

Suggested Criteria for Evaluating the Assessment Plan

- 1) Are methods aligned with outcomes? Does the use of language make the alignment explicit?
- 2) Is the weighting of the different methods appropriate in relation to the importance of the outcomes and the time that students will spend on learning?
- 3) Are the assessment methods distributed over the course in a way that can provide feedback to learners on progress towards achieving the outcomes?
- 4) Are a range of methods used, including alternative and informal, to support different kinds of learners and different kinds of learning?
- 5) Do the strategies and assessment flow into/support each other?
- 6) Is it do-able? Not too much work for you and your students?
- 7) Are students given choices or options if possible?

Making Decisions about Assessment in your Course

(adapted from P. Knight)

Follow the numbers starting at 1. The numbers lead you back and forth from making decisions about what assessment methods to use (alignment) to assessing the completeness and appropriateness of the decisions (adjustment).

Alignment	Adjustment
1. Match assessment methods with learning outcomes.	Check that you are not putting too big a time load on yourself and the students. If so, modify the plan.
2. See if there are any learning outcomes that don't have an assessment method connected to them.	
3. Verify that the weighting of the assessment methods (in terms of students effort and time) accurately reflects the relative importance of the different learning outcomes.	
4. Check that the instructional strategies and assessment methods that you have planned actually enable students to practice and get feedback on the tasks they will be graded.	
5. Check that there is a balance of types of assessment methods overall, e.g., avoid having only short answer tests... and , if possible, try for a balance for each learning outcome	

Figure 5: Which methods of assessment do you use?

Cases and open problems	Have potential for measuring application of knowledge, analysis, problem-solving and evaluative skills. Short cases are relatively easy to design and mark. Design of more complex cases and their marking schemes are more challenging to design and develop. Marking for grading and feedback are about as fast as essay marking.
Computer-based assessment	Much talked about. Usually software such as Question Mark will be used to format multiple choice questions, mark and analyse results. Wider range of graphics and simulations can be used. Optical Mark readers can be used - but allow for some students not marking the items clearly. Time consuming to set but marking very fast. Reliability is high but validity (match with outcomes) needs careful attention.
Direct Observation	Useful for immediate feedback, for developmental purposes and for estimating performance -providing a simple, structured system is used. The presence of the observer can change the performance so the method should be handled sensitively. Impressionistic observation can be useful if supported by constructive feedback. Can be used by a group of peers to provide feedback as well as assessment. Intensive, lengthy training is required for high reliability if detailed checklists are used. Reliability, validity and manageability are fairly high when structured observation is used.
Essays	A standard method. There are several types of essays that test different styles of writing types of thinking. Measures understanding, synthesis and evaluation, providing you ask the right questions. Relatively easy to set. Marking for grading based on impressionistic marking is fast. Marking for feedback can be time-consuming. Keep the criteria simple. Variations between assessors can be high - and so can variations of the Assessor.
Learning logs/ diaries	Wide variety of formats ranging from an unstructured account of each day to a structured form based on tasks. Some training in reflection recommended. Time-consuming for students. Requires a high level of trust between assessors and students. Measuring reliability is difficult. May have high validity if structure matches learning outcomes.
Mini-practicals	A series of mini-practicals undertaken under timed conditions. Potential for sampling wide range of practical, analytical and interpretative skills. Initial design is time-consuming. Some if not all of the marking can be done on the spot so it is fast. Feedback to students is fast. Reliable but training of assessors is necessary.

