

Brookes Briefing: Designing and using Assessment Rubrics

'Rubrics may be the single most powerful and versatile assessment measurement tool your program can utilize for assessment'. (Kasimatis and Massa, 2017: 71).

A well-designed assessment rubric is an essential instrument in the Higher Education toolkit (Shipman et al., 2012). Assessment rubrics are a scoring guide (Bindayel, 2017) that present the marking criteria for an assessment task, mapped against statements of performance standards. Each statement specifies the qualities and features of a given piece of assessment across the grade boundaries. A well-designed rubric can reduce the level of subjectivity in marking, and provide a sound basis for a more defined and objective approach that can be employed across marking teams (Bindayel, 2017). Their core purpose is to make marking more transparent and fair (Brookhart, Moss and Long, 2009). An effective assessment rubric is an essential tool in helping the institution to meet the 'Conditions of registration' (OfS, 2022) which state the Higher Education Institutions must ensure that students are assessed effectively, that each assessment is valid, reliable and credible.

Good use of assessment rubrics is as essential as good design. An assessment rubric will enhance the objectivity of the marking team if it is coupled with calibration and benchmarking exercises. In a calibration exercise marking teams review the rubric, discuss what each descriptor means and collectively decide upon the conception of each one (Turbow, et al., 2016). A benchmarking exercise, in which all markers mark the same piece of work and discuss the grade they awarded and their reasons for it, enables marking teams to apply the rubric and come to a shared understanding of the grade boundary descriptors before they mark the full cohort of student submissions. These approaches enhance the rigour of the marking process.

A good assessment rubric is as helpful to students as it is to staff. By sharing an assessment rubric with your students you invite the students to become 'assessment savvy' (Brookhart et al, 2009). Some academics take it one step further and co-create their assessment strategy with their students (ibid). This approach has been shown to strengthen students' understanding of what they can achieve and how they can achieve it (Joseph et al., 2020; Kasimatis and Massa, 2017). Engagement with a rubric has also been shown to improve students skills in self-assessment and self-regulation (Cockett and Jackson (2018), and increase student performance (Brookhart and Chen, 2014).

The process of designing a good assessment rubric can help programme and module teams to clarify assessment tasks. In order to achieve this you need to embed the notion of constructive alignment (Biggs, Tang and Kennedy, 2022) in the design of your programme, ensuring that the learning activities and resources, the assessment tasks, and the LOs all correlate. Figure 1.

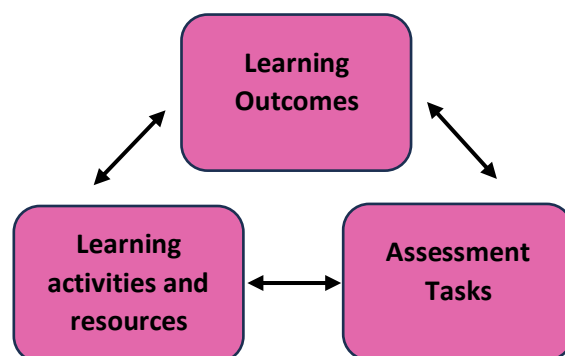


Figure 1. Constructive alignment

Principles and Practices for designing and using Assessment rubrics

1. Determine the format of your rubric

An analytic rubric (figure 2) is the recommended, easy-to-read format which normally takes the form of a matrix with the criteria in the left hand column and the percentages or grade boundaries listed from left to right across the top.

Figure 2. Format of an analytic rubric

	0-20%	21-40%	41-50%	51-60%	61-79%	80-100%
LO1.Design a piece of furniture considering both function and form	Design sketches are poorly presented. There is no indication of the development of function and form.	Design sketches are basic. There is limited indication of the development of function and form.	Design sketches demonstrate development of function and form.	Clearly presented design sketches, showing clearly articulated development of function and form.	Detailed design sketches, showing clearly articulated development of function and form.	Detailed design sketches of professional standard, showing clearly articulated development of function and form.
LO2. Present the context and rationale for your piece of furniture	Presentation lacked confidence and structure. There was no given context or rationale to support the choice of your piece of furniture.	Presentation lacked confidence or structure. The context was not entirely clear and the rationale for the choice of your piece of furniture was limited.	Presentation followed a logical structure and outlined a clear context and the rationale behind your chosen piece of furniture.	Well-structured presentation, with a good narrative, which justified the context and rationale behind your chosen piece of furniture.	High quality presentation, with strong narrative, which provided clear context and strong rationale behind your chosen piece of furniture.	Presentation was of a professional standard. Provided clear context and compelling rationale for your chosen piece of furniture.

