GRADING AND FEEDBACK

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Grading as Interpreting

Grading is an interpretation of students' learning products to:

- Reflect where students stand in relation to an orderly development of competence
- Inform both student and teacher not only where the student currently is, but also what needs to be done to improve that position
- Be able to be combined with other grades in order to meet administrative requirements for awarding of levels of pass, and the like

There are a number of questions that need to be asked in the planning phase, namely:

- Who will judge the product or performance?
- What grading scales will be used?
- What assessment criteria and points of reference will be used?
- What strategies will be used to determine validity and reliability?

Reference:

Frisbie, D. A. &. Waltman K. K (1992) **Developing a Personal Grading Plan**[1]Educational Measurement: Issues and Practice, Fall 1992.
http://depts.washington.edu/grading/plan/frisbie1.htm

Who will Judge

Common practice often assumes that it is the teacher who will interpret and assess students learning practices. However, a number of alternatives are possible, for example:

- Student assessment and peer assessment
- Neutral external examiner
- Expert professionals and community representatives
- Computer aided assessment
- Teachers

Should we Grade?

A question that may be raised in planning assessment tasks is whether students' learning products and performances ought to be graded. Wolff (1969) has described three *species* of grading:

- ***Criticism:*** the analysis of a product or performance for the purpose of identifying and correcting its faults or reinforcing its excellences
- ***Evaluation:*** the measuring of a product or performance against an independent and objective standard of excellence to which nothing is added to education by adding a grade. The true rationale of evaluation is not educational but professional in that it indicates if a person is qualified
- ***Ranking:*** the relative comparison of the performances of a number of students. This is the grading activity that produces the greatest anxiety and provokes the most opposition and is neither educational or professional but economic

Non-Graded Passes

Alverno College in the United States is the only example found where the rule is not to grade. Rather than using grades, standards are established in clearly defined profiles of desired learning outcomes. These outcomes must be demonstrated in a combination of self, peer and teacher assessment before a pass is recorded.

Points of Reference and Grading Criteria

Judging and grading implies that what is being observed is being compared with something. The meaning of grades is embodied in both the criterion and the points of reference and, theoretically, they are selected based on the purpose or intentions of particular assessment

Points of reference can be reduced to three types

- *Pre-established criteria,* in which the assessor asks:
  "Did the student performance or learning product demonstrate or address the criteria for which the task was established?"
- *Pre-determined behavioural norms,* in which the assessor asks:
  "How does the student performance or learning product compare against established norms for this particular level of students?"
- *Ideographic,* in which the assessor asks:
  "How does the performance or product measure against this student's earlier performances or products?"

Actual practice demonstrates that the points of reference that academics use are not so clear cut and rational. Those identified in experienced academics' cognition during assessment include:

- Products of other students
- Recall of classroom events and conditions
- Broad pedagogical objectives and the specific intended learning objectives
- Knowledge of content
- Recall of prior assessment events
- Incrementally developed construct based on assessor's perceptions of form, process and content cues in their students' texts
- Performance Standards

A Generic Learning Rubric

This rubric outlines levels of attainment and a range of generic learning attributes that might be taught and assessed in a university education. The following rubric has been developed based on a number of frameworks that describe levels of learning attainment. They include:

- The Solo Taxonomy (Biggs, 1992)
- The Florida Taxonomy of Learning attainment (Grant and Givens Fisher, 1982)
- The Taxonomy of Ethical Moral Reasoning (Perry, 1999)

The first row (in Italics) describes the general capacities of the level.

> ***Developing*** is intended to describe performance that is not yet at the basic level of expectations. So features may be present but not enough to pass, but maybe enough to ask for further work and resubmission.
>
> ***Functional*** is intended to describe learning attainment that meets the basic requirements and can be carried out in part without support, although some may still be necessary as there still is a high degree of reliance on authority for guidance in decisions making and very little translation or integration of concepts. It would correspond to a Pass.
>
> ***Proficient*** is a desirable standard for most students to reach and strongly exhibits independence, translation, integration and application. It would correspond to a credit.
>
> ***Advanced*** is performance beyond core expectations that is highly independent, creative, critically reflective, generative and transformative. It would correspond to a distinction or high distinction.

