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Assessment – power, fairness and learning

University of Girona symposium on assessment

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The big picture

- Assessment is powerful and not neutral
- How has it become so important?
- How can we make it fairer? Improving our assessments
- How can it help learning? – Assessment *for* learning

Assessment is powerful

Sometimes our sciences create kinds of people that in a sense did not exist before. This is 'making up people.'

(Ian Hacking)

The individual in contemporary society is not so much described by tests as constructed by them (Allan Hanson)

- Identity
 - Dyslexia, Aspergers, ADHD (hyperactive)
- Selection
 - Low and high ability(IQ)
 - Multiple Intelligences
 - Learning Styles (Visual, Auditory, Tactile & Kinaesthetic)

Assessment is not neutral, it is value-laden

- It is based on the values of particular groups (who sets the questions and the mark scheme?) – Class, religion, gender etc.
- It is not objective in a scientific sense ('objective tests' are still created subjectively)
 - 'who discovered America?'
- It affects how we teach and learn
 - 'knowledge in bits leads to teaching in bits'
 - Writing is more important than speaking
 - No practical work since not tested?

Assessment is value-laden

....so how can we use it in a positive way?

- By making sure the purpose is constructive (validity)
- And the form of assessment is fit-for-purpose (does it measure what we claim we are assessing?)
 - Language teaching; mathematics and reading
- To use it diagnostically rather than judgementally or for managerial purposes
- To help the learning process (Formative Assessment /Assessment for Learning)
- To encourage self-assessment/self regulation (21st Century Skills)

Why, and how, has assessment become so important?

- It is fairer than patronage and family connections (the Chinese Imperial Civil Service examinations)
- It leads to meritocratic selection (does it? – cultural assumptions and privileged preparation)
- It raises standards – accountability and targets (UK; USA); national comparisons – PISA
 - The problems of high-stakes assessment.
- It has a diagnostic role (Special Education)- Binet

Fairness in assessment – it's more than the test

Access questions	Curricular questions	Assessment questions
Who gets taught and by whom?	Whose knowledge is taught?	What knowledge is assessed and equated with achievement? What knowledge is assessed and equated with achievement?
Are there differences in the resources available for different groups?	Why is it taught in a particular way to this particular group?	Are the form, content and mode of assessment appropriate for different groups and individuals?
What is incorporated from the cultures of those attending	How do we enable the histories and cultures of people of color, and of women, to be taught in responsible and responsive ways? (M.Apple)	Is this range of cultural knowledge reflected in definitions of achievement? How does cultural knowledge mediate individuals' responses to assessment in ways which alter the construct being assessed? (Gipps & Murphy)

So what are the implications for summative assessments? Some testing principles:

1. *If teachers are going to teach to the test (and they will) then the test must encourage the skills and knowledge which the curriculum requires;*
2. *The form of the test will influence teaching and learning – a multiple-choice test of ‘knowledge in bits’ will lead to ‘teaching in bits’;*
3. *The predictability of a test will affect whether the teaching emphasis is on deep or surface learning approaches.*
4. *Tests must help to motivate those tested, through accessibility and fairness.*
5. *How the results are interpreted and used are of critical importance*

