Grading and Assessment @ Yale-NUS College
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Overview and Foreword

This document is intended to be both a sourcebook on best practices in assessment and grading and a living document that embodies the culture of teaching and assessment at Yale-NUS College. It is hoped that it will be a source of useful information for new and experienced faculty alike as we create our own unique culture of teaching and learning at Yale-NUS College. The document includes several sections that provide context for our efforts at Yale-NUS College, and reviews the ways in which grading and assessments are designed across the world, the psychological impacts that those grades have on students, the new movement toward "authentic assessment" and an overview of the forms and uses of grading and assessment.

In April 2015, the Working Group on Alignment of Assessment and Grading conducted an extensive study of assessment and grading practices across the Common Curriculum. Included in their final report was a recommendation for the “development of College-level statements of expectations with respect to assessment and grading practices and standards”. In response to the Working Group’s recommendation, the Yale-NUS College Centre for Teaching & Learning has proposed a series of “principles of assessment” for consideration by the faculty, which are presented in the first section. These principles can help guide our decisions regarding assessment and grading at Yale-NUS College, and are widely regarded as informing the best practices from leading institutions around the world. These principles were adapted from similar documents posted by the University of Sydney and the University of Bristol. They have been discussed with faculty and leadership at Yale-NUS College, and represent the underlying philosophy that our faculty at Yale-NUS take in designing assessments and grading for their courses.

Our faculty and students come from over 50 different nations, and embody the academic cultures of the world. As Yale-NUS College is a truly global academic community, this document is especially important as it communicates some of the expectations and practices of academic institutions in many nations across the world – the U.S., U.K., Australia and Singapore in particular. We have provided an overview of those practices in the second section.

The latest educational research has advocated clear and assessable learning...
objectives as the focus in course design. These learning objectives when expressed as concrete outcomes that are rooted in the practice of an academic discipline, and in the context of real-world societal applications form the basis of "authentic assessment." The third section gives an overview of authentic assessment, and how it can be designed to improve the relevance and effectiveness of courses.

Students should be the primary focus of our teaching and also for our assessment and grading practices. The ways in which grading and assessment improve their learning, affect their self-concept and communicate to them are described in the fourth section on the psychology of grading and assessment, and in the fifth section, which considers the effects of criterion vs. normative-based grading through the lens of Achievement Goal Theory.

Yale-NUS College does not currently have any formal policy for faculty instructors regarding assessment and grading. However, the Student Policies and Procedures make reference to some expectations that students may reasonably have. Appendix A includes the relevant portions of the Student Policies and Procedures that describe assessment and grading. Included in Appendix B is also information about Latin Honours made available to students on the Yale-NUS website.

Included in Appendix C is the grading and assessment report developed during Academic Year 2014-15, which serves as a useful manual for grading and assessment. This section includes the contributions of over 90% of the entire Yale-NUS faculty who participated in working groups and focused workshops during Semester 2 of 2014-15, and we are grateful to our colleagues for their hard work. The input from this diverse group of faculty formed the basis for this extended document, which includes additional research on grading and assessment practices, and an overview of the international context of our work at Yale-NUS College. Particular credit for this part of the document goes to Jenifer Raver, who edited the reports from the many working groups, as well as to the members of the TLA committee and working group chairs such as Jane Jacobs, Mira Seo and Marty Weissman.

We hope that this guide is helpful, and will evolve with constant input from both new and experienced faculty as they build Yale-NUS College and its teaching culture further with their excellent teaching. Our approach to teaching and learning, and grading and assessment, is one of our highest shared intellectual efforts, and this document describes a portion of this effort. Within our Yale-NUS Culture of grading and assessment is an emphasis on a holistic approach to learning focused on student learning. This approach entrusts the faculty with the judgment, experience and expertise for designing and conducting their courses. The final authority for determining grades lies with individual faculty members teaching each course, and we hope that this guide will help faculty provide effective, fair and transparent processes that can enable students to reach their full potential for learning.

The Centre for Teaching & Learning
Yale-NUS College
Introduction

Our approach to teaching and learning, and grading and assessment is one of our highest shared intellectual efforts, and this document describes a portion of this effort. We anticipate that this document will evolve with constant input from new and experienced faculty as they craft their courses, and build Yale-NUS College further with their excellent teaching. Within our Yale-NUS Culture of grading and assessment is an emphasis on a holistic approach to learning that is focused on student learning. This approach also entrusts the faculty with the judgment, experience and expertise for designing and conducting their courses. The final authority for determining grades lies with individual faculty members teaching each course, and we hope that these principles will help faculty provide effective, fair and transparent processes in these courses that can enable students to reach their full potential for learning.

The Principles of Assessment

1. Assessment practices should be used to promote student learning
   - Assessment practices should be clearly aligned with the intended learning outcomes and objectives for each course
   - A variety of assessment tasks should be used, including both formative and summative assessment
   - Constructive feedback to students should be provided regularly throughout the course to support learning

2. Assessment practices should be communicated clearly to students and staff
   - Constructive feedback to students should be provided regularly throughout the course to support learning
   - Course syllabi should clearly state the learning outcomes and objectives for the course
   - Procedures for assigning grades should be clearly communicated to students

3. Assessment practices should be valid and fair
   - Assessment tasks should be consistent with expectations for the level of the course module
   - Assessment tasks should incorporate rigorous academic standards related to the discipline(s)

4. Assessment practices should be continuously improved and updated
   - Assessment tasks and outcomes should be regularly reviewed by instructors to ensure that procedures are working effectively to promote learning
   - Wherever possible, research and best practices should inform the development of assessment and feedback practices
   - Faculty should make use of professional development opportunities to refine the design, implementation, and assessment of their courses

5. Final decisions about assessment and grades lie with faculty instructors
   - All grades assigned lie within the jurisdiction of the faculty member and will reflect academic standards of Yale-NUS College
   - Pre-determined mathematical distributions of student marks will not be imposed on faculty members’ grades, but instead faculty will decide the range of marks based on student performance within their classes.
Grading Practices ACROSS COUNTRIES: US, UK, Australia and Singapore

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Bryan Penprase, Professor of Science (2013 - 2017), Yale-NUS College; Director (2015 - 2017), Centre for Teaching & Learning
Introduction

The community at Yale-NUS is incredibly diverse, with students and faculty hailing from over 50 different nations and bringing different perspectives on education to this community. Given that Yale-NUS is a truly global academic community, this section aims to communicate some of the expectations and standards of academic institutions in many nations across the world – the U.S., U.K., Australia and Singapore in particular. These regions are represented in this section because the academic cultures seem to have the most influence in the context of Yale-NUS. Having insight into the academic cultures the faculty and students come from will provide insight into how grading and assessment might be perceived and practised by different members of our academic community.

Throughout this section, there will be references to marks, grades and percentage scores. For the purposes of clarity, the following definitions of marks and grades will be used:

<table>
<thead>
<tr>
<th>Grades</th>
<th>Marks</th>
<th>Percentage scores/marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A formal certification of competence and achievement of learning outcomes that should reflect as accurately as possible a student’s performance in a module or its elements (e.g., letter grades like A or B, a grading scale like a grade point average).</td>
<td>The points awarded for an assignment that typically has a maximum limit to the number of points one can score (e.g. scoring 17/20 for a quiz).</td>
<td>The overall percentage score calculated by aggregating marks and converting them into a percentage that represents the students overall performance (e.g. 90% is the percentage score for an assignment assigned 9/10 marks).</td>
</tr>
</tbody>
</table>

Typically there is a mapping between grades and marks, which allows for points to be converted into letter grades. These conversions vary by country and institution, and will be discussed in the text in each of the sections below.

The U.S.A

In the US, students face frequent assessment throughout the semester, with many assignments counting towards a summative grade at the end of the course. This form of assessment is commonly referred to as continuous assessment. With continuous assessment, not every assessment is summative (i.e. contributing to a final grade), and many can be formative with the purpose of providing feedback (Biggs & Tang, 2007). Some of the goals of continuous assessment include increasing student ownership of the learning process, providing instructors greater insight into student needs throughout the course, and to increase student self-awareness about their academic strengths and weaknesses (Yu, 2014).

These assessments may be given results in the form of a percentage or a letter grade. The overall grade for the course is given with a five letter grading scale (A, B, C, D, F) with ‘+’ and ‘-’ affixes for further differentiation. These letter grades are converted into a grade point, where A= 4, B = 3, C = 2, D = 1, with the “+” or “-“ affixes representing a third of a grade point (Yorke, 2008). The number of decimal points included in a grade point average may vary between institutions. The following table demonstrates how percentage scores are typically converted to letter grades and grade points in the U.S:

<table>
<thead>
<tr>
<th>Conversion from marks to grades in the US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Point</td>
</tr>
<tr>
<td>Grade</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>Score Range (%)</td>
</tr>
<tr>
<td>97-100</td>
</tr>
</tbody>
</table>

In some schools, students may be allowed to take classes on a Pass/Fail basis. This means that the student will not receive a letter grade for the module but will instead receive an indication of whether the student has passed or failed the module in their transcript.