It is intended that specific disciplines or fields of study to accurately reflect the learning intentions of their programme will further develop the rubric. This development might mean the selection of some of the attributes and the elaboration of still others to form new ones. The resulting rubric can be used in a number of ways. (1) guiding curriculum design; (2) communicating expectations to students; providing students with an idea of where they sit in a framework of orderly development towards increased expertise in a learning domain; a peer and self evaluation tool; an aid to *consistency* and *accuracy* and *representativeness* in interpreting, grading and reporting learning outcomes

Feedback to me (Janice.orrell@flinders.edu.au) the author of this rubric of any developments you make with of this rubric would be greatly appreciated and used for the common good.

Assessment Attributes	Levels of Attainment			
	Developing	**Functional**	**Proficient**	**Advanced**
General description of the level of attainment	*Not yet to desired standard or unsafe practice. Possibly a resubmit or a fail grade would be given.*	*Reached basic academic standards and capable of limited safe practice. Work is rule based with limited or no translation and interpretation of concepts, skills and procedures and limited adaptations to meet situational factors unless aided. Would attract a pass grade.*	*Has completely reached the standards expected.* *Can function independently in novel contexts, adapting concepts, skills and procedures to meet situational factors. Demonstrates an appreciation of own limitations and can set personal learning goals. Given adequate teaching, assessment tasks, resources, and student effort, most students should be able to reach this standard. Would attract a credit grade*	*Have gone beyond the basic expected standards. Exhibit high levels of independence and can use principles to generate new understandings and ways of completing procedures and can provide theoretically defensible arguments for their new interpretations and adaptations. Can engage in productive critical reflection. Would attract a distinction or high distinction grade.*
Knowledge & Understanding	Limited understanding of required concepts and knowledge. Inaccurate reproduction of text and lectures Cannot discuss concepts in their own words	Encyclopedic knowledge and can reproduce accurately required facts and definitions. Has adequate breadth, but limited depth of understanding of basic concepts.	Exhibits breadth and depth of understanding of concepts in the knowledge domain. Can use terminology accurately in new contexts and has transformed the ideas so that they can express them appropriately in their own words. Demonstrates an appreciation of the limits of their own understanding.	Exhibits accurate and elaborated breath and depth of understanding of concepts in the knowledge domain. Knows how particular facts came to be. Demonstrates an appreciation of the limitations and temporary nature of conceptual knowledge in the discipline or field. Can generate and justify principles, protocols and hypotheses.

Psychomotor Skills & procedures	Cannot complete tasks and standard procedures unaided.	Can successfully complete most tasks largely unaided. Does not exhibit a capacity to make adaptations to account for situational factors unaided. Can practice safely under supervision. Demonstrates limited capacity to evaluate their own behaviour and skill level and to establish personal learning goals	Can independently complete all tasks and standard procedures successfully and safely. Can provide theoretical explanation for them. Can adapt standard procedures and protocols effectively for novel contexts to meet situational demands and can use theory to defend the adaptations. Can critique their own practice and identify ways to improve.	Effectively executes procedures and skills that are embedded within a theoretical framework. Selects from a range of options, appropriate ways of proceeding taking contextual factors into account and providing a theoretically defensible rationale for doing so. Can prioritise and make compromises and provide a justification.
Communication Skills	Poor verbal communication and listening skills accompanied by a lack of self-awareness of impact on others.	Communicates ideas and relates sensitively to others. Can listen to the ideas of others and respond to them.	Communicates most effectively and explains ideas clearly. Actively listens to others and responds appropriately, reflecting a personal understanding of the viewpoint expressed.	Balances listening and responding. Synthesizes what has been heard and responds and evaluates or elaborates on ideas, offering alternative perspectives.
Use of mathematical ideas	Knows a few mathematical ideas and rules can use them with supervision.	Rule based, knows basic concepts and rules and can use them to solve problems and in novel contexts. Requires support for transferring to new situations.	Thorough and accurate understanding of concepts and processes and can analyse and apply them in new situations.	Uses principles and theories accurately Abstracts and applies them in novel situations. Uses concepts to build new knowledge and understanding. Recognises the limitations of current thinking. Is open to new ways of mathematical thinking and problems solving.
Reasoning	Personal and anecdotal	Rule based, derived largely from authority (texts, teachers, authority figures). Mostly 'black and white' thinking. Little interpretation or translation.	Can recognise competing explanations and can identify the relative merits and limitations of an argument or position. Can describe and defend their own view or position.	Uses principles to formulate a position or an argument. Can articulate the limited nature of their argument and can challenge to boundaries of disciplinary understanding.
Analysis	Personal and anecdotal	Descriptive and anecdotal with limited use of theoretical frameworks. . Limited capacity to identify the complex factors within a larger idea or context. Limited capacity to synthesise a number ideas into a larger argument.	Can break large ideas, situations or problems down into components and explain each using the theoretical ideas and concepts of the discipline. Can synthesise a number of concepts or factors into a larger idea. Can evaluate the salience & limitations of arguments	Analysis is sophisticated with a balance of theory and personal reflection. Capable of generalising from personal reflection on theoretical ideas or real life experiences to formulate principles and evaluate the efficacy of ideas from a number of standpoints.