Figure 2. Format of an analytic rubric (continued)

	0-20%	21-40%	41-50%	51-60%	61-79%	80-100%
LO3. Appraise the makers and influences behind your design	There was no appraisal of other makers or the influences behind your design	There was acknowledgement, but limited appraisal of the makers or the ways in which they influenced your design	The appraisal described the makers and the ways in which they influenced your design	Detailed appraisal of the makers and the ways in which these influenced your design	Detailed and insightful appraisal of the makers and the ways in which these influenced your design	Exceptionally detailed and insightful appraisal of the makers and the ways in which these influenced your design
LO4. Demonstrate your consideration of the manufacture process and sustainability costs and benefits	Reference to the manufacture process was missing or limited. It did not include any reflections on sustainability costs and benefits	The manufacture process was outlined, but lacked costings or materials analysis. Sustainability costs and benefits required more detail.	Costings, materials analysis and manufacture process were clearly presented. Clear outline of sustainability costs and benefits	Strong presentation of costings, materials analysis and manufacture process. Good consideration of sustainability costs and benefits	Clear analysis of costings, materials analysis and manufacture process. Detailed consideration of sustainability costs and benefits	Detailed analysis of costings, materials analysis and manufacture process. Detailed and objective consideration of sustainability costs and benefits

Assessment rubrics based on the concept of constructive alignment (Biggs, Tang and Kennedy, 2022) will use the Learning Outcomes (LOs) of the module as the criteria in the left column (e.g. fig 2). This offers clarity of how the students' work is expected to meet each LO of the module (or programme). Alternatively, some assessment rubrics use the left column for a set of criteria that mirror the tasks of the assignment when there is more than one element to the task - this approach is more commonly seen in relation to practical assessments such as Observed Structured Clinical Examinations (OSCE's) or Science Technology Engineering and Mathematics (STEM) disciplines. Either version of an analytic rubric offers a straightforward interpretation of the grade boundaries for an assessed piece of work across the key criteria. It enables markers to make swift decisions about specific elements of the work simply by selecting the most appropriate descriptor statements.

A holistic rubric (figure 3) offers a more simplistic approach which invites the marker to make a decision on a piece of work as a whole. The holistic rubric is efficient, but is deemed to be low on content validity (Tomas et al, 2019). This can be problematic, particularly if the quality of the work varies

across elements of the task. For example, a thesis may have a strong introduction, theoretical framework and methodology, but the data analysis and discussion might require significant development. A holistic rubric such as Figure 3 would force the marker to make an ‘overall’ decision which may not reflect each ‘descriptor statement’ in its entirety. If you use this approach be aware of the challenges of justifying borderline marks and giving careful feedback.

Figure 3. Format of a holistic rubric

Score	Descriptor Statements
70-100%	A succinct abstract outlining the key questions, originality, direction and findings of the study. The introduction provides clear context and rationale for the study and the positionality of the author, and presents a detailed theoretical framework. The chosen methodology is clearly justified and supported by comprehensive appendices which demonstrate rigorous processes of data selection, creation and analysis. Results are objective, detailed, ordered, accurate and make excellent use of appropriate graphics to assist the reader. Discussion and findings deal effectively with complex, critical and original arguments. The writing is straightforward, unambiguous, grammatically correct, error-free, and guides the reader through the text with extreme dexterity. There is substantial, critical engagement with relevant literature throughout, all fully referenced using consistent referencing conventions. The conclusions and potential applications/impact are persuasive, and the presentation is excellent.
60-69%	The abstract outlines the key questions, direction and findings of the study. The introduction provides clear context and rationale for the study and the positionality of the author, and presents an outline of the theoretical framework. The chosen methodology is justified and supported by selective appendices which demonstrate processes of data selection, creation and analysis. Results are detailed, ordered, accurate and make use of appropriate graphics to assist the reader. Discussion and findings present complex, critical and original arguments. The writing is straightforward, grammatically correct, error-free, and guides the reader through the text. There is evidence of critical engagement with relevant literature throughout, all fully referenced using consistent referencing conventions. The conclusions and potential applications/impact are clearly laid out, and the presentation is excellent.
50-69%	The abstract indicates the key questions, direction and findings of the study. The introduction provides a context and rationale for the study and the positionality of the author. The theoretical framework is outlined. The chosen methodology is justified. Results are ordered, and largely accurate. Discussion and findings present original arguments. The writing is grammatically correct, error-free, and sequential. There is evidence of engagement with relevant literature, all fully referenced using consistent referencing conventions. The conclusions are clearly laid out, and the presentation is good.
0-49%	The abstract does not clearly present the key questions, or findings of the study. The context and rationale for the study and the positionality of the author are unclear. There is little indication of any theoretical framework. The methodology is limited/unjustified. Results are disorganised and unclear. The discussion and findings are very limited, lack direction, and sometimes repetitive. The writing is grammatically incorrect, includes multiple errors, and non-sequential. There is little/no evidence of critical engagement with relevant literature, and there are multiple referencing convention inaccuracies. The conclusions are not justified by the main body of the thesis and the presentation is poor.