Unlike in the UK, where grades may be standardised across a course or major, professors in the US are able to “tailor” their methods of assessment and determine how a summative grade will be given. Thus, professors are the ones who primarily manage grading in a module and are therefore responsible for developing their own grading standards (Walvoord & Anderson, 2010). Instructor autonomy in grading protected by the 1940 Statement of Principles on Academic Freedom and Tenure
by the American Association of University professors, which states that a right that flows from a “teacher’s freedom in the classroom” is the assessment of student academic performance, including the assignment of particular grades (Euben, 2001). Faculty are thus entrusted with the responsibility of assessing students in a fair manner, and are expected to be experts in the field who know best how to ensure mastery of the subject matter amongst their students in the discipline.

Grade inflation has become a common concern in the US. Various undergraduate surveys have shown that the number of students who receive grades of A- or higher have more than tripled between 1969 and 1993 (Levine & Cureton, 1998). The phenomenon of grade inflation has continued and nearly all studies of grade changes over time have shown a positive raw grade increase. (Kostal, Kuncel, & Sackett, 2016). Rojstaczer and Healy also plotted the average GPAs of students from over 160 colleges and universities in the United States and historical grades from over 80 schools to demonstrate the phenomenon of GPAs rising over time in the diagram below. They also discovered that grades tended to be higher in the humanities than in the natural sciences, engineering or social sciences.

One concern about grading in the US is the “inequitable assessment of students” with students being inclined towards taking classes with professors who grade more leniently (Johnson, 9).

Most colleges in the US use a Latin honours system, where students who do well can graduate with a summa cum laude, a magna cum laude, or a cum laude. Many top institutions limit honours a top percentage of students based on their GPA. The following table summarises the percentage breakdown of Latin honours in various colleges.

<table>
<thead>
<tr>
<th>Percentage of students who receive honours at various institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>Yale-NUS</td>
</tr>
<tr>
<td>Yale</td>
</tr>
<tr>
<td>Columbia</td>
</tr>
<tr>
<td>Harvard</td>
</tr>
<tr>
<td>Williams</td>
</tr>
</tbody>
</table>

However, some peer institutions also utilise a GPA cut-off for Latin honours. For instance, both University of Pennsylvania and Middlebury College award the summa cum laude to students with a GPA of 3.80 or higher, the magna cum laude to students with a GPA between 3.60 and 3.80, and a cum laude to students with a GPA between 3.40 and 3.60.

Some colleges, such as Amherst college and Swarthmore college, require students to complete specific coursework (a senior thesis at Amherst college and externally assessed honours programme at Swarthmore) in order to be eligible for honours. Colleges may also provide different types of honours alongside Latin honours, such as departmental honours, which are honours presented to the top performing students in each major.

Yale-NUS College has introduced a “grade-free” semester for first-years. Grade-free semesters have also been established amongst peer institutions, such as the Massachusetts Institute of Technology (MIT), the California Institute of Technology.
Grading Practices Across the World

(Caltech), Swarthmore College and John Hopkins University. Typically, these institutions would record grades for first-years as pass or fail, rather than provide letter grades in their transcripts. Whether this is done for only the first semester or both semester differs across institutions. For instance, MIT begins providing letter grades from a student's second semester, while students at Caltech and Swarthmore do not have recorded letter grades for the entire first year.

The stated purposes for these grade-free semesters generally lean towards providing “students time to make the transition to college-level academic work” (Swarthmore College, n.d.) and “to adjust to factors like increased workloads and variations in academic preparation” (MIT, n.d.) Many of these institutions continue to provide shadow letter grades, which are letter grades provided as feedback for the students but which are not recorded on their transcript. This is presumably to facilitate “a transition to letter grades” in subsequent semesters (California Institute of Technology, n.d.). It also enables instructors and academic advisors to “identify students who may be experiencing academic difficulty” (Swarthmore College, n.d.) or determine student suitability for awards and other opportunities (John Hopkins University, n.d.).

Descriptive evaluation in replacement of letter grading has also emerged as a potential grading alternative in US colleges. One advantage of descriptive grading that has emerged is that it helps “focus the student's attention on his problem. The student would become aware of his strengths and of the areas in which effort could be most profitably expended to produce improvement” (Levine & Cureton, 1998) It also eliminates the problem that letter grades might “divide students by labels of achievement” and focus their attention on competing with their peers rather than self-improvement (Reed College). Some colleges, such as Sarah Lawrence College, may provide letter grades to students alongside narrative evaluations for external use, such as job applications or applications to graduate school (Sarah Lawrence College).

United Kingdom

In the UK, assessment tends to occur less frequently, with fewer assignments and projects. It is entirely possible that a student's entire grade is based on a single examination at the end of a module (International Student, n.d.). Formative assessment is limited and feedback is given less consistently over the semester (Oxford). Marks in the UK system typically map to grades with lower percentages corresponding to the same letter grades as one would find in the US. A typical mapping of grades within a course or module is shown below in the following table:

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score Range (%)</td>
<td>70-100</td>
<td>60-69</td>
<td>50-59</td>
<td>40-49</td>
<td>0-40</td>
</tr>
</tbody>
</table>

(Imperial College London, n.d.)

Grades play an important role for students in the UK because they determine their degree classification, which can impact their job search. In general, getting a second-class honours in the lower division (referred to as a 2:2 or a second lower) or anything lower is looked upon as having a negative effect on one's employability after graduation (Liang, 2012). The general guidelines for degree classifications are found in the following table:

<table>
<thead>
<tr>
<th>Degree Classification</th>
<th>M ≥ 70.0%</th>
<th>Where the mean is greater than or equal to 70.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>69.9% ≥ M ≥ 60.0%</td>
<td>Where the mean is greater than or equal to 60.0% and less than 70.0%</td>
</tr>
<tr>
<td>Second Upper</td>
<td>59.9% ≥ M ≥ 50.0%</td>
<td>Where the mean is greater than or equal to 50.0% and less than 60.0%</td>
</tr>
<tr>
<td>Second Lower</td>
<td>49.9% ≥ M ≥ 40.0%</td>
<td>Where the mean is greater than or equal to 40.0% and less than 50.0%</td>
</tr>
<tr>
<td>Third</td>
<td>39.9% ≥ M ≥ 35.0%</td>
<td>Where the mean is greater than or equal to 35.0% and less than 40.0%</td>
</tr>
<tr>
<td>Pass (no honours)</td>
<td>34.9% ≥ M</td>
<td>Where the mean is less than 35.0% provisionally and no degree is awarded</td>
</tr>
</tbody>
</table>

(The University of Warwick, 2015)

Each university would use a different classification algorithm to determine the final percentage a student receives for all assessments upon graduation. Often,
the final year’s examinations tend to be weighted more heavily than the student’s performance in other years (Yorke, 2008). Some institutions allowed “discounting” of modules, whereby not all modules were used to calculate the final percentage (Yorke, 2008).

The Fulbright Commission has developed the following framework to help students convert their UK degree classification to a US Grade and GPA:

<table>
<thead>
<tr>
<th>Conversion Table for UK Degree Classification and US Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK Class</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>First</td>
</tr>
<tr>
<td>Second Upper</td>
</tr>
<tr>
<td>Second Lower</td>
</tr>
<tr>
<td>Third</td>
</tr>
<tr>
<td>Pass</td>
</tr>
<tr>
<td>Fail</td>
</tr>
</tbody>
</table>

(Fulbright Commission, n.d.)

In 2011, approximately 15% of students graduating from undergraduate programmes in the UK received first class honours. This is an increase from 7% in 1995 (Paton, 2012). Some have considered this evidence of grade inflation in the UK.

It is also common practice in universities in the UK to rely on external examiners for grading. External examiners are “experienced higher education teachers who offer an independent assessment of academic standards and the quality of assessment to the appointing institution” (The Higher Education Academy, 2012). For instance, at Cambridge University, external examiners are appointed by the governing board to act in a moderating capacity; provide an independent assessment of academic standards, and comment on the validity of the examination process (University of Cambridge, n.d.). The Quality Assurance Agency (QAA) in the UK, which safeguards higher education standards in the UK, mandates that external examining is used across all universities in the UK in order to ensure that degrees are awarded based on a common standard (Quality Assurance Agency, n.d.).