Ethico-moral reasoning	Black and white thinking. Dependent on the views of authority and experiences difficulty in formulating own opinion or in hearing the efficacy of another's opinion.	Multipulistic or relativistic thinking. Still largely dependent on the views of authority to form an opinion. Can hear differences in viewpoints but is persuaded by majority viewpoint. Difficulty in formulating conclusions.	Weighs an idea to formulate and justify personal conclusions. Recognises the need for compromise in decision- making. Can recognise the competing interests in arguments and identify the ethical issues embodied in them.	Uses principles to decipher competing interests and views. Can elaborate on the ethical and moral positions inherent in viewpoints and actions. Articulates a personal position, but is willing to surrender it should further persuasive evidence become available.
Professional and work based literacy	Fails to notice important information and factors in the workplace. Requires constant supervision. Unable to make independent decisions. Is not safe. Does not relate to colleagues and clients appropriately. Does not seek guidance through sensible questioning.	Can practice safely. Carries out most procedures without direct supervision. Notices basic contextual cues and asks questions. Attempts to relate to colleagues and clients. Functions largely through imitation, protocols and rules rather than through problem posing, critical reasoning and effective problem solving strategies. Finds little relevance in the workplace for theoretical concepts.	Establishes personal learning goals. Practices safely, balances initiative and independence with seeking guidance and feedback. Uses/critiques theoretical learning in the workplace. Considers and prioritises alternative action. Relates professionally to colleagues and clients. Makes effective contributions to the workplace. Understands organisational structure, functions and contemporary social context and issues that impact on it.	Makes a major contribution to the organisation though judicious use of the academic learning. Has the capacity to notice important cues in the workplace environment. Can work independently and take initiative as well as co-operating effectively in a team. Investigates the organisation and understands the social, political and economic factors that impact on it. Establishes personal learning goals and monitors their own learning.
Cultural and global literacy	Fails to recognise cultural differences or issues > does not recognise bias in their own personal views as or appreciate their culturally embedded values. Take's a fairly ethnocentric view on most issues.	Recognises their own viewpoint as one of a number of competing views. Understands that they have tacit personal biases to justify their opinions and actions. Recognises cultural differences and competing interests.	Recognise cultural differences and how they are enacted in the social life, economic privilege and personal and political empowerment and marginalisation.	Demonstrates a critical understanding of own cultural history and how it influences their interpretation of privilege and oppression. Able to articulate how social institutions perpetuate 'othering' and continued racialised practice and maginalisation.
Aesthetic Appreciation	Is unable to engage in any discussion about aesthetics	Is encyclopedic in any discussion of aesthetics, using the language of lectures and texts appropriately, but reveals no personal views or ideas	Is able to identify elements of a complex whole and can appreciate aesthetic qualities using course related concepts appropriately. Can compare the qualities of similar bodies of work.	Able to identify and comment on elements of a complex body of work. Demonstrates a capacity to understand the underlying ideology or genre of a body, critically evaluating its relative worth using course concepts. Suggests improvements for a body of work.

Technological Literacy	Is uncomfortable in using technologies. Needs support. Rule based.	Largely rule-based, but can function independently. Can transfer some learning from one platform to another.	Confident, independent user of a variety of technologies and platforms. Understands underlying principles and uses this understanding to move between platforms and modalities. Is open to technological change and development.	A sophisticated and independent adopter of new technologies to solve organisational and informational problems. Can adapt technologies to meet personal preferences rather than adapting practice to standard platforms. Creative and innovative interaction with technology.
Information Literacy	Uses immediately available information with little discrimination. Cannot independently seek out and locate required information.	Can seek out and locate required information with minimal support. Does not always discriminate effectively between sources of information.	Can independently seek out and locate required information. Is selective, effectively discriminating between sources of information.	Independently seeks out and locates required information. Is selective and discriminates between sources of information. Adopts effective processes for storage and retrieval of information.
Use of Academic Conventions	Absence or inaccurate use of referencing and citation conventions.	Basic referencing accurate and use of a bibliography and or reference list. Sometimes lacks consistency, but never the less is a reasonable acknowledgment of the sources of information	Use of academic conventions such as referencing and citation is accurate, consistent and appropriate for the discipline.	Use of academic conventions such as referencing and citation is accurate, consistent and appropriate for the discipline. Able to adapt the approach to different disciplinary conventions.
Use of academic writing and presentation grammars	Does not demonstrate an understanding of what is expected in presentation of learning products. E.g. Fails to use spell checker, some sentences fail to have verbs, poorly punctuated, written in note form. paragraphs have only one sentence etc	Adheres to most basic expectations regarding the formatting and presentation of work. E.g., titles name on work, introduction, conclusion, and reference list. Has correct sections for reports, case notes etc. Spell checked & grammatically correct.	Adheres to all expectations and conventions with all expected attributes present. Some translation and interpretation of the conventions to suit personal style and the specific execution of the task.	All expectations and conventions with all expected attributes present but have been creatively interpreted to suit personal style and the specific execution of the task. A unique but appropriate presentation of work.