Modified Essay Questions (MEQs)	A sequence of questions based on a case study. After students have answered one question, further information and a question are given. The procedure continues, usually for about one hour. Relatively easy to set. May be used in teaching or assessment for developmental or judgmental purposes. Can be computer - or paper-based. Can encourage reflection and analysis. Potentially high reliability, validity and manageability.
Multiple Choice Questions (MCQs)	A standard method. Can sample a wide range of knowledge quickly. Has potential for measuring understanding, analysis, problem solving skills and evaluative skills. Wide variety of formats from true/false to reason/assertion. More complex formats not recommended: they confuse students unnecessarily and they are time-consuming to design. More demanding MCQs require more time to set. Better ones are based on case studies or research papers. Easy to mark and analyse results. Useful for self assessment and screening. Potentially high reliability, validity and manageability. Feedback to students is fast. Danger of testing only trivial knowledge. To save time, look for banks of items on the Net or in US text books. A team of assessors, working to the same learning outcomes, can brainstorm and produce several questions in an afternoon.
Orals	Tests communication, understanding, capacity to think quickly under pressure and knowledge of procedures. Feedback potential. Marking for grading can be fast but some standardisation of interview procedure is needed to ensure reliability and validity.
Objective Structured Clinical Examinations (OSCEs)	Initially used in medicine but can be used in business, legal practice, management, psychology, science courses and social work. Particularly useful for assessing quickly practical and communication skills. Fairly hard to design and organise, easy to score and provide feedback. Could be used in induction phase to estimate key practical skills. Group OSCEs useful for teaching, feedback and developmental purposes. OSCEs can be used towards the end of a course to provide feedback or to test performance against outcomes. Reliability, validity and manageability are potentially fairly high. Probably less labour intensive than other forms of marking but several assessors required at one time. Initially, they are timeconsuming to design - but worth the effort.
Portfolios	Wide variety of types from a collection of assignments to reflection upon critical incidents. The latter are probably the most useful for developmental purposes. May be the basis for orals. Rich potential for developing reflective learning if students trained in these techniques. Require a high level of trust between assessors and students. Measuring reliability is difficult. May be high on validity if structure matches objectives of training.

Poster sessions	Tests capacity to present findings and interpretations succinctly and attractively. Danger of focusing unduly on presentation methods can be avoided by the use of simple criteria. Feedback potential: from tutor, self and peers. Marking for grading is fast. Use of criteria reduces variability.
Presentations	Tests preparation, understanding, knowledge, capacity to structure, information and oral communication skills. Feedback potential: from tutor, self and peers. Marking for grading based on simple criteria is fast and potentially reliable. Measures of ability to respond to questions and manage discussion could be included.
Problems	A standard method. Has potential for measuring application, analysis and problem solving strategies. Complex problems and their marking schemes can be difficult to design. Marking for grading of easy problems is fast. Marking of complex problems can be slow. Marking for feedback can be slow. Variation between markers is fairly low when based on model answers or marking schemes. Allow for creative, valid solutions by bright students.
Projects, Group Projects and Dissertations	Good all-roundability testing. Potential for sampling wide range of practical, analytical and interpretative skills. Wider application of knowledge, understanding and skills to real/simulated situations. Provides a measure of project and time management. Group projects can provide a measure of teamwork skills and leadership. Motivation & teamwork <i>can</i> be high. Marking for grading can be time-consuming. Marking for feedback can be reduced through peer and self-assessment and presentations. Learning gains can be high particularly if reflective learning is part of the criteria. Tests methods and processes as well as end results. Variations between markers possible. Use of criteria reduces variability but variations of challenge of project or dissertation can affect reliability.
Questionnaires and report forms	A general method including a wide variety of types. Structured questionnaires get the information you want but semi or open-ended questionnaires may give you the information that you need. A mixture of structured and open-ended questions is recommended. Criterion reference grading recommended for judgmental purposes. Broad criteria are more reliable and valid than highly detailed criteria. Detailed criteria tempt users to react negatively or disdainfully.
Reflective Practice Assignments	Measures capacity to analyse and evaluate experience in the light of theories and research evidence. Relatively easy to set. Feedback potential from peers, self and tutors. Marking for feedback can be slow. Marking for grading is about the same for essays. Use of criteria reduces variability.

Reports on Practicals	A standard method. Have potential for measuring knowledge of experimental procedures, analysis and interpretation of results. Measure know how of practical skills but <i>not</i> the skills themselves. Marking for grading using impressions or simple structured forms is relatively fast. Marking for feedback with simple structured forms is faster than without them. Variations between markers, without structured forms, can be high. Method is often over-used. To reduce student workload and the assessment load, different foci of assessment for different experiments recommended.
Self-assessed questions based on open learning (distance learning materials and computer-based approaches)	Strictly speaking, a method of learning not of assessment. But could be used more widely. <i>Self assessed questions</i> could form an integral part of Open Learning. These could be based on checklists, MCQs, short answer questions, MEQs and other methods. Their primary purpose is to provide feedback and guidance to the users. They can be used to integrate open learning and work-based learning when students are on placement. Reliability and validity is probably moderately high and manageability is high, in the long term, but low initially.
Short answer questions	A standard method. Has potential for measuring analysis, application of knowledge, problem-solving and evaluative skills. Easier to design than complex MCQs but still relatively slow. Marking to model answers is relatively fast compared with marking problems but not compared with MCQs. Marking for feedback can be relatively fast .
Simulated interviews	Useful for assessing oral communication skills and for developing ways of giving and receiving feedback on performance. Video-recorded sessions take more time but are more useful for feedback and assessment. Peer and self assessment can be used. Sensitive oral feedback on performance is advisable. Assessment by simple rating schedule or checklist is potentially reliable if assessors, including students, are trained.
Single Essay Examination	Three hours on prepared topic. Relatively easy to set but attention to criteria needed. Wider range of ability tested including capacity to draw on a wide range of knowledge, to synthesise and identify recurrent themes. Marking for feedback is relatively slow. Marking for grading is relatively fast providing the criteria are simple.
Work based Assessment	Variety of methods possible including learning logs, portfolios, projects, structured reports from supervisors or mentors. Important to provide supervisors and mentors training in the use of criteria. Work experiences can be variable so reliability can be low. Validity, as usual, is dependent upon clear learning outcomes.

