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Key skills – what are they and how can we assess them?

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The Rough Guide

- Lessons from personal experience
- What are 21st century skills?
- Why are they 21st century skills?
- What's happening about them (it's 2014)?
Policy and practice.
- Curriculum leads
- And assessment lags?
- Some assessment approaches

The risks of coming from somewhere else and some lessons from experience

- GCSE merging two traditions and a dry cascade
- National curriculum assessments – Key Stage 1 & 3 tests: authenticity and over-egging it
- General National Vocational Qualifications (GNVQs): the risks of ‘tick a box’ and the ‘never ending spiral of specification’. (131)

The message? Keep it simple and manageable

What are 21st century skills (1)?

- A global policy rhetoric – the globalisation agenda, business rather than education led?
- A wish list with some common features but arbitrary numbers

Are students prepared for future challenges? Can they analyse, reason and communicate effectively? Do they have the capacity to continue learning throughout life?

PISA homepage

www.pisa.oecd.org

As never before, the next generation will need to be innovative, creative, and skilled at managing knowledge as a resource.

(Alberta Province, Canada, *Inspiring Education*, 2010, p.3)

The 21st century learner agenda

Singapore's *Desired Outcomes of Education (DOE)*

a confident person

a self-directed learner

an active contributor

a concerned citizen

Scotland's *Curriculum for Excellence*

Successful learners

Confident individuals

Responsible citizens

Effective contributors

The 21st century learner agenda

Ireland's key skills of junior cycle

Managing myself

Staying well

Communicating

Being Creative

Working with Others

Managing Information and Thinking

The 21st century learner agenda

- *Ways of Thinking*
 - 1. Creativity and innovation
 - 2. Critical thinking, problem solving, decision making
 - 3. Learning to learn, metacognition
- *Ways of Working*
 - 4. Communication
 - 5. Collaboration (teamwork)
- *Tools for Working*
 - 6. Information literacy
 - 7. ICT literacy
- *Living in the World*
 - 8. Citizenship – local and global
 - 9. Life and career
 - 10. Personal and social responsibility – including cultural awareness and competence

P. Griffin et al. (eds.), *Assessment and Teaching of 21st Century Skills*,

21st Century learning – John Dewey (and Socrates) got there early

Modern life means democracy, democracy means freeing intelligence for independent effectiveness – the emancipation of the mind to do its own work' (1903).

We state emphatically that, upon its intellectual side education consists in the formation of wide-awake, careful, thorough habits of thinking. Of course intellectual learning includes the amassing and retention of information. But information is an undigested burden unless it is understood. It is knowledge only as material is comprehended. And understanding, comprehension, means that the various parts of the information are grasped in their relations to one another – a result that is attained only when acquisition is accompanied by constant reflection upon the meaning of what is studied.

John Dewey (1933) *How we think*

So what makes them 21st century skills?

They operate in a very different environment:

- A changing world which needs a more flexible approach to facts and information ('to google' as a new verb) and the need to be critical and make sense of information
- More encouragement of 'on-the-spot thinking' and higher order thinking (the Flynn Effect/ IQ)

So how different do our classrooms look?

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)

Students still in rows?

Work still individual?

Teachers still at the front?

How different do our examinations look?

Still largely 'pencil and paper' individual timed tests? 'No talking', 'no collaborating'

England's 'back to the future' reforms' – linear exams (end of flexible modules), no coursework, more demanding (more failing) – it's 1951 again.

Ireland's Junior Certificate largely unchanged?

So what's being done to produce 21st century exams?

(Computerise 20th century exams?)

How does our classroom assessment look?

Reasons to be optimistic:

- A greater focus on learning (rather than teaching)
- Assessment for learning/formative assessment
 - Richer dialogue to find out where learners are in their learning
 - Learners understanding what they're learning and why
 - ...and what good performance looks like (success criteria)
 - More effective feedback – informative, task based & timely
- School Based Assessment which samples a broader range of skills than tests

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

Assessing 21st century skills

The three best assessment questions:

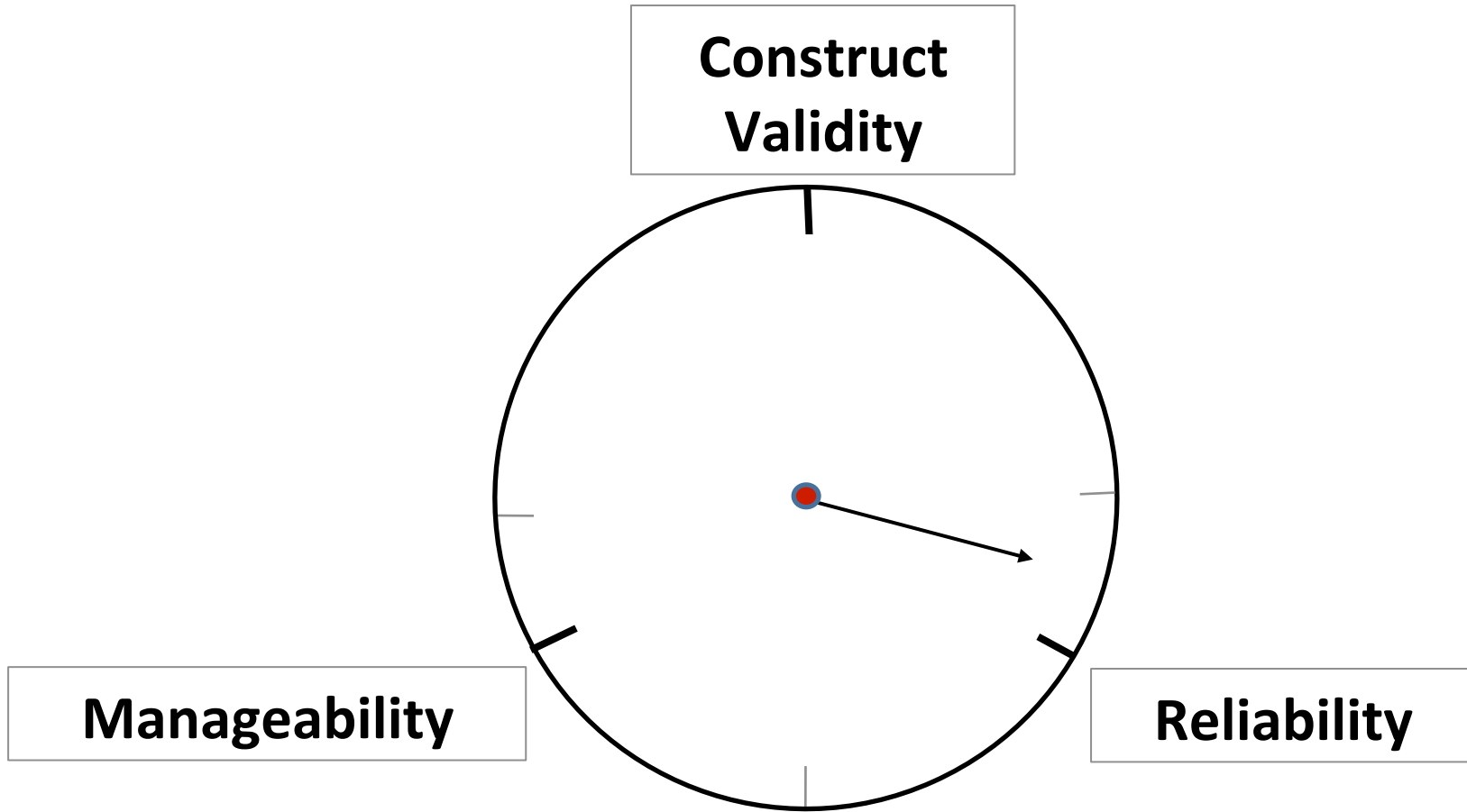
- What is the purpose of this assessment?
- Is it fit-for-purpose?
- What are the consequences? (washback; unintended consequences)

And some suggested strategies:

- Keep it simple
 - Best fit or mastery?
 - Report at element level (131)?
 - Use a verbal shorthand not a grade

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Dependability: The one-handed clock



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What form(s) of assessment are fit-for-purpose for each key skill?

Sustainable assessment

David Boud's 'double duty of assessment'

Assessment activities:

Have to focus on the immediate task and on implications for equipping students for lifelong learning in an unknown future ...they have to attend to both the process and the substantive domain.

Frederiksen and Collins have called for *systemically valid assessment*:

that induces in the education system curricular and instructional changes that foster the development of the cognitive skills that the test is designed to measure.