2. Identify the grading system

Remember that the grading system must reflect the marking structure across your degree programme. Figures 2 and 3 (above) use different grade boundaries. If you use a Distinction/Merit Pass/Fail, or A, B, C, D or 1st, 2:1, 2:2, 3rd system it is likely that this will need to be converted to percentage boundaries in order to register marks in the Digital Learning Environment (Moodle or Turnitin). Make these conversions absolutely clear on the rubric. For undergraduate assessment you may also be asked to indicate the Grade Point Average (figure 4). If in doubt, check with your programme lead.

Figure 4. Grade Point Average

Percentage	70+		60+		50+		40+		30+	0-29
GPA	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0.0	0.0

3. Be clear about what you are really assessing

Programme and Module Learning Outcomes (LOs) are set during the accreditation/approval process of each programme. The assessment tasks should be designed to measure the given LOs: they should be constructively aligned. In other words the validity of an assessment is reliant upon the extent to which a test or assessment measures what it is supposed to measure (Biggs, 2022). The job of the marking rubric is to clearly articulate how this achieved at different levels. Don't get distracted by peripherals. If, for example, you are marking a presentation then you may consider the quality of the content, structure, timings, visuals and narrative. What the person may be wearing, whether they are nervous or not, whether they have an accent or not, are irrelevant, unless they have a direct impact on the assessment criteria.

4. Define the pass mark standard

In order to gauge the pass mark standards you should be setting for a degree programme refer to national guidelines, and of course any professional body statements available to you. The Quality Assurance Agency (QAA) provide [Subject Benchmark Statements](#) which '*describe the nature of study and the academic standards expected of graduates in specific subject areas. They show what graduates might reasonably be expected to know, do and understand at the end of their studies.*' (QAA, no date). South East Education Consortium (SEEC, 2021) provide a [generic set of credit level descriptors](#) which define the level of challenge, complexity, and autonomy expected of a learner at a given stage. These are categorised as knowledge, understanding, skills, behaviours and values and can be used as a basis for the language of the descriptor statements in your assessment rubrics. Remember to relate the assessment tasks directly to the LOs, and ensure that the assessment regime provides our diverse student body with opportunities to demonstrate their learning in ways that avoid systematic disadvantage to groups or individuals.

5. Clearly articulate the level of achievement across the grade boundaries

The essential ingredient of an effective assessment rubric is in the wording of each descriptor statement. These must clearly articulate what excellent, good, mediocre or poor look like. You must not leave interpretation of these terms to the marker, or indeed the student. Describe exactly what you see in a piece of work for a given grade boundary. The example in figure 5 relates to a criterion about written communication. Remember that the descriptor statements should be explicit. In the

example below the marker is looking for several things: the standard of writing, use of language and terminology, and logic of argument. Each of these components must be directly relevant to a given learning outcome of the module or programme. In most assignments, you may be more concerned with how well the content is communicated, in others you might also focus on the grammar and typography. Just ensure that the learning activities and resources clearly reflect what the students are expected to master in their assessment.

