

Aims

- > Diagnosing issues with assessment
- > Differentiating assessment for learning from assessment of learning
- Recognising the impact of assessment on learning
- > Enhancing our own assessment practices





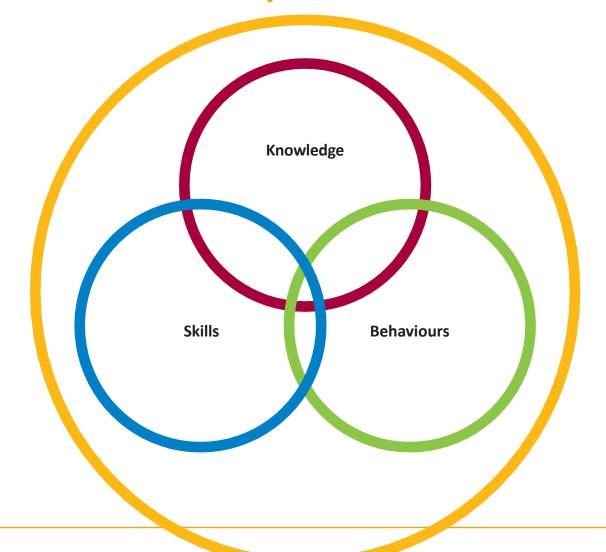
What does a successful bioscience graduate from Manchester look like?:

- > What do you want students to know, understand and be able to do?
- What personal qualities such as team working, professional practice, ethical principles - do you want to encourage and bring into play?
- Can you specify the knowledge, concepts, skills, experiences, personal qualities you want to address





Create a mind map for assessment





You will need the following:

- o 9 post-it notes
- o A pen
- o Someone to compare notes with



Step 1:

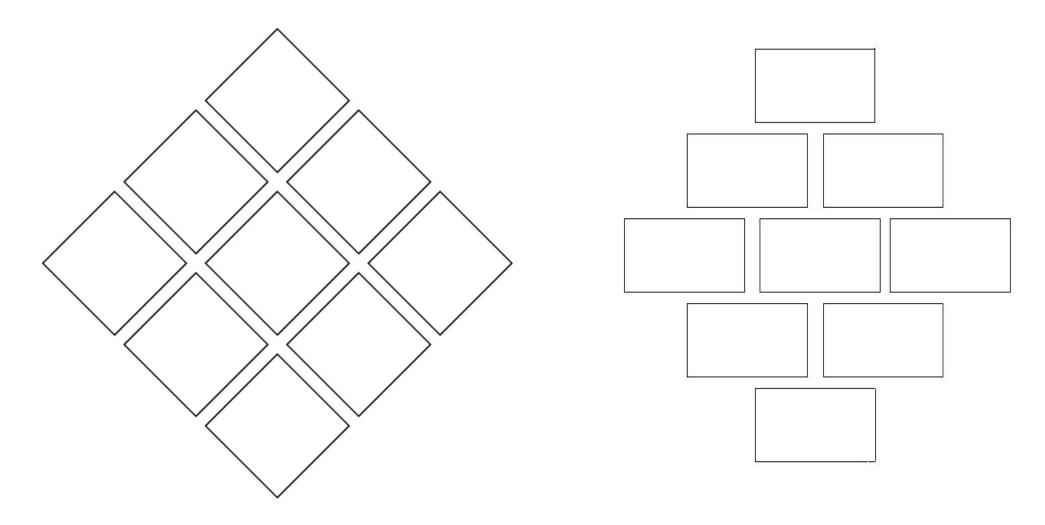
Name/list the top 9 aspects of effective assessment in biosciences (one per post-it)



Step 2:

Rank each of your aspects by level of importance for assessment







How do we solve a problem like assessment?

Staff spend vast amounts of time and energy on assessment and associated feedback to students, whilst students continue to rate assessment and feedback relatively poorly in surveys such as the NSS.



Course	BSc (Hons) X Developmental Biology	BSc (Hons) Molecular Biology	Biology Full time, Optional	★ BSc (Hons) Cell ★ Biology Full time, Optional
	Full time, Optional foundation year, Sandwich year	Full time, Optional foundation year, Sandwich year	foundation year, Sandwich year	foundation year, Sandwich year
Location	University of Manchester	University of Manchester	University of Manchester	University of Manchester
	1 location: Main Campus	1 location: Main Campus	1 location: Main Campus	1 location: Main Campus
The criteria used in marking have been clear in advance	78%	69%	82%	78%
Assessment arrangements and marking have been fair	85% (76% 🛑	100%	85% 🛑
Feedback on my work has been prompt	52% 🛑	71% 🛑	64%	52% 🛑
I have received detailed comments on my work	66% (75% 🛑	64%	66%
Feedback on my work has helped me clarify things I did not understand	66% 🛑	73%	64%	66%



Commentary from the sector

"Assessment is currently caught in the culture of oppression!"

"Summative assessment is the pedagogy of control!"