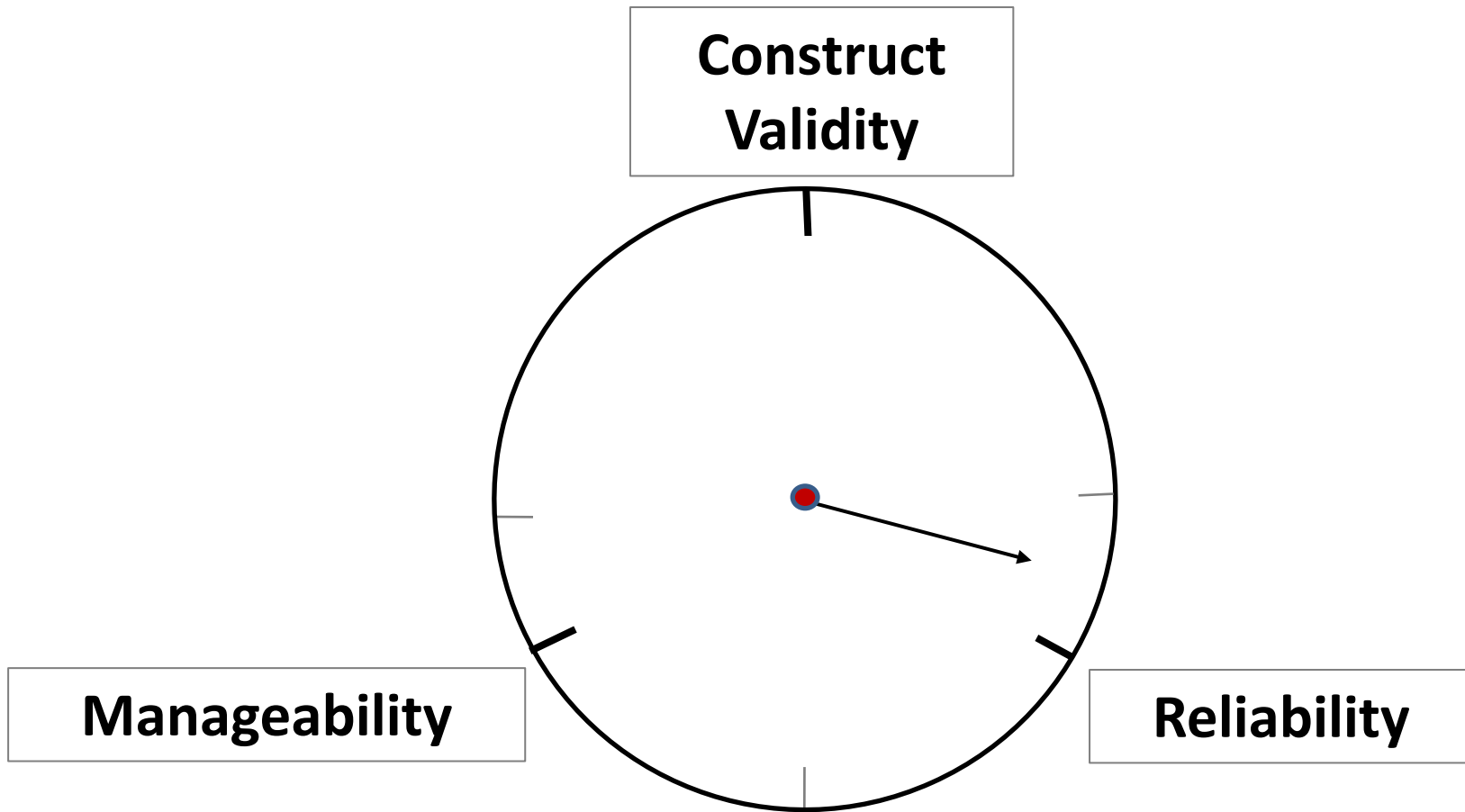
(Testing Times, 2008)

What kind of learners are we producing?

Attitudes to learning

- *Surface* – teacher dependent, ‘what do I need to do to pass?’
- *Strategic / instrumental* – the focus is on getting good marks/grades rather than on the learning (encouraged by low quality assessments)
- *Deep* – need to understand and make sense, thinking for themselves (the need for assessments that encourage the students to think)

Dependability: The one-handed clock



Assessment for Learning

Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.

Assessment Reform Group (2002)

Finding out where learners are

‘The most important single factor influencing learning is what the learner already knows..[find it].. and teach accordingly,’ (D.Ausubel)

- Diagnostic assessment - ‘checking in’:
 - listen to reading
 - classroom work
 - test information
- Questioning and classroom dialogue:
 - Misconceptions
 - Rich questions
 - Wait time (thinking time)

Finding out where learners are

- *Classroom dialogue*: questions, discussions

Teachers talk 70-80% of time;

ask 200-300 questions a day, 60% recall facts, 20% procedural;

<5% group discussion or meaningful ideas;

70% of answers less than 5 secs (3 words) (Source J. Hattie 2012)

How long do teachers wait after asking a question before taking action?