### Australia

In Australia, results for an assessment are commonly expressed as a percentage mark, and the cumulative percentage mark is used to determine the letter grade a student receives at the end of the module. In Australia the conversion of points or marks into letter grades follows a mapping close to that which is used in the UK, with slight variations in the exact percentages used for each band. An example table is shown below:

<table>
<thead>
<tr>
<th>Conversion Table for Australia grades and US Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian Letter Grade</td>
</tr>
<tr>
<td>HD</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>P</td>
</tr>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

(Fulbright Commission, n.d.)

In Australia, there is an honours system that takes different forms; most commonly, it involves qualifying for a fourth year of study (a normal bachelor’s degree would take three years) that enables one to graduate with honours. Honours share the same classification as in the UK, but in Australia, receiving honours does not mean superior performance in the undergraduate programme but suggests entering an additional programme that “requires high-level academic performance for admission and graduation” (Kiley, Boud, Manathunga, & Cantwell, 2011).

In Australia, grading is seen to be stricter than in the US or UK. In general, percentage grades tend to be lower as students start with 0% and have to earn points. Thus, receiving 75% is already seen as performing excellently (University of Colorado, n.d.).

James Cook University in Australia recommends that no more than 20% - 30% of students in a course receive a Distinction (James Cook University, n.d.). Likewise, the Faculty of Arts and Social Sciences in the University of Sydney recommends to faculty that no more than 20-25% of students receive a Distinction or Higher Distinction (University of Sydney, n.d.). Moreover, a large number of students still receive merely a passing grade.
The University of New South Wales (UNSW) grade distributions for 2015 suggest that across all courses, the median students who receive Distinctions or Higher Distinctions in a course constituted about 30% of students, as demonstrated in the diagram below. However, there is a notably wide distribution of grades in the diagram. The blue shaded section of the graph demonstrates that an instructor of a course could give anything between 20% to 55% of a class a Distinction or Higher Distinction.

Singapore

There is a wide range of practice and procedures in grading and average calculations within Singapore. Marks and grades within Singaporean higher education in many cases parallels the procedures used in the U.K., with a similarly high emphasis on final summative examinations for determining a course (or “module”) grade.

In the National University of Singapore (NUS) and the Nanyang Technological University (NTU), grades are based on the five-point scale shown on the next page, and the cumulative average is calculated the same way it is in the US.

### Letter Grades and Grade Points at NTU and NUS

<table>
<thead>
<tr>
<th>Grades</th>
<th>A+</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>D+</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point</td>
<td>5.0</td>
<td>5.0</td>
<td>4.5</td>
<td>4.0</td>
<td>3.5</td>
<td>3.0</td>
<td>2.5</td>
<td>2.0</td>
<td>1.5</td>
<td>1.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

(Nanyang Technological University, n.d.)

NUS has also made explicit its use of grade moderation based on a normal distribution curve, stating that: "where necessary, the final grade which a student receives for a module may be subject to moderation. One important reason for grade moderation is that examiners come from diverse academic backgrounds with different marking regimes. Grade moderation will prevent grade inflation or deflation and thus help achieve consistency in assessment across modules." (National University of Singapore, n.d.). Because of this moderation, there are no specific mark ranges for each letter grade; instead, mark boundaries are moderated based on a curve such that a certain percentage of students in each class will receive each grade (Provost’s Office, 2012).

At NUS, a student can graduate with honours only if they apply to an honours programme. This is similar to the system in Australia. To graduate with honours, a student must apply for an honours programme, which comes in the form of an extra set of credits that a student must complete. To be eligible for an honours programme, a student must have a Cumulative Average Point (CAP), or GPA of 3.2 (National University of Singapore, 2014). In 2014, there was a lowering of the minimum CAP for a third year student to qualify for the Honours programme from 3.5 to the current 3.2. The revised programme also utilised the degree classification, used in Australia rather than the ones used in the UK, as shown below:

### Honours Degree Classification

<table>
<thead>
<tr>
<th>Past Honours Degree Classification (before 2014)</th>
<th>Revised Honours Degree Classification (after 2014)</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Class Honours</td>
<td>Honours (Highest Distinction)</td>
<td>CAP 4.50 and above</td>
</tr>
<tr>
<td>Second Class (Upper) Honours</td>
<td>Honours (Distinction)</td>
<td>CAP 4.00 – 4.49</td>
</tr>
<tr>
<td>Second Class (Lower) Honours</td>
<td>Honours (Merit)</td>
<td>CAP 3.50 – 3.99</td>
</tr>
<tr>
<td>Third Class Honours</td>
<td>Honours</td>
<td>CAP 3.00 – 3.49</td>
</tr>
<tr>
<td>Pass</td>
<td>Pass</td>
<td>CAP 2.00 – 2.99</td>
</tr>
</tbody>
</table>

(National University of Singapore, 2014)
On the other hand, the Singapore Management University uses a distinctly different system, adopting a four-point scale instead:

### Grading at Singapore Management University

<table>
<thead>
<tr>
<th>Grade</th>
<th>A+</th>
<th>A-</th>
<th>B+</th>
<th>B-</th>
<th>C+</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Point</td>
<td>4.3</td>
<td>4</td>
<td>3.7</td>
<td>3.3</td>
<td>3</td>
<td>2.7</td>
<td>2.3</td>
<td>2</td>
<td>1.7</td>
</tr>
</tbody>
</table>

| Mark Range (%) | > 86 | 83 - 85 | 80 - 82 | 77 - 79 | 74 - 76 | 70 - 69 | 66 - 63 | 60 - 62 | 53 - 59 | 50 - 52 | < 49 |

(Digital Senior, n.d.)

The honours system in SMU is more closer to that of the US, in that honours are awarded to students with higher GPAs. However, at SMU, it is based on a GPA range rather than a top percentage of students, as seen below:

### Honours at Singapore Management University

<table>
<thead>
<tr>
<th>Grade Point Average</th>
<th>Honours</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.8+/4.0</td>
<td>Summa Cum Laude (With Highest Distinction)</td>
</tr>
<tr>
<td>3.60 – 3.79 / 4.0</td>
<td>Magna Cum Laude (High Distinction)</td>
</tr>
<tr>
<td>3.40 – 3.59 / 4.0</td>
<td>Cum Laude (Distinction)</td>
</tr>
<tr>
<td>3.20 – 3.39 / 4.0</td>
<td>High Merit</td>
</tr>
<tr>
<td>3.00 – 3.19 / 4.0</td>
<td>Merit</td>
</tr>
</tbody>
</table>

(Singapore Management University, n.d.)

However, given that the above institutions use normative curve-based grading, the CAP or GPA cut-off essentially corresponds to various percentiles within classes.

In Singapore, honours graduates tend to receive remuneration for their stellar academic performance. For instance, in 2007, honours graduates experienced a 10% increase in their starting pay in the civil service, therefore earning more than their counterparts who did not receive honours (Kumar & Siddique, 2010).

Recently, various institutions have been trying to resist the traditional focus on grades in education in Singapore. In August 2014, NUS introduced a grade-free first semester for all first-years. The stated purposes of this was to help transition students into university life and encourage them to explore courses outside of their comfort zone (McMorran, Ragupathi, & Luo, 2015). NTU, SMU and NUS, alongside five polytechnics, have also expanded their admission of students on a non-academic basis (Teng & Yang, 2016).

### Works Cited

**Section on the USA**


Section on the UK


Section on Australia


Section on Singapore


Authentic Assessment and Constructing Knowledge

Decades of research on teaching and learning have provided documented evidence for increases in student learning through active learning pedagogies (Freeman, 2014; Deslauriers, 2011). Such forms of active learning enable students to construct knowledge from their own projects, in-class exercises, and discussions (Mazur, 1996; Bain, 2004). Some of the early works on learning science have pointed toward the need for a shift in paradigm away from a professor as an agent for delivering content, and instead toward a paradigm of teaching than can enable students to become active constructors of their knowledge (Barr and Tagg, 1995).

Methods for enabling knowledge construction in class include Constructive Alignment, where each class session has Intended Learning Outcomes that align with in-class activities (Biggs, 1996; Biggs and Tang, 2011), and Backward Course Design, in which Assessable Learning Outcomes are the primary element in course design, and determine the content and structure of a course (Handelsman, 2007). These techniques shift course design and delivery away from content and towards an emphasis on facilitating student learning.

Regardless of how teaching activities in class are structured, the most meaningful and lasting aspect of a course comes from its assessments. From the student’s view, the assessments dictate their studying strategies and determine the majority of their activities. Some quotes from educational literature summarise how profoundly assessments determine the nature of the student experience and define curriculum (from Glofcheski, 2016):

- “Students learn what they think they will be tested on” (Biggs and Tang, 2011)
- “What we can measure often becomes what is valued; therefore we should target our evaluation at what we want valued.” (Svinicki, 2004)
- “Students can survive bad teaching but they cannot survive bad assessments” (Boud, 1995)
- “If we wish to discover the truth about an educational system, we must look into its assessment procedures” (Rowntree, 1987)

These quotes provide a succinct summary of how integral good assessment design is for any curriculum or course, as these assessments will guide both the students as they experience the course, and the professors as they implement their course plans which respond to the learning objectives encoded in assessments. To make a course more meaningful for both students and professors, it is possible to create assignments that enable students to perform exercises and activities that align as closely as possible toward the same practices used by professors in their scholarly work (Anderson and Speck, 1998). This form of shifting projects away from tests that probe content knowledge and toward assessments that enable students to demonstrate skills and to create their own research is known as authentic assessment.

Elements of Authentic Assessment

An authentic assessment scheme include assessments that are challenging, assessments that produce a performance or product, that ensures transfer of knowledge to a real-world application, metacognition, feedback, and collaboration (Ashford-Rowe, et al, 2014). Authentic assessment crucially develops realistic exercises that reflect “the way the information or skills would be used in the ‘real world’” and exercises that require “judgment and innovation” in which students can “do the subject” and in which they can “demonstrate a wide range of skills that are related to a complex problem” with “feedback, practice, and second chances to solve the problem being addressed.” (Svincki, 2004).

The following six elements are typical of an “authentic” assessment (after Wiggins, 1998, and Lombardi, 2007):

1) **Focuses on problems that are realistic and relevant to "the real world."** The problem will make use of the abstract concepts, facts and formulae within a course but applies them directly toward a challenge faced within an academic community or in a social or political context.

2) **Requires students to exercise “judgment and innovation.”** The problem should not be solved by a single existing formula or technique but should require students to build their own solution that integrates multiple ideas, formulae and concepts toward an original solution.
3) **Mirrors professional practice in the discipline.** This requires one to design problems that require students to use the same techniques, equipment and methodologies practised by professional researchers or practitioners.

4) **Places students in situations and contexts as realistic as possible.** Students working on the problem should be interacting with community leaders, the public, or working in laboratories and field settings where the problem requires the students to overcome challenges and complexities.

5) **Requires students to bring together diverse skills and knowledge.** Collaboration should be necessary for the task to be completed, and leveraging the strengths and expertise within a diverse team should be part of the assignment. In some cases, problems will require consultation from multiple experts and diverse literature to enable students to develop an integrated knowledge of multiple fields. Such interdisciplinary work requires students to transcend disciplinary boundaries to solve a complex problem.

6) **Allows for feedback and multiple chances to solve a problem.** The problem should have multiple stages, and opportunities for diagnostic feedback and improvement. Multiple projects can enable students to improve and apply what they have learned from earlier exercises.

### Additional Elements within Authentic Assessment

One study of authentic assessment (Lombardi, 2007) highlights the importance of the social environment in which the students are working. Authentic assessment often requires students to incorporate diverse viewpoints from multiple stakeholders and team-members in their work. This can involve interviews with community members and outside experts, creating challenges for students and a need for additional reflection and discussion as part of the problem. Building structure into the a project or assignment that allows time for this reflection and “metacognition” is essential for increasing learning and helping students achieve success within the more complex and challenging environments found in authentic assessment (Ashford-Rowe, et al, 2014).

Reflection and metacognition can be facilitated by having students evaluate their own work, or by regular progress reports in both written and oral formats.

Another goal of an effective authentic assessment is to ensure that the students produce an outcome – a performance or product – that embodies their work (Ashford-Rowe, et al, 2014). This outcome can take many forms depending on the discipline, but should be designed to enable students to go beyond the abstract formulation of a solution. The students develop additional experience and knowledge from the process of implementation of a fully developed product – and can create a visible outcome that enables a demonstration of their learning.

### Examples of Authentic Assessment

Many articles within educational literature have provided examples of courses and assignments within courses that give “authentic” experiences to students (Svinicki 2004; Mueller, 2015; and Lombardi, 2007). It is also important to note that no course or assignment will follow all of the elements, but can run through a continuum of authenticity. An inauthentic assignment would be to “write a paper on laws” while a more authentic assignment would be to “write a persuasive essay on why a law should be changed” and an even more authentic assignment would be to “write a proposal to present to appropriate legislators to change a current law.” (from Svinicki, 2004). An assignment of a research paper can be made more authentic very simply by just shifting the purpose and audience for a research paper – by giving the paper an audience beyond the professor and a purpose beyond exposition of content knowledge. Likewise tests can be made more authentic by shifting the focus away from content and toward completion of a problem that may have multiple stages. An easy way to evaluate authenticity of a test is to note that a typical test “must be unknown in advance to ensure validity” while a more authentic test “is known as much as possible in advance” as it will require students to integrate their knowledge and apply it to a complex task (Wiggins, 1993).

Below are more examples of authentic assessments from the research literature:

- Research portfolios for a course on library science are developed by students to provide a full solution to problems with precise selection of databases, searching protocols, and technologies that were developed after interviewing experts (Snavely and Wright, 2003).
• Engineering students work with a university’s industrial partners to solve a design problem faced within their industry that the students present after interviews and extensive team meetings (Wellington, et al 2002).
• A law professor in Hong Kong has students report on actual tort cases from readings of current newspapers, and teams of students develop reports of potential tort cases from their own photographs of actual scenes within Hong Kong (Glofcheski, 2015).
• Students at UBC create realistic 3D reconstructions of the Athenian marketplace, using aerial photos, satellite images, maps, and other archaeological evidence (Lombardi, 2007).
• Students remotely operate scientific and engineering equipment for their assignment to take measurements from seismometers, meteorological instruments, and other devices (Lombardi, 2007).

**Tips for Designing Authentic Assessment**

In designing a course, it generally best to begin with your assessments – as this determines that your students will do and what they will learn in your course. Keep the intended learning outcomes of your course in mind – and design assessment activities that will produce those outcomes. Starting with a fresh perspective of “what should a graduate of this course be able to do?” and “what would a current practitioner of my field do in their work?” can help determine authentic assessments. Any student work that leverages your own research, contacts, and context will also make the assignments more meaningful for both the students and for you as a professor. Students will naturally be more engaged in an authentic learning environment, which can enhance everyone’s experience.

**Works Cited**

The Psychology of Grading IV

Kristi Lemm, Associate Professor of Social Science (2016 - 2017), Yale-NUS College; Senior Research Associate (2016 - 2017), Centre for Teaching & Learning
Introduction

Letter grades have been used in higher education for over two hundred years, with the first formal grade distinctions given in the United States in 1785 at Yale University, according to a note in Ezra Stiles' diary (Durm, 1993). Following the early introduction of grading systems at Cambridge, Yale, Harvard, and Mount Holyoke, letter- or point-based grading systems had become widely adopted at universities by the early 20th century.

However, not long after grading systems had become ubiquitous, educators began raising questions about the value of grades:

…few teachers stop to consider what the marking system under which they work really implies; that the variability in the marks given for the same subject is so great as frequently to work real injustice to the students; and that the marking system in most common use—the percentage system with 100 for a maximum and 60 or 70 as a “pass” mark—is in all probability not the best system. (I.E. Finkelstein, 1913)

In the final chapter of his monograph, Finkelstein (1913) ultimately recommended that instructors adopt a five-category system with a fairly rigid distribution — “grading on the curve” — to ensure similarity in grades across different instructors and different courses. In the years since, substantial research has been done on the effectiveness of grading in higher education as well as other educational levels. Efforts have been made to improve grading effectiveness, and a small number of institutions have moved to de-emphasise the importance of grades or eliminate them entirely. However, traditional letter- or point-based grading systems continue to be the norm at the vast majority of colleges and universities worldwide, despite numerous studies that have raised concerns about their usefulness. Many of these concerns are related to the what might be referred to as the “psychology of grading”, that is, the effects of traditional grading systems on students’ feelings and motivations and, ultimately, their performance and learning.

What are grades good for?

If almost every institution of higher learning, including Yale-NUS College, uses traditional grading, there must be some good reasons for doing so. And there are some good reasons, although these reasons tend to be more beneficial to the institutions that assign grades rather than to the students who receive them.

1. Grades allow comparisons among students
   • Grades are frequently used to rank students, to make decisions about honours, etc. However, the standards by which grades are determined are often unequal, which means grades can’t effectively be compared across different institutions, different majors, different classes, and different instructors (Bull, 2013).

2. Grades allow students to move forward through the educational system
   • Grades are used for admission to schools, awarding of scholarships, etc.
   • Grades are sometimes used to make employment decisions, particularly in Singapore, where grades are used to determine starting salaries of government jobs

3. Grades give an institution credibility
   • Students who attend institutions without grades (or who are home-schooled) are perceived to be at a disadvantage in gaining admission to college or graduate school, although there is in fact no evidence for this (Kohn, 2011).
   • Schools that do not assign grades are perceived as having lower academic rigor (Bull, 2013).

4. Grades motivate students
   • One important psychological benefit of grades is motivation. There is evidence that being graded can motivate students — but only to get a good grade. Students who are motivated to get good grades and who are competent to do so may succeed at that task. However, their motivation to score an A may not increase their motivation to learn. In fact, competing for a good grade may actually reduce students' motivation to achieve deep understanding, resulting in diminished learning.
How traditional grading systems undermine learning

Whereas the benefits of grading are mostly conferred on the ones who administer the grades, the costs of grading are mostly borne by the students. The mere act of being evaluated can lead to a variety of negative outcomes. Research on achievement goal theory (e.g., Dweck & Leggett, 1988; also described by Paul O’Keefe in the next section of this document) has identified two vastly different goal orientations that guide students’ motivations. Students with a mastery goal orientation focus on developing competence – they seek to learn and to improve their understanding. In contrast, students with a performance goal orientation focus on demonstrating competence – they seek to impress others with their abilities and accomplishments. These orientations differ from one individual to another, and they can be activated by the educational context. Classes that emphasise evaluation, particularly normative comparisons (i.e., grading on a curve) activate performance goal orientation. Focus on demonstrating performance rather than learning can lead to a variety of negative outcomes:

- Decreased intrinsic motivation and diminished interest in the subject matter (Harackiewicz, Manderlink, & Sansone, 1984)
- Reduced creativity and diminished quality of thinking (Amabile, 1983; Deci & Ryan, 1987)
- Students ask “is this going to be on the test” rather than “why is this important?”
- Reduced willingness to take on challenging tasks for fear of failure (Harter, 1978)
- Impaired conceptual learning and problem solving ability (Deci & Ryan, 1987)
- Increased anxiety (Deci, Ryan, & Williams, 1996)
- Lowered self-esteem (Crocker, 2002)
- Lowered performance (Deci et al., 1996; Grolnick & Ryan, 1987)
- Increased use of cramming, which tends to lead to short-term retention but not to long-term learning (Mazur, 2016)

In addition to the negative psychological effects of grades, there is evidence that grades lead to other, non-psychological outcomes as well:

- Greater cheating (Anderman & Murdock; 2007; Lang, 2013)
- Exacerbated race and class divisions (Harackiewicz et al., 2015)
- Conflicts with professors (Mazur, 2013)
- Inability to discriminate high-achieving students from other students, due in part to grade inflation (Bernsetein, 2015)

What can be done?

Given that the negative effects of traditional grading systems seem to outweigh the positive effects, it is important for instructors and institutions to ask what can and what should be done. Many suggestions have been made in this regard, ranging from simple interventions that can be done within a traditionally graded class to eliminating grades entirely.

1. De-emphasise the importance of grades
   - This is something that is happening at Yale-NUS and NUS. At Yale-NUS, grades are posted only as “Completed Satisfactorily” or “Completed Unsatisfactorily” in the first semester of classes, although students are given more detailed formative feedback about their performance. At NUS, students are allowed to change courses grades to S/U at the end of the term, after they have seen their letter grades, for up to eight courses in their first year. NUS Provost Tan Eng Chye reports that this has allowed students to explore topics outside their “academic comfort zone” and that it has not resulted in slacking. According to Tan, “The analysis suggests that student academic performance was not compromised, even though now students can ask for their grades to be omitted. NUS students were not complacent and continued to be academically engaged.” (Davie, 2016).

2. Eliminate letter grades entirely.
   - This has been done at a handful of institutions, which have replaced traditional grading systems with narrative evaluations.
3. Ensure that students understand how the work they produce is connected to the grades they receive.
   • If a student believes (justifiably or not) that grades are being given arbitrarily, without regard to the quality of their work, they will flounder (Rotter, 1966; Seligman, 1975).

4. Ensure that students believe they are competent to achieve the goals of the course
   • Expectation of incompetence is associated with low motivation to achieve (Abramson, Seligman & Teasdale, 1978).

5. Improve student performance through values-affirmation intervention
   • Judith Harackiewicz and her colleagues have demonstrated that intrinsic interest and performance can be promoted through “utility values” intervention. According to their model, students will be motivated to learn if they feel that they can be successful and if they perceive that the topic is important to them (Harackiewicz & Hulleman, 2010). Their research has shown that students’ perceived value of a school subject can be increased through a simple intervention, such as writing an essay about how a class topic applies to their own lives. The improvement in interest was most notable among students who initially had the lowest interest in the topic or who had the lowest performance in the course.

6. Focus on feedback rather than ranking, and on skills rather than content
   • As noted by Eric Mazur in his talk “Assessment: The Silent Killer of Learning”, grading produces a conflict for the instructor, who must simultaneously act as “coach”, promoting learning, and also as “judge”, promoting comparison. This conflict can be resolved by using external evaluators and by including peer- and self-assessment. Mazur notes that the only type of thinking that can be judged completely objectively is the lowest-level of thinking – memorization. To truly assess student understanding, he recommends using open-book exams that require problem-solving, not just rote memorization. Greater cheating (Anderman & Murdock; 2007; Lang, 2013).

6. Use Mastery Grading rather than Comparative Grading
   • Dan Bernstein argues that students should be assessed according to their achievement of course goals, rather than the speed with which they demonstrate proficiency. He notes that some students take longer than others to demonstrate proficiency in a subject. With most typical grading systems, students are assessed particular points in time. Those who demonstrate proficiency by the end of a grading period receive high grades; those who have not yet achieved proficiency look worse compared to their peers and thus receive low grades, even though they may have been making progress. If the slower students pass the class (say, with a C), they may be advanced to a subsequent class for which they are not fully prepared and likely to fall (Bernstein notes that an informal survey at his university showed that students who received a C in Calculus 1 had only a 20% chance of passing Calculus 2).
   • Bernstein argues that a better model is a Mastery Model, in which students are graded based on what they know, not how long it takes them to learn it. In this model, students are allowed to learn at their own pace, and to repeat examinations (with different versions of tests) until they can demonstrate that they fully grasp the material.
   • In his talk at Yale-NUS College, Bernstein noted that he once gave 80% of his Intro Psych students an A, because they had all successfully accomplished his course goals. He was accused of grade inflation, but he successfully convinced University administrators that his test questions were sufficiently difficult and the fact that 80% of his students had earned As was evidence that they had truly learned the material.
Works Cited

Achievement Goal Theory

Dr. Paul O’Keefe, Assistant Professor of Social Sciences, Yale-NUS College
Achievement Goal Theory


Achievement goal theory proposes two main goal orientations that influence individuals’ interpretations and reactions to achievement situations (Ames, 1992b; Dweck and Leggett, 1988; Kaplan and Maehr, 2007; Maehr and Nicholls, 1980; Maehr and Zusho, 2009). A mastery goal orientation refers to a focus on developing competence. With a performance goal orientation, the focus is on demonstrating competence. Goal orientations can be thought of as interpretative frameworks or schemas, which focus the individual’s attention towards the self or the task (Maehr, 2001). In this way, a performance goal orientation activates a focus on demonstrating competence, which is realised through impression management (showing others that you are smart) and outperforming others (normative strivings). In contrast, a mastery goal orientation activates a focus on developing competence through an emphasis on improvement, learning, and deepening understanding. Goal orientations include beliefs about the purposes for engaging in goals, how competence and standards are defined, and the meaning of success, ability, effort, and failure (Kaplan and Maehr, 2007; Maehr and Zusho, 2009; Pintrich, 2000a).

Performance goal orientations can have an approach or avoidance focus (Elliot, 1997, 1999; Middleton and Midgley, 1997; Pintrich, 2000a). People endorsing a performance-approach goal orientation are concerned with appearing competent, while those endorsing a performance-avoidance goal orientation are concerned with evading appearing incompetent.

Classroom Goal Structures

Researchers have long sought to understand how environments can be structured to most effectively elicit achievement motivation (Brophy, 2008). Most goal theorists have focused on the primary dimensions of TARGET, identified by Ames (1992a) and Epstein (1988), as key structures within a school or classroom. TARGET identifies six main areas that are thought to shape the endorsement of achievement goal orientations within a particular context. These include the nature of the Tasks in which students engage (e.g., the extent to which they are novel or challenging), the Authority in the classroom (e.g., the extent to which instructors provided autonomy support), how students are Rewarded (e.g., how instructors acknowledge and reinforce student achievements and their learning progress), how students are Grouped (e.g., organising students based on their similarities or differences), Evaluation and recognition practices (e.g., the standards, procedures, and methods used to ensure students are learning and progressing), and flexibility of Time (e.g., the pace of the instruction and assignments). In more recent work, the importance of considering the socio-emotional climate has also been noted (Patrick et al., 2001).

Using this framework as a guide, researchers have investigated how the presence (or absence) of these contextual qualities invoke or support particular goals or goal orientations as well as other academic outcomes (see Urdan, 2010 for a review). Much of the research on goal structures has emphasised how they shape key educational outcomes (e.g., Ames & Archer, 1988; Gutman, 2006; Karabenick, 2004; Ryan et al., 1998; Urdan et al., 1998). However, a number of studies also considered how the educational context shapes students’ goals and goal orientations. Although most of this work has been conducted from the goal orientation perspective, compelling evidence also comes from the goals as standards perspective. Church et al. (2001), for example, examined how students’ perceptions of particular characteristics of the classroom environment determined their goal adoption. Students endorsed mastery goals when the lectures were engaging and when an evaluation focus and harsh evaluation were absent. In contrast, performance-approach goals were adopted when students perceived the classroom to have an evaluation focus, while performance-avoidance goals resulted when students perceived a presence of evaluation focus and harsh evaluation (e.g., imposed grading curves).

There is also research suggesting that perceptions of the classroom goal structure and the goal orientations endorsed by socialisation agents (e.g., teachers and parents) shape personal goal orientation endorsement (e.g., Ciani et al., 2010; Friedel et al., 2007; Kaplan and Maehr, 1999; Midgley and Urdan, 2001; Murayama and Elliot, 2009; Roeser et al., 1996; Urdan, 2004; Wolters, 2004). Qualitative examinations of classroom goal structures have further clarified that there are clear variations in classroom goal structures that can be readily identified by both students...
in the classroom and outside observers (Patrick et al., 2001; Urdan, 2004).

Taken together, there is fairly strong empirical evidence to suggest that the perceived goal structure of the classroom is related to personal goal endorsement as well as achievement-related behaviour and beliefs, and that perceived mastery goal structures are generally more beneficial for achievement-related behaviours and beliefs than performance-goal structures (Urdan, 2010). Maehr and Midgley (Anderman et al., 1999; Maehr and Midgley, 1996; Midgley and Maehr, 1999) engaged in a 3-year intervention study working with both elementary and middle school administrators to shift the schools’ focus towards a mastery mindset. At the elementary level, there were no significant differences in students’ reports of the motivational environment—although this may be due to the use of self-report instruments with younger elementary school students. For middle school students, both performance-approach goal orientations and perceived classroom goal structures were lower in the intervention school; however, there were no differences in self-reported mastery goals. While not using an intervention framework, per se, Linnenbrink’s (2005) quasi-experimental study also provides evidence that the classroom goal structure shapes students’ goal endorsement as well as other academic-related outcomes such as help-seeking and achievement.

Yale-NUS should carefully consider the classroom goal structures it wishes cultivate, as they will have a significant impact on the goal orientations students adopt. Mastery goal structures promote individual improvement, persistence, intellectual risk-taking, and the development of competencies. Performance goal structures often promote less desirable outcomes, such as a pronounced focus on social comparison, the avoidance of help-seeking, and lower achievement, among others.

Works Cited


Appendix A: Existing Policies on Grading & Assessment

From Student Policies & Procedures

Grades and evaluation:
The skills gained through a liberal arts and science education are not the kind that can easily be evaluated by final examinations alone. Continuous assessment is the norm. The assessment is rigorous and demanding, but many-faceted. You will be given regular feedback on papers, projects, and other assignments during the semester. Oral as well as written expression is evaluated. The aim is for you to view your education not merely as the acquisition of facts, but also as the development of abilities, insights, and perspectives.

Assessment:
We also hope that you will come to think of assessment as a self-reflective and discursive exercise. You should be the owner of your own assessment and development – reflecting on your own progress and potential for improvement, incorporating external inputs from professors and classmates, and looking forward to what this integrated assessment should mean for you. Assessment should also be two-way, so we will be soliciting your reflections on your academic (and total) experience at Yale-NUS – not just immediate feedback on the mechanics of this or that course, but longer-term reflections on how you've seen the puzzle pieces fit together over time.

First semester evaluation:
During the first semester of the first year, you will receive comments and grades so that you develop a feel for the expectations of collegiate work, but the grades will not be recorded on your transcripts and do not factor into your Cumulative Average Point (CAP). Instead, a grade of Completion Satisfactory (CS) or Completion Unsatisfactory (CU) will be recorded on the transcript. None of the courses during that first semester will have final examinations. Instead, you will be challenged through a variety of assignments designed to evaluate the different sorts of skills and knowledge you are expected to learn during the semester.

Grade points:
Yale-NUS uses a 5.0-point scale: A = 5, B = 3.5, C = 2.0, D = 1, etc. A weighted average is taken of your individual course grades to calculate your Cumulative Average Point (CAP).

From the Yale-NUS Undergraduate Regulations

Assessment:

Modules within a Yale-NUS programme of study are designed such that students are assessed proportionately. This means first, that assessments correspond to the objectives the faculty has for a student's learning. Second, that time demands of assessment requirements are included as part of the overall time requirements of the module; note that such requirements are always notional but provide a reasonable guide in module design.

Modules are designed in consultation with colleagues and with the approval of the College’s Curriculum Committee. Faculty members are required to indicate the assessment tools and the breakdown/weighting of components in their proposal to the Curriculum Committee. Thereafter, faculty members are responsible for the details, such as grading criteria and standards expected. Faculty members use multiple methods of assessment within a module. There is typically much emphasis on continuous assessment and feedback. Thus, a final grade for a module will comprise the total of more than one instance of assessment. Faculty members are expected to inform students of assessment requirements in a syllabus issued at the start of the module. Students with concerns on their performance are expected to discuss their progress with the faculty member during the semester.

Grading:

The authority and responsibility for determining grades and reporting those grades to the Yale-NUS Registry belongs to the faculty member teaching the module. All grades assigned lie within the jurisdiction of the faculty member but will reflect normative standards of the College, and may be discussed with other faculty members when a module has multiple sections and/or is taught as a set of components by a team of faculty members.
Grade Points:
Yale-NUS College uses a 5.0 point scale:

<table>
<thead>
<tr>
<th>Grades</th>
<th>A+</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>D+</th>
<th>D</th>
<th>F</th>
</tr>
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<tbody>
<tr>
<td>Point</td>
<td>5.0</td>
<td>4.5</td>
<td>4.0</td>
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<td>3.0</td>
<td>2.5</td>
<td>2.0</td>
<td>1.5</td>
<td>1.0</td>
<td>0.0</td>
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</tbody>
</table>

The Cumulative Average Point (CAP) is the weighted average of the individual module grades, or the sum of the module grade points multiplied by the number of MCs for the corresponding module, divided by the total number of MCs. Module with no assigned MCs or grade points are excluded from the calculation of CAP. 'W' grades are excluded from the calculation of CAP. All MCs awarded on the basis of a letter grade and taken at Yale-NUS or NUS will contribute to a student's CAP.

Modules Completed without Letter Grade

Some modules are designed to be ungraded. On a student's transcript, these modules will show as 'Completed Satisfactorily' (CS) or 'Completed Unsatisfactorily' (CU). A CU grade is a failed grade. Ungraded courses (CS/CU) do not contribute to a student's CAP.

A student may elect to convert a letter grade to an ungraded (S or U) result on a restricted range and number of modules. Modules that a student elects to show as S/U on their transcript do not count towards the Major/Minor and are thus treated as electives outside the Major/Minor, even if originally taken within the Major/Minor requirements. Thus students will need to take an alternative module to fulfil the Major/Minor requirements. However, students should bear in mind to check if the module is a required or compulsory module according to the distribution requirements of the Major/Minor, before they proceed to opt for S/U for the module.

Incomplete grades (IC) are assigned when a student's work is incomplete for good reasons (e.g. illness). Confirmation of the reason for an IC grade will be provided by the student's Vice Rector in consultation with the module instructor to the Yale-NUS Registry in advance of the deadline for confirmation of grades. However no student may be awarded an IC grade if the work already completed for the module was clearly not of passing quality; instead an F grade will be assigned in such cases. A module assigned an IC grade cannot be used to fulfil the pre-requisite of a higher-level module. Should the student choose to repeat the module in the future, none of the work completed previously may be carried forward for assessment purposes.

Award of Grades

A grade, once reported to the Yale-NUS Registry, is final. The College permits the Yale-NUS Registry to change grades only when a clerical error is proven. If the faculty member believes that there are grounds for an exception to this policy, full explanation can be submitted to the Committee on Academic Standards (CAS).

The CAS will not receive petitions from students for a change in grade or for work to be re-evaluated (marked a second time). A student may, however, petition the CAS to check that all parts of an examination have been marked and/or that component assessments have been summated accurately in the final grade. These petitions must be submitted in writing through the Vice Rector to the Chair of the CAS by 5pm on the third day following publication of the grades to students in myISIS.
Appendix B: Latin Honours at Yale-NUS (28 Aug, 2017)

From Frequently Asked Questions (FAQs) on Latin Honours at Yale-NUS College

1. What is Latin Honours?

Latin Honours refers to the College’s system of recognising student cumulative academic achievement at graduation. The system was proposed by the College’s Teaching, Learning and Advising Committee (TLA) and has been endorsed by the Academic Committee (AC), the College’s Faculty, and the Yale-NUS Governing Board.

Yale-NUS students graduate with a Bachelor of Arts (Honours) or a Bachelor of Science (Honours) degree. In addition, the College will award Latin Honours (summa cum laude, magna cum laude and cum laude) to no more than 35 per cent of each graduating class. However, all of Yale-NUS students graduate with honours because they complete a Capstone.

For more information on the rules concerning Latin Honours, please refer to Section 10 of the Yale-NUS Undergraduate Regulations.

2. What are the levels of Latin Honours at Yale-NUS College?

The levels of Honours, including Latin Honours, are below:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>summa cum laude</td>
<td>To not more than the top 5 per cent of the graduating class.</td>
</tr>
<tr>
<td>magna cum laude</td>
<td>To not more than the next 10 per cent of the graduating class</td>
</tr>
<tr>
<td>cum laude</td>
<td>To not more than the next 20 per cent of the graduating class</td>
</tr>
</tbody>
</table>

- Latin Honours will go to no more than 35% of a graduating class.
- Graduating class is defined as graduates who entered the College at the same time, unless the student has been tagged by the College to a later cohort due to promotion rules or other official purposes.

3. Why did the College introduce an Honours system?

Yale-NUS College, similar to other institutions of higher education in Singapore and around the world, is committed to recognising the academic achievement and excellence of our students.

A system of Honours with distinct levels enables the College to offer this recognition. This will, in turn, improve the ability of our students to communicate the extent of their academic achievement and excellence to potential employers, graduate programmes and scholarship providers.

Latin Honours provides recognition for a specific kind of achievement, which is academic achievement in coursework across all four years, including the common curriculum, electives and majors. The College will implement other modes of recognition, such as prizes and awards, to highlight other academic and non-academic accomplishments by students.

4. Why did the College adopt ‘Latin’ Honours?

The College adopted the ‘Latin’ Honours terminology for several reasons:

Latin Honours enables the College to distinguish its Honours system from that of the NUS Honours system. The College uses a different method of determining the levels of Honours due to our unique curriculum, smaller cohort and grading practices. The Latin Honours will help the College and students to highlight such distinguishing factors to potential employers, graduate programmes and scholarship providers.

The College also wanted to use terminology that was established and widely recognised so it would carry the appropriate gravity. While Latin Honours may not be as widespread in Singapore, it is well-known in the international education arena, used by such leading institutions such as Yale University, Princeton University, Columbia University and some European institutions, and is recognised by employers worldwide.

In addition, the College’s common curriculum draws upon ancient cultures, languages, and traditions, which makes the use of Latin fitting for our context.
5. How will the College determine the levels of Latin Honours for recipients?

The Latin Honours are based on the Cumulative Average Point (CAP), which is the weighted average of individual course grades (or the sum of course grade points multiplied by the number of MCs for the corresponding course, divided by the total number of MCs).

The percentiles recommended by the TLA Committee for the three levels of Latin Honours (summa cum laude, magna cum laude and cum laude) are similar to those used by liberal arts and sciences colleges and universities in North America and other countries, and have been endorsed by the College's faculty, administration and Governing Board as appropriate, both in terms of representing the academic standards of the College, and recognising student achievement and excellence vis-à-vis external parties such as potential employers.

No more than 60 per cent or 6 of the students (whichever is larger) in any one major will receive honours at the cum laude level or above, and no more than 40 per cent or 4 of the students (whichever is larger) will receive honours at the magna cum laude level or above. In cases where the number of students might exceed these limits, only the top students down to the designated limits will receive the relevant honour.

For example, a student whose CAP is within the top 5 per cent of his/her graduating class and is among the top 40 per cent or 4 students (whichever is larger) in his/her major will be awarded Bachelor of Arts or Science (Honours) degree with summa cum laude.

The above is intended to recognise academic achievement not only with respect to the overall CAP, but also academic excellence within the major. This mechanism is also applied to help control for possible differences in grading across majors, and shifts in average CAP from one graduating class to another.

The College's Academic Committee is the authority for implementing the cut-offs for each class based on the data available at the time of graduation of the majority of the class. The same cut-offs will apply to students in any given class who graduates later because of participation in the double degree programme or other programmes or due to delays because of Leave of Absence (see FAQ 9).

6. Why is the College's Honours system based on the CAP?

The TLA Committee carefully considered a number of models for determining the levels of Honours. After much deliberation, the Committee found that a majority favoured the simplest option; a computation based on the overall Cumulative Average Point (CAP), which is the weighted average of the individual course grades or the sum of course grade points multiplied by the number of modular credits (MCs) for the corresponding course, divided by the total number of MCs.

A CAP-based Honours system conveys the breadth of students' academic achievement and experience at the College including the common curriculum, electives, capstones, and majors. It takes into account the assessment of diverse faculty since the CAP reflects the assessment of interdisciplinary faculty across the divisions. It is relatively constant compared to majors-based nominations that are dependent on the leadership of the majors, which may change periodically. This system is also an objective and transparent measure of academic performance.

It is important to note that initiatives are planned to separately recognise students by way of prizes and awards that are not solely CAP-based and will include appreciation of achievement in capstones and other student activities.

7. Why is the College's Honours system not based on a fixed CAP like NUS?

Yale-NUS College has grading practices that are different from NUS. The College, which has a much smaller cohort, does not provide a normative (curve-based) grading system and therefore the CAP received at Yale-NUS would not correspond to percentiles within courses. The College's CAP-based percentile honours system provides these percentiles at the end of the Yale-NUS education. This allows for a measure of performance that averages together performance across all graded courses completed by the student in order to recognise excellence across the entire four years of their education.

8. How will the Latin Honours be applied to DDP students and other students who will graduate one or more years later?

DDP Law students will be considered for Latin Honours along with the other Yale-NUS
students, and their CAP and placing in their intake Class will be computed in the same way.

The Liberal Arts B.A. (Hons) degree completed by DDP Law students will be considered as a 'major' for the purpose of the Latin Honours system, i.e., “No more than 60 percent or 6 of the students (whichever is larger) in any one major will receive honours at the cum laude level or above, and no more than 40 percent or 4 of the students (whichever is larger) will receive honours at the magna cum laude level or above. In cases where the number of students might exceed these limits, only the top students down to the designated limits will receive the relevant honour.”

This will also apply to other students who need to graduate later than the majority of their class (for example, due to Leave of Absence) unless they are tagged by the College to graduate with a later cohort due to promotion rules or other official reasons.

9. Will Latin Honours promote competition among students?

Academic competition among students is sometimes part and parcel of being a student at an institution of higher education. However, since a student would not know whether they would receive honours until the end of their Yale-NUS experience, we would hope that students would focus on learning and achievement in each class rather than divert valuable energy towards worrying about their percentile rank by cohort.

Since Latin Honours is reserved for the upper 35% of Yale-NUS graduates, it preserves the distinction for truly outstanding levels of performance. However, since all Yale-NUS graduates are considered Honours graduates due to Yale-NUS having a Capstone project and being part of a truly excellent academic community, not being a recipient of Latin Honours in no way undermines the intellectual commitment and curiosity that a student has demonstrated during their candidature at the College.

All qualified Yale-NUS students will graduate with a Bachelor of Arts (Honours) and Bachelor of Science (Honours), regardless of whether they receive Latin Honours.

10. How will the Latin Honours affect the employment prospects of students?

Yale-NUS College offers a four-year undergraduate honours programme. All qualified Yale-NUS students will graduate with an Honours degree.

Latin Honours is a distinctive recognition that enables outstanding students to communicate the extent of their academic achievement at the College to prospective employers, postgraduate institutions, and scholarship providers.

Notwithstanding Latin Honours, the College is very confident that students who perform reasonably well academically and in co-curricular activities, or who prepare for working life such as through internship or by engaging professional networks, will have successful careers. The College’s Centre for International and Professional Experience (CIPE) will provide all students with the preparation and assistance they need to seek employment and productive careers.

Many employers and graduate programmes are interested in students' CAP rather than the terminology or level of Honours in order to standardise their candidates' academic achievement.

Starting salaries are generally determined based on an individual's calibre (educational qualifications, skills, personal qualities and any prior work experience); the demands of the job; and the prevailing labour market.

Given the College’s selective intake, innovative curriculum and experiential learning opportunities, graduates of Yale-NUS will be strong contenders in the job market or for graduate programmes. The distinctiveness of our graduates and their achievements will be highlighted in the College’s ongoing outreach efforts.

11. When will the College apply the Latin Honours?

The Latin Honours will apply to the Class of 2017 and subsequent classes.

12. Will there be a review of the Honours system at Yale-NUS College?

The College will conduct a review three years after the inaugural graduation in 2017.

13. How can I seek more information or information specific to me?

Please contact your Vice Rector or Faculty Advisor for more information.
Appendix C: 2015 Report on Grading & Assessment

Section I. Best Practices in Formative Assessment

A. Definition of Formative Assessment

Formative assessment refers to situations in which students receive feedback on their work that is not directly related to the formal grades they receive. While formative assessment may or may not come with a grade, it is done to encourage and assess learning and progress throughout the course term. This contrasts with summative assessment, which is the holistic grade earned by students at the end of a course. There are a remarkably wide range of formative assessment opportunities – indeed, any interaction of any kind relating to academic and intellectual work might be considered formative assessment. Section A addresses the more organised aspects of formative assessment. Section B presents a taxonomy of formative assessment activities, including specific kinds of formative assessments, some potential options and related goals.

One key point that emerged from the discussion of the faculty workshop working group on formative assessment (hereafter referred to as "the faculty working group" in this section) was that faculty members should be cognizant of the full range of formative assessment and should consider using multiple forms of this practice. Two reasons for doing so exist. First, different students learn more (or less) from different kinds of feedback. The Yale-NUS College student body is a highly diverse student population so it behooves the faculty to consider a wide range of assessment styles that take into account the varied learning needs of the students. Second, different kinds of formative assessment serve different purposes, which may be useful for some courses but not others, or at different points within the same course. Having the full range of possibilities in mind allows faculty members to select the most appropriate formative assessment procedures.

B. A Taxonomy of Formative Assessment

The following are seven properties of formative assessment procedures. Any type might include some properties of more than one kind of assessment. Examples are presented here and will be discussed at greater length in the next section.

1. Symmetric vs asymmetric assessment
This refers to the relative status of the assessor and the assessed. Interactions between the instructor and students are necessarily asymmetric. However, there are also a range of peer assessment and tutoring options. These will be discussed below.

2. Public vs private assessment
This refers to whether or not feedback is delivered to an individual student or made public. There are assessment practices that take place more openly – in the classroom, on-line, or in group settings. The advantage of public assessment is that all students being assessed potentially benefit from hearing feedback about their peers. At the same time, there are obvious issues related to confidentiality and privacy.

3. Binary vs collective assessment
This relates to the second property but is not identical to the issue of public vs private assessment. Instead, binary assessment refers to discussions of a single student's work – collective assessment may either be an evaluation of group work, or discussions of class performance or academic issues conducted with several students at once (e.g. at public office hours).

4. Anonymous vs non-anonymous assessment
An interesting feature of formative assessment is its ability to evaluate a student's work without knowing the identity of the student who produced it (this can also be done with summative assessment, but it requires an elaborate system of blind evaluations as ultimately the assessment must be connected back to the student). This seems particularly appropriate in settings where students can ask questions or present ideas in anonymous ways – for complete work products it becomes increasingly less efficient to assess anonymously.

5. Internal vs external assessment
External assessment refers to evaluation of work by people not directly associated with the course in which the work is produced. This could be through tutoring, or through entities such as the Writers' Centre.
6. Student initiated vs faculty initiated assessment

Faculty members can create moments for formative assessment as part of the structure of their courses. However, unlike summative assessment, students can also initiate a formative assessment process simply by asking the instructor about their work. The latter kind of interaction is generally encouraged by faculty, but the norms and procedures deserve more careful consideration than usually received – there is a danger that such interaction will degenerate into mere “grade grubbing”. Furthermore, students with different personalities or approaches might receive sharply different levels of attention.

7. Incentivised formative assessment

It is common practice to “require” certain kinds of formative assessments (e.g. a consultation with the faculty member, submission of drafts, reading responses, peer evaluation, etc.). How are such requirements to be mandated, and what are the penalties for not doing so? Often students accumulate some points toward their final grades by performing these activities. What makes these parts of the grade “formative” is that they do not depend on the quality of the work or activity, merely on the fact that the parts have been completed. Faculty workshop participants noted that there is a limit to the number or percentage of points that should be available in this way, otherwise perverse results might be obtained in which students with greater achievement due to having missed one or more “participation” points are awarded lower grades than those who have learned less. This is particularly true when participation points are awarded on an either-or basis – that means the grade for this activity is either 100% or zero, which has the effect of weighting the activity higher than activities where there is a range. The experience of the faculty workshop participants seemed to indicate that this limit is reached at about 20-30% of the total grade.

C. Modes of Formative Assessment

1. Office hours

Perhaps the most common mode of formative assessment is discussion in office hours. The standard definition of office hours is they are simply a designated time at which the instructor is known to be available to students in his or her office. A variety of conversations take place during office hours for the following reasons:

- **Absence from class** - Students who missed class and want to know what happened might attend office hours. It is recommended that instructors have a specific policy on what kind of assistance students are entitled to if they miss class – this allows the instructor to invoke the policy when needed, and to be fair to all students in this situation. Absence from class:

  - Students who missed class and want to know what happened might attend office hours. It is recommended that instructors have a specific policy on what kind of assistance students are entitled to if they miss class – this allows the instructor to invoke the policy when needed, and to be fair to all students in this situation.

- **Specific questions on course material** - This is rarer than one might expect, and seems to be more commonly and easily dealt with by email.

- **Poor performance in a course** - Students who are performing poorly in a course will often attend office hours with the goal of obtaining an explanation for low grades and at other times to appeal grades for better marks. Still other times, such students attend to work through general or specific areas of weakness. For younger students in particular, it is often useful to probe and critique the study habits of the students, as this is sometimes the impediment to better performance, rather than any specific lack of understanding of the material.

- **Deeper engagement with course material** - Occasionally, students will attend office ours to engage in deeper conversations about the subject matter, scholarship, and life in general. Some experienced faculty who have come to Yale-NUS after teaching elsewhere find that the amount of “pastoral care” required in office hours is somewhat less here than elsewhere, because of the unusually strong and deep student advising through faculty advisors, Rectors, Vice Rectors, and others in the Dean of Students and CIPE offices. This allows faculty members more time to engage in academic conversations, and helps faculty from becoming too deeply involved in students’ personal difficulties, freeing faculty members’ time up for other purposes. While some members of the faculty working group derive great satisfaction from helping students through their life problems, others recommend taking advantage of the existence of the unusually strong student support network as a way for faculty to pursue other faculty obligations at the College.
• **Substitution for or supplement of class participation:** In some cases, students who find it difficult to participate in class discussions go to office hours to engage with the material and demonstrate their knowledge and enthusiasm in ways that their classmates do in the class itself. This can be very useful for younger students unused to and uncomfortable with classroom discussions. It also provides an opportunity for instructors to offer feedback on how discussions should occur in the class itself, and find ways to help students participate. Other students might want to further bolster their course participation through attending office hours.

Faculty workshop participants felt that real consideration about the nature and purpose of office hours was warranted, since it is a mandated exercise for faculty members that does not always seem to benefit the students as much as one might hope. For example, instructors using the standard approach find that there are significant numbers of students who attend immediately before and after major assignments are due or exams are scheduled, but a much lower number of students attending office hours at other times. However, the working group discussion uncovered a wide range of other tactics used by faculty members in office hours with a variety of related goals. Some of these include:

• **Required student sign-up:** Some faculty members have a signup sheet – either physical or online – so that students can reserve time for a conversation. This has the advantage of avoiding the awkward pile-up of waiting students in the hallways, but has the disadvantage of discouraging spontaneous visits.

• **Public office hours:** Several instructors have public office hours that take place outside of the office, e.g. at Starbucks. This changes office hours from a private, binary conversation to a public, collective activity. Those who have tried this find that it strongly encourages attendance and informal conversation, but makes careful and nuanced discussion of the work of a particular student more difficult. Sometimes office meetings are scheduled at “Starbucks hours” when more in-depth discussion is warranted.

• **Mandatory meetings:** Some instructors require that their students meet individually with them early in the semester. This is found to increase attendance later on, presumably because the (psychological) barriers are reduced once a student has been to a faculty member’s office at least once.

• **Required brief meetings:** Some instructors have had success in scheduling short, 10-minute conversations with each student either shortly before a paper is due, or immediately afterwards. The tight schedule impels a clear focus on one or a