"Solving our problems with assessment isn't solved by doing the same things better and slower, but by doing different things"

"Fine to recognise effort, but effort does not equate to quality"

"Persistently poor NSS scores are representative of low assessment literacy not necessarily poorly conceived assessment and feedback practices!"

"10 types of assessment task make up 100% of all university assessment!"



Podcast and PBL exercise

Brainstorm the problem:

Generate lots of ideas, define the problem(s)

Facts:

What do you know/ evidence base and resources

Learning issues:

What is the gap in your knowledge or understanding?

Action plan:

What do you need to do as a group to identify and evaluate potential solution(s) to the problem



Designing Assessment

- Thinking about the task you have just completed:
 - What learning was being developed
 - (How) Should it be assessed?

- > What does good assessment look like?
- > What does bad assessment look like?
- How does the assessment you undertake encourage student learning?
- > How can assessment be a barrier to learning?



Assessment models: examples

- > 'EAT' Assessment Tool comprising three central components: holistic assessment design; assessment literacy; facilitating Improvements in learning (Evans, 2016)
- 'Assessment 2020' seven principles for assessment reform (Boud & associates, 2010)
- > A framework for learning-oriented assessment (Carless, 2009)

- > Assessment *for* Learning model (Sambell et al, 2013)
- > Seven basic principles of assessment (Lea, 2012)
- > Six tenets from ASKe* Assessment Standards: 'a manifesto for change' (HEA, 2012)
- > Framework for Transforming Assessment in higher education (HEA, 2016): based on three focus areas; three process areas; and six tenets



Assessment models: bespoke / specific

Kearney (2012) – two models on authentic learning and authentic assessment through self and peer assessment: AASL (authentic assessment for sustainable learning); ASPAL (authentic self and peer assessment for learning)

> Fastre et al (2013) integrated model for developing sustainable assessment skills, enabling students to assess their learning and performance throughout life

Boud & Molly (2012) – approaches to sustainable assessment and feedback

> Broader based curriculum models, e.g. Meyers & Nulty (2009)

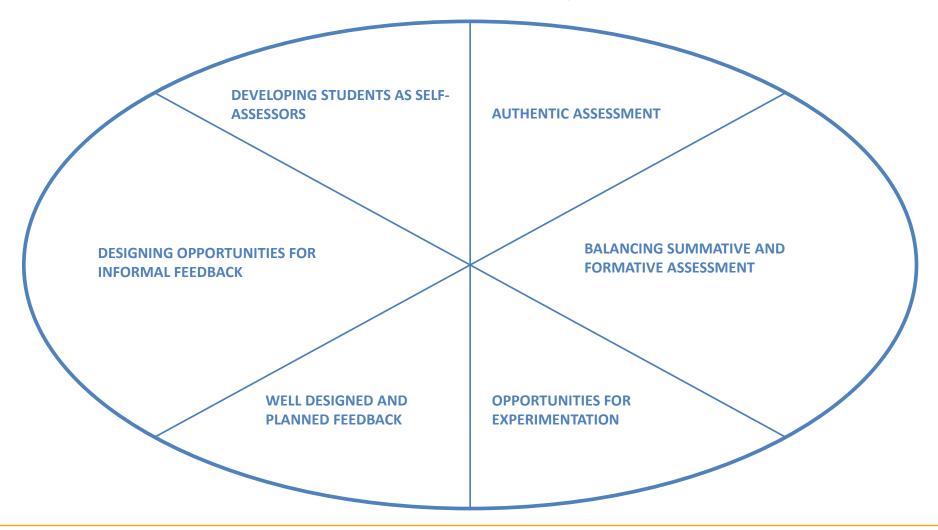
Integrative assessment and types of assessment task (Crisp, 2012)

> Peer assessment at the disciplinary level (Llado *et al*, 2014).



ASSESSMENT-FOR-LEARNING

(Sambell, McDowell & Montgomery, 2013)





Assessment for learning model

- > Represents a shift away from assessment merely as testing, evaluation, or of learning
- > Key principle: 'all assessment...should contribute to helping students to learn and to succeed' (p3)
- > Based around a holistic approach and needs to be applied as such

(Sambell et al, 2012)



Assessment for learning

Authentic assessment – engaging, meaningful assessment tasks

Students developing as learners – effective attributes and skills to self-assess and evaluate their own learning

> Informal feedback – e.g. in-class group discussions, peer-review

Formal feedback – range of forms of feedback, used at number of stages

> Practice, rehearsal – opportunities to learn and practice

> Formative and summative – appropriate balancing of these two types of assessment





Authentic assessment

- > 'Emphasise authentic and complex assessment tasks
- > Engaging and meaningful.
- >'Original' assignments.
- > Reflecting real-world activities.
- > Student and graduate employability.







Balancing assessment needs: of and for learning

- > A need for testing and measurement *and* a need for learning (balancing assessment *o*f and *for* learning)
- >Assessment strategies need to be manageable but include a combination of formative assessment (for learning) and summative assessment (for, or at least partly, for measurement): a 'double duty'
- > How do we find the balance?
 - What are the constraints?
 - Are we over-assessing?