Figure 5. Articulating the features of the assessed work across the grade boundaries

	0-20%	21-40%	41-50%	51-60%	61-79%	80-100%
Criterion 1 Written Communication	Poor standard of writing where range and accuracy of language use impedes communication of ideas. Lacks appropriate use of terminology. Ideas are confused or incorrect.	Basic standard of writing where range and accuracy of language use limits communication of ideas. Use of terminology is limited and ideas sound confused or incorrect.	Reasonable standard of writing. Range and accuracy of language use presents key ideas clearly. It uses correct terminology. It makes a series of logical points, but would benefit from clearer explanations.	Good standard of straightforward writing. Range and accuracy of language use facilitates communication of complex ideas. It uses the correct terminology, and explains core ideas with clarity. It offers key, logical arguments.	Excellent standard of straightforward, unambiguous writing. Range and accuracy of language use facilitates communication of complex ideas with clarity. It makes good use of appropriate terminology and provides a clear narrative.	The writing is of a professional standard. Range and accuracy of language use enhances communication of complex ideas with dexterity. Excellent use of terminology and a strong narrative. It offers persuasive and critical arguments.

References, resources and further reading

- AERA (2014), American Psychological Association, & National Council on Measurement in Education (Eds.). Standards for educational and psychological testing. American Educational Research Association. <https://www.apa.org/science/programs/testing/standards>
- Biggs, J., et al. (2022). Teaching for Quality Learning at University. Maidenhead, OUP McGrawHill.
- Bindayel, N. (2017) Reliability of Rubrics in the Assessment of Orthodontic Oral Presentation. *Saudi Dental Journal*, 29, 135-139.
- Brookhart, S. & Chen, F. (2014). The Quality and Effectiveness of Descriptive Rubrics. *Educational Review*. 67. 1-26. 10.1080/00131911.2014.929565.

- Brookhart, S. Moss, C, and Long, B. (2009) Promoting Student Ownership of Learning Through High-Impact Formative Assessment Practices. *Journal of MultiDisciplinary Evaluation* Vol. 6 Issue 12 Pages 52-67
- Cockett A, & Jackson C. (2018) The Use of Assessment Rubrics to Enhance Feedback in Higher Education: An Integrative Literature Review. *Nurse Educ Today*; 69:8-13. doi: 10.1016/j.nedt.2018.06.022. Epub 2018 Jun 30. PMID: 30007151.
- Faison, W. (2022) Full Disclosure: Black Rhetoric, Writing Assessment, and Afrocentric Rubrics. *Rhetoric Society Quarterly*, 52:3, 270-281.
- Grainger, P. and Weir, K. (2020) *Facilitating Student Learning and Engagement in Higher Education Through Assessment Rubrics*. Cambridge Scholars Publishing
- Hancock, A., & Brundage, S. (2010) Formative Feedback, Rubrics, and Assessment of Professional Competency through a Speech-language Pathology Graduate Programme. *Journal of Allied Health*, 39 (2), 110-119.
- Joseph, S., Rickett, C., Northcote, M., & Christian, B (2020) 'Who are you to Judge my Writing?': Student Collaboration in the Co-construction of Assessment Rubrics, *New Writing*, 17:1, 31-49, DOI: 10.1080/14790726.2019.1566368.
- Kasimatis, M., & Massa, L. J. (2017). *Meaningful and Manageable Program Assessment : A How-to-Guide for Higher Education Faculty*. Stylus Publishing, LLC.
- Shipman, D., Roa, M., Hooten, J., & Wang, Z. J. (2012). Using the Analytic Rubric as an Evaluation Tool in Nursing Education: the Positive and the Negative. *Nurse Education Today*, 32(3), 246-249.
- Teaching and Learning Academy (2022) Research Paper Holistic Rubric. Available: https://www.queensu.ca/teachingandlearning/modules/assessments/35_s4_05_types_of_rubrics.html. Accessed 30/11/22.
- Tomas, C., et al. (2019). "Modeling Holistic Marks With Analytic Rubrics." *Frontiers in Education* 4.
- Turbow, D., Werner, T., Lowe, E., Vu, H. (2016) Norming a Written Communication Rubric in a Graduate Health Science Course. *Journal of Allied Health* 45 (3) 37-42.
- Guidance on creating a rubric on turnitin/Feedback studio: <https://help.turnitin.com/feedback-studio/turnitin-website/instructor/rubric-scorecards-and-grading-forms/creating-a-rubric-or-grading-form-during-assignment-creation.htm>
- QAA Subject Benchmark statements: <https://www.qaa.ac.uk/quality-code/subject-benchmark-statements>
 - SEEC Credit Level descriptors: https://seec.org.uk/wp-content/uploads/2021/05/MDX_SEEC-Descriptors_Update-May-2021_Version-2_For-screen_AW13885.pdf
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