How good is our practice in assessment, interpretation and grading?

Criteria for Judging the Quality of Assessment Design

- Transferability of the skills and knowledge required to novel conditions
- Fairness for all students
- Degree of cognitive complexity of the processes the student must use to complete the performance
- Meaningfulness of the problems
- Quality of the content
- Comprehensiveness of the coverage

Consistency, Accuracy and Representativeness in Judging and Grading

Bachor, Anderson, Walsh & Muir (1994) suggest that rather than a concern for validity and consistency on a single test at one moment in time, the concern should be for:

- **Representativeness**
  Questions the meaningfulness in the information the student is required to generate and the extent to which the task reveals the student's cognitive activities
- **Accuracy**
  A concern for mapping a student's typical performance related to clearly outlined criteria
- **Consistency**
  A concern to use consistent established criteria but in tasks that best suit individual students. Not all students can demonstrate their learning in the same manner

Factors that Influence the Grades we assign!

- Graphic quality of the students' texts
- Students' use of writing grammars
- Cues in students' text
  - -the quality of handwriting
  - -the readability of a student's papers
  - -the quality of the introductory paragraph
- Teachers' knowledge and expectation of students
- Teachers' personalities
- Teachers' beliefs about grading and education
- Teachers' experience in grading
- Quality of the other papers
- Readability of the text

Grading Strategies to Achieve a Higher Degree of Reliability

- Multiple marking of the same paper by either the same assessor or by two different assessors
- Blind marking (Newstead & Dennis, 1990)
- Establishing standards through the use of model essays (Heywood, 1977)
- Marking all responses to the same question in the case of essay tests that contain several short essay questions
- Neutral external examiners (Fong, 1987)
- Using computers in grading (Marshal, 1986)
- Assessor self monitoring

- Randomised in quality prior to marking rather than sorted beforehand. Sorting essays into perceived grade categories prior to assigning grades exacerbates the tendency for contrast effects (Daly & Dickson-Markham, 1982)

Expert Assessment Behavior Depends on Assessors having:

- A detailed knowledge of their discipline, of curriculum intentions and of learners
- A detailed knowledge of assessment options and the knowledge of the limitations of these options
- Clarity in their understanding of the purposes of assessment
- A repertoire of meaningful approaches that have been intentionally developed for interpreting students learning performances
- Awareness of contextual influences on their practice and of the limitations of their own interpretations and judgments

Giving and Getting Feedback

An important and neglected aspect of assessment is providing students with adequate feedback on their work. Yet it is the design of assessment and the quality of feedback that largely determines what and how students learn, not our erudite lectures. Feedback defines for a student what their teacher thinks is important for a topic or a subject.

At its **best,** feedback should:

- Guide both teachers and students
- Be a core part of teaching and learning, not an add-on ritual
- Focus around course and topic learning outcomes
- Guide students to become independent learners and their own critics
- Account for a developmental approach for achievement in a discipline

Crooks (1988) suggests the following tenets of effective feedback:

- It should focus on mastery rather than effort
- It should take place while it is still clearly relevant
- It should be specific and related to need

Sadler (1989) argues that feedback ought to be such that students will be ultimately capable of assessing the quality of their own work. It is important for students to get feedback on their learning, but there are problems associated with:

- Getting timely feedback as to whether our teaching is really supporting learning and focused on students' actual learning needs
- Giving students enough feedback to help them develop and improve their capability and achievements

Difficulties Associated with Giving and Getting Feedback

Feedback ought to aim at enabling students to improve their future efforts. However, one often gets the impression that students leave university making many of the same errors that they made when they entered.