Questions > 'thinking time' (wait time) > pair and share > no hands up.

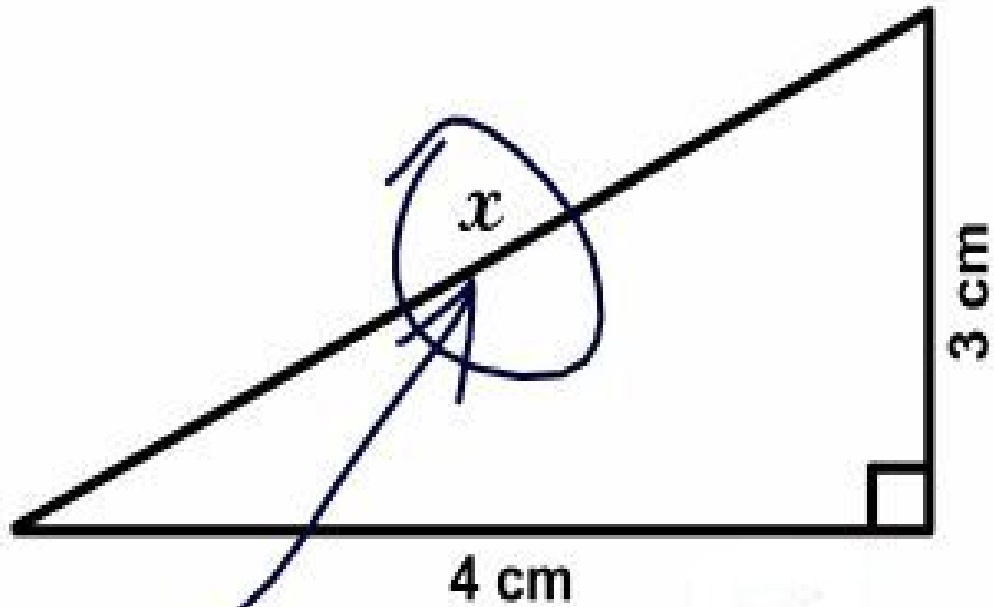
Traffic lights

Where learners need to go:

Learning intentions & success criteria

- High expectations are the key to improving learning (leaving the comfort zone)
- The teacher is clear about what is being learned (progression in learning) – and makes it clear to the student.
- What we will be *learning* rather than what we will be *doing*
- The importance of ‘*tuning in*’ (building on ‘where learners are in their learning’):

3. Find x .



Here it is

PETER

1.21

4c) Expand

~~$a^2 + b^2 - 2$~~

$$(a+b)^n$$

Very young Peter

$$= (a + b)^n$$

2 ?

$$= (a + b)^n$$

$$= (a + b)^n$$

~~...~~

etc...

Success criteria – understanding what is needed

Royce Sadler's paradox: why does thoughtful feedback often not work?

Success criteria need:

1. Negotiation: 'what would you expect to see in a successful piece of work?'
2. Exemplars: 'which of these two (or more) pieces of work best meets the criteria?'
3. Modelling: 'Here's what I mean...'
4. Guided practice: activity > independent practice (6x)

The greatest enemy of understanding is coverage. As long as you are determined to cover everything, you actually ensure that most kids are not going to understand. You've got to take enough time to get kids deeply involved in something so they can think about it in lots of different ways and apply it—not just at school but at home and on the street and so on.

(Howard Gardner)

Where should our focus be now?

John Hattie's priorities for effective teaching and learning

Transparent goals

- the more transparent the teacher makes the learning goals, then the more likely the student is to engage in the work needed to meet the goal.

