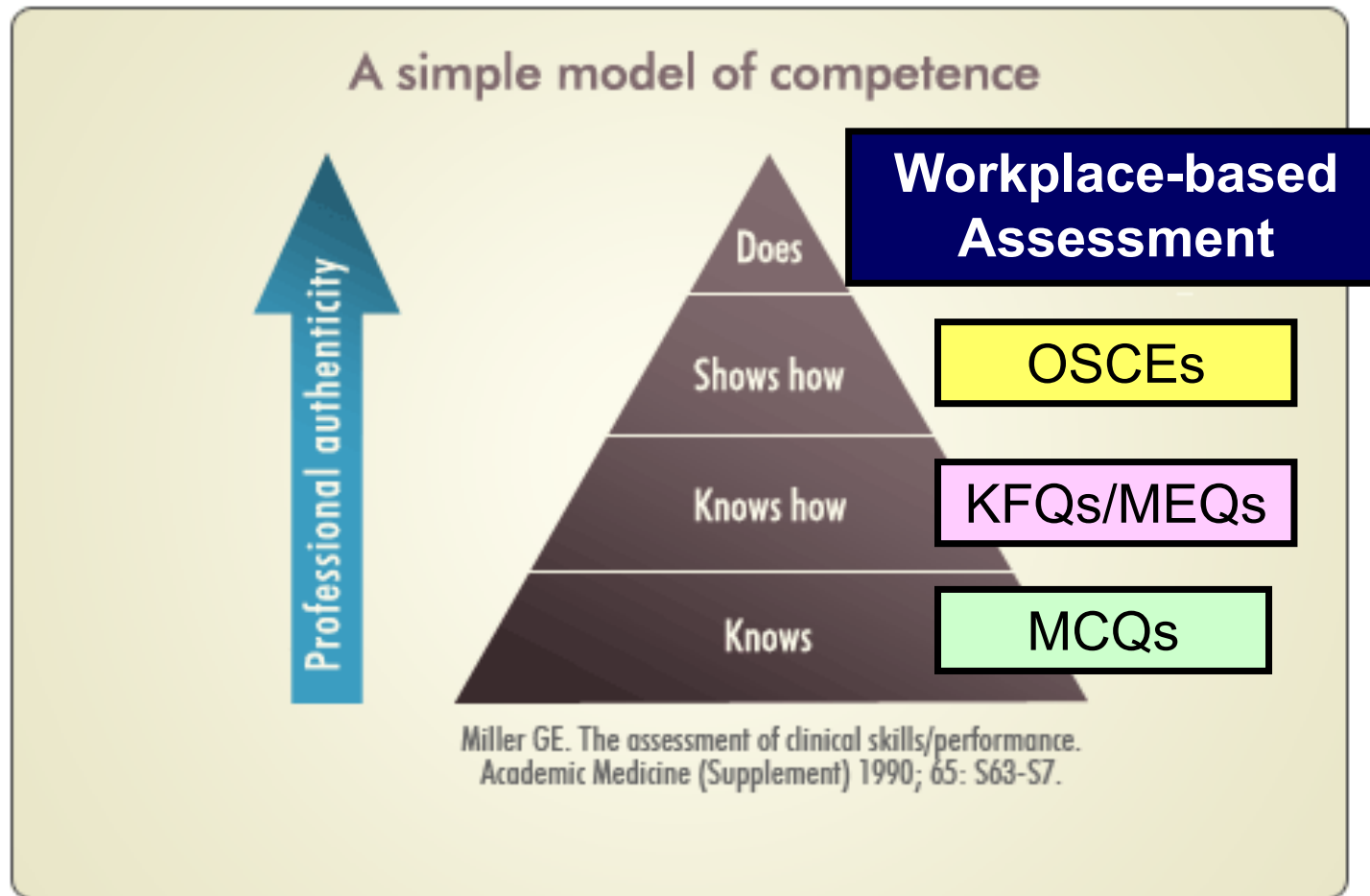


Based on work by Miller GE, The Assessment of Clinical Skills/Competence/Performance; Acad. Med. 1990; 65(9); 63-67  
Adapted by Drs. R. Mehay & R. Burns, UK (Jan 2009)



# Will Tayors – Competency Matrix

# Miller's Pyramid of Competence (Miller, 1990)



# Workplace Based Assessment WPBA

- Defined as the **evaluation of a doctor's progress** over time in their performance in those areas of professional practice best tested in the workplace.
- It is a developmental process through which **evidence of competence in independent practice** is gathered in a structured and systematic framework

# CLINICAL COMPETENCE AREAS

1. Communication and consultation skills
2. Practising holistically
3. Data gathering and interpretation.
4. Making a diagnosis / making decisions
5. Clinical management
6. Managing medical complexity and promoting health
7. Primary care administration
8. Working with colleagues and in teams
9. Community orientation.
10. Maintaining performance, learning and teaching
11. Maintaining an ethical approach to practice
12. Fitness to practise.

# Four groups of WBA

- Observational of clinical activities such as mini-clinical evaluation exercise (mini-CEX), direct observation of procedural skills (DOPS) and procedure-based assessment (PBA).
- Discussion of clinical cases; for example case-based discussion (CBD).
- Analysis of performance data such as logbook compilation of performed clinical activities.
- Multisource feedback which include mini peer-rating tools (mini-PAT) and patient satisfaction questionnaires (PSQ).

# WORKPLACE BASED ASSESSMENT (WPBA)

Competence Area	COT	MSF	CbD	Mini CEX	PSQ	CSR
Communication and consultation skills	√	√		√	√	√
Practising holistically	√		√		√	√
Data gathering and interpretation	√	√	√	√		√
Making a diagnosis / making decisions	√	√	√	√		√
Clinical management	√	√	√	√		√
Managing medical complexity and promoting health			√	√		√
Primary care administration			√			
Working with colleagues and in teams		√	√			√
Community orientation.			√			√
Maintaining performance, learning and teaching		√		√		√
Maintaining an ethical approach to practice		√	√			√
Fitness to practise		√	√			√

**I CARE MORE ABOUT  
THE PEOPLE MY STUDENTS  
BECOME THAN THE  
SCORES ON THE TESTS  
THEY TAKE.**

**#TEACHERCONFESSION**

*venspired.com*