Effective Assessment for Learning Environments

The change that has the greatest potential to improve student learning is a shift in the balance of summative and formative assessment. Summative assessment has important purposes in selection, certification and institutional accountability, but its dominance has distorted the potential of assessment to promote learning (assessment for learning)

(HEA, 2012, p.9)



Effective Assessment for Learning Environments

The imperatives of summative assessment necessarily limit the use of assessment methods that have demonstrable value for learning, such as feedback on drafts, group assessment, peer learning and work-based assessment. The need to provide a reliable, verifiable mark for each individual for each assignment can either limit the methods we use or create justifiable concerns about consistency and fairness in marking.

(HEA 2012, p.9)



Balancing assessment needs

- > Assessments should be linked to programme and module structure, and in particular number and level of credits for the learning (e.g. module)
- > Credits equate to learning hours
- > Learning hours can be used for teaching, reading, writing, being assessed
- >Over-assessment occurs when too much of the time is used for summative assessment rather than teaching, learning or other activity
- >Organise programmes and modules around level and number of credits: balance learning hours across different activities, as opposed to grounding in summative assessment



Summative or formative?

- > The summing up of achievement at a particular point in time
- > Provides opportunities to demonstrate, practice or rehearse key skills, knowledge and behaviours
- Includes online Quizzes, short excerpts from projects, partial lab reports, project plans

- > The formation of student dispositions and actions to enhance ongoing learning
- > It is critical to the development of learning & should be integrated into the curriculum
- Does not contribute a mark to final award
- Important that students receive feedback



How does constructive alignment promote better assessment strategies?

 What knowledge, skills attributes do you want students to learn

> Learning outcome

Learning environment

 How does what students do in class help them achieve the intended learning?

 How do we know students have acquired the intended knowledge, skills etc.

Assessment



Balancing assessment needs

> We can also encourage assessment-for-learning through applying "constructive alignment" (Biggs, 2003)

Constructive alignment

"integrating the planning of different elements of the teaching and learning process, including curriculum design and review; lesson planning; assessment strategies, tasks and criteria; linking formative and summative feedback; providing feedback; evaluation of teaching; utilising evaluation to inform curriculum review (...)"



A Marked Improvement : Six Tenets

- 1. Promoting assessment for learning moving beyond achievement of learning outcomes onto demonstration of higher order learning and integration of knowledge
- 2. Ensuring assessment is fit for purpose achievement of programme outcomes through a variety of routes reflecting ability at the end of a programme not accumulation of marks
- 3. Recognising that as an exercise assessment lacks precision cannot set out precisely all meaningful learning or assessment outcomes
- 4. Constructing standards in and through communities developing standards within the discourse and practices (WTP) of the appropriate disciplines and professions.
- 5. Integrating assessment literacy into course design encouraging an active educational community in which students are contributing partners
- 6. Ensuring professional judgements are reliable sharing and demonstrating professional judgements regarding assessment standards is the prime responsibility of discipline or subject communities

A seventh tenet? Verifiable





grades. I will carry these values beyond my time as a student at Michigan State University, continuing the endeavor to build personal

In a recent post for the WriteCheck blog, I took a look at research by Dr. Lee Adam from the University of Otago.

Dr. Adam found that of some 21 undergraduates that she surveyed, most

integrity in all that I do."

Assessment methods and modes

- >The choice of assessment methods is a fundamental area in assessment but there is broad consensus that diversifying assessment methods and focusing on process (learners doing things) as opposed to only product (getting an answer right) yields learning benefits
- Assessment method choices will also impact on manageability: variety of marking; marking time; nature of feedback given; student involvement in assessment and feedback process
- > Consider the learning benefits to students of using a wider range of assessment methods
- > Consider alternative modes of assessment: e.g. increased interest in ipsative approaches ('personal best' philosophy).



List all of the assessment types you use

	Valid	Reliable	Authentic	Manageable
Essay	1	1	0	1
MCQ	1	2	0	2



Task

> Redesign a piece of assessment to meet all the criteria as well as supporting student learning



Mindful Assessment Design (MAD)

- > Purpose(s) What is the rationale for the assessment approach adopted in institutional strategy/practice?
- >Interactions What nature and form of interactions do the chosen assessment strategy/tasks/activities encourage? For whom and to what end?
- > Context(s) Where does assessment typically take place? What kind of "Learning Climate" does the assessment approach and associated activities create?
- > Feedback Processes How, when and in what form do students typically receive feedback on their work? Is feedback timely i.e., sustainable?
- > Tasks Are tasks authentic, challenging and relevant to the aims of programmes? Is there a balanced diet of tasks throughout programmes? Is there continuity and connectivity between tasks (across modules and levels) how is this captured/articulated?
- > Learner Outcomes Are learner outcomes clearly articulated for assessment tasks? Is there an element of student choice in how these outcomes are conceptualised and realised? Permeability of programme learning outcomes?

Dialogue Sheet Activity

What needs to happen now?

- What changes in practice are now needed to embed assessment for / as learning?
- How will we ensure these changes happen?
- How can we ensure the approach is manageable, scalable and sustainable?