Success criteria

- the more the student is aware of the criteria of success, then the more the student can see the specific actions that are needed to attain these criteria

Rapid formative feedback

- the more there is feedback about progress from prior to desired outcomes the more positive attributes to learning are developed

AfL in practice: teaching Sudoku

Sudoku

Fill the grid so that each row, column and 3x3 box contains the numbers 1-9

			4	1	6			
		5				3	4	
	7							9
	6				3			5
		8				6		
2			1				9	
1							2	
	3	4				7		
			3	7	9			

Feedback

‘Provides **information** which allows the learner to close the gap between current and desired performance’

It is most effective when:

- It is clearly linked to the learning intention;
- The learner understands the success criteria/standard;
- It focuses on the **task** rather than the learner (self/ego);
- It is effectively timed;
- It is specific and clear;
- It gives cues at the right levels on how to bridge the gap;
- It offers **strategies** rather than solutions;
- It **challenges**, requires **action**, and is **achievable**.

Negative feedback as a 'thorn'

- 'write more' – 'If I knew more I would have written it – I don't know what more to write. Teachers should tell me what is missing' (14 yr old Norwegian pupil)
- When pupils are not given time to act on the feedback they see it as negative and critical which makes them feel 'useless'. If they are given time and the teacher follows up on the feedback it is treated as positive.

(Gamlem and Smith)

'is unclear and too general'....

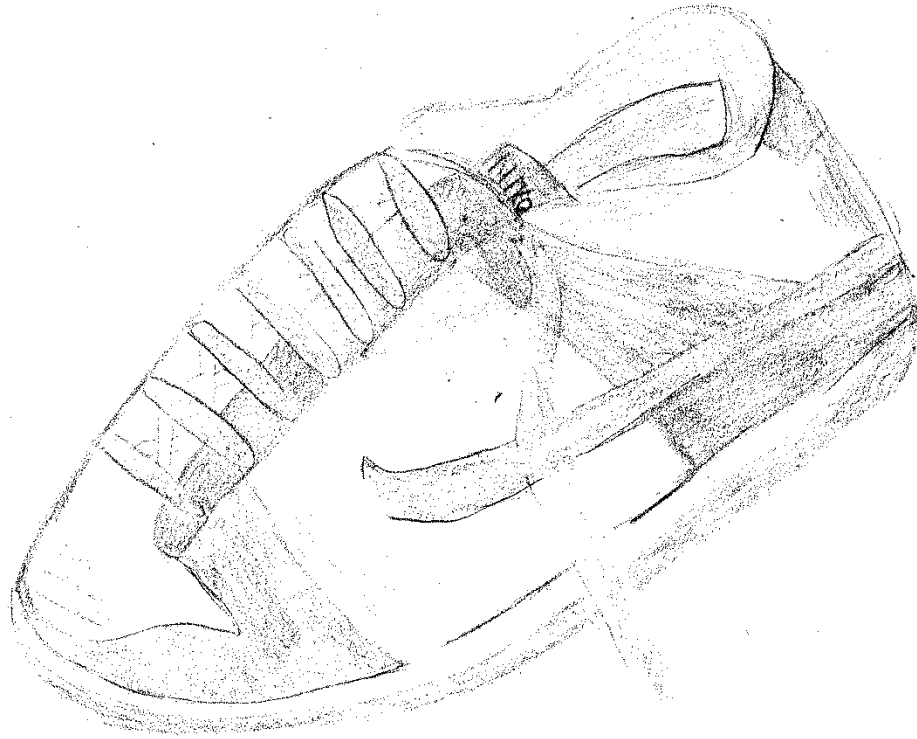
The thermochromic ink in this changes colour from the temperature from your forehead. It tells you if you are too hot.

Continue to improve handwriting and spelling

Explain the science

H/W

My Trainer

Credit ✓

© This is a sensitive, well planned drawing, your lines are light and you have observed very carefully. To develop draw a little larger which will also assist with achieving a more accurate shape.



lovely drawing
-big and bold.
keep pencil really
sharp so edges are
hard and crisp.

Keeping assessment constructive

- Focus on achievement rather than ‘ability’
- Interpret results cautiously – even a well-constructed assessment can be interpreted wrongly
- Recognise the social context
- Use classroom assessment to encourage learning – the importance of interaction and a focus on learning (rather than teaching)