Techniques for Evaluating Individual Student Learning			
Technique	Description	Advantages	Considerations
Paper-and-pencil test: objective (multiple-choice, matching, true-false, fill in blanks)	Student selects most appropriate answer from several alternatives. Questions can be pulled from text bank.	Quick to score. Can be marked in class by students. Useful to survey or sample student learning. Can test student ability to analyze, apply, compare, and problem-solve. Avoids marking bias.	Higher-level questions are difficult and time-consuming to prepare. Limits student responses. May provide inaccurate responses due to misinterpretation of questions or reading ability. Provides no information about where or why student answered incorrectly. Time consuming to prepare questions. Easy for students to cheat or guess.
Paper-and-pencil test: essay style	Student can discuss, analyze, describe, prove, trace, explain, and so on. More open-ended and fewer questions. Offers opportunity for students to demonstrate their own insights and reflections beyond the instructor's perspectives.	Less preparation time than multiple choice. Student can demonstrate support and reasoning for their answer, personal interpretation, and creative thinking that the question doesn't anticipate.	Time-consuming to mark. Students' writing ability may limit their demonstration of thinking and knowledge. Criteria for assessment of each answer must be worked out carefully, and unexpected responses must be anticipated and considered.

Techniques for Evaluating Individual Student Learning			
Technique	Description	Advantages	Considerations
Student demonstration of skill	Student performs a maneuver according to standard stated in course objectives	Can be performed live or on videotape. Quick to assess using tools such as checklists. Corrective feedback can be immediate.	Objectives must be state in specific detail. Students must know the expectations for skill mastery. Assessment criteria must be clear. Consider training peers to give constructive feedback in practice.
Informal student writing	One-page memos to instructors in class, journal writing, learning logs. Marked by viewing selected pages, skimming holistically, or having students periodically prepare short summaries	Provides valuable information on how students are processing the learning, kinds of problems and questions that some are reticent to raise in class. Helps students track own learning process. Can act as a basis for formal writing assignments or projects.	Unfamiliar to some students – must use patience. Be well organized before reading (mark selectively and skim). Marking can be time consuming. Using results to modify instructional approaches.
Student-created product	Presentation, piece of writing, display, video, dramatization, product suited to course content (graphic, chart, artwork).	Good learning opportunity for students. Usually involves research. Most products (except writing) can be quickly scored with clear, specific criteria.	Students may need help developing projects. Ideas may be grandiose or impractical in terms of time. Fosters learning of multiple skills.

Techniques for Evaluating Individual Student Learning			
Technique	Description	Advantages	Considerations
Informal student observation	Instructor observes students informally as they discuss in small groups, or assesses panel presentations in front of class.	Quick way to get instant information about the level of student understanding. Instructor must know clearly in advance what to listen for.	Focus on one group at a time. Consider using checklists.
Student self-assessment (based on own goal setting) and interview with instructor	Student presents personal learning goals and self-assessment. Instructor helps student plan future learning goals based on progress.	Helps students take responsibility for own learning and evaluation. Mirrors workplace (goal-based performance appraisals). Reduces cheating. Often leads to powerful, meaningful learning, greater motivation and commitment to learning process because of self-directed nature.	Interviews take time. Consider meeting students throughout class periods when others are working on projects. Keep interviews focused. Some students need a great deal of assistance the first time they set goals. Refer to goals often throughout the course and demonstrate your commitment to your students.
Peer assessment	Using criteria provided by instructor or established together, students provide written or oral feedback to one another.	Students internalize criteria and can assess themselves more accurately. Provides wide range of feedback to each student without taxing the instructor. Develops better understanding of the expected standards and evaluation process.	Peers must be carefully trained in applying the assessment criteria effectively. Model and monitor. Train students in appropriate ways to give feedback.