Explanation for this common phenomenon could be that:

- Assessors' feedback is little more than editing and does not give students a clear message about what they must do to improve future submissions
- Assessors feedback is in 'code' so that students are unable to interpret what they must do differently
- Students do not read or take the advice that is given

For Academics:

- Giving feedback can be very time consuming and has limited value if students do not read it

- It is not uncommon to correct the same common errors on a particular student's work and on most students' work with little change occurring over time in students' performances
- Few assessment tasks enable teachers to get timely feedback to adjust either content or teaching strategies to focus on actual learning needs

For Students:

- It is often students who do not do well that get the feedback and the good students receive little more than 'excellent' on their work without gaining an insight into what they have done well and what they could do to enhance their performance
- Many assessment tasks are 'one-off' and for real grades and students do not get the opportunity to take the advice given
- Much feedback does not actually give the student a sense of what they might do to improve their learning

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Making Feedback Consequential : A Case Study

The is an account of an academic who questioned the value of his diligent editing of students' texts, especially when the assignments lingered in his office for over a year because students failed to collect them. To ascertain the value of his considerable effort of providing feedback to students, he paid a graduate student to survey his undergraduate students to find out what they did with the feedback. He found that students did **not** read what he had written on their assignments and particularly did not use his comments as a reference for the next assignment.

His solution to the problem was as follows. On the first assignment:

- Resist writing all over the assignment. Note a particular type of error once, and indicate that the student needs to look for other potential errors and find out a way to correct them, for example:
    - poor spelling, advise them to use a spell checker etc
    - poor grammar, direct them to advice or use a computer programme
    - poor paper design, direct them to courses or books on essay writing
    - poor conceptualizing, redirect them to texts
    - lower level cognitive achievement e.g. simple retelling of the text. Describe it and explain what you are looking for instead
- Give students three or four pieces of advice about the changes/improvements
- Expect the advice to be attended to for subsequent paper(s)
- Make the grade assigned to the subsequent paper contingent upon students' clear and specific indication about how they had acted upon the advice given

This teacher required that the first essay and his feedback be returned with the subsequent assignment with a single page explanation of the ways in which they had acted on the advice provided in the prior assignment. In this case, the last paper his students submitted merely received a grade with no written comments. His rationale for this was largely based on an assumption that students will not have the opportunity to act on advice at the end of a topic. (When I have tried this approach, I have added an A4 typed page of feedback, (common for all students), that briefly describes the characteristics of papers that achieved each grade. This enables students to see how their learning product fitted into a scope of possible achievements.)

Advantages of This Type of Approach to Feedback

- Reduces the 'one-off' nature of most assignment demands
- Makes students take responsibility for their own learning
- Increases the value added nature of your teaching (you can indicate improvements made for all students)
- Increases the opportunity for high achieving students as well as low achieving students to get constructive feedback
- Helps to increase students' metacognitive awareness
- Reduces the hoop jumping approach to assessment and the repetitive nature of assignment writing and giving feedback

Review

Feedback defines for a student what their teacher thinks is important for a topic or a subject.

Feedback is needed by:

- Teachers to adapt and adjust teaching to accommodate learning needs
- Students to adapt and adjust their learning strategies

Principles: Feedback should be

- Timely, so that students can use it
- Prompt, so that they can recall what they did and thought at the time
- Support learning, so they know how to improve their performance
- An iterative process between student and teacher
- Linked to a clear statement of orderly progression of learning
- Focus on mastery, not effort
- Specific
- Consequential, so that you are not continually giving the same student the same advice
- Lead students to being capable of assessing their own work
- Efficient for staff to do

Types of Feedback

- Informal, (worked examples, verbal feedback in class)
- Formal (in writing, checklists)
- Direct to individual student
- Indirect to whole class
- Formative, to enable adjustment
- Summative, to let students know what they have achieved

Challenges

- Much feedback is either editing, hortatory, cursory, recipe-like and atheoretical (Sadler, 1989)
- Students report that they are often left not knowing what they have done well, what they need to change and why they have achieved the grade they have
- This often occurs when a subject/topic is over
- Is 'one-off' and does not allow for risk taking, experimentation and practice
- Does not give students a sense of what they have achieved in progressing towards a goal
- Students are rarely required to act upon it

Feedback at its Best

- Guides both teachers and students
- Is a core part of teaching, not an 'add-on' ritual
- Focuses on course and topic learning outcomes
- Guides students to become independent learners
- Assists students to become their own critics
- Accounts for a developmental approach for achievement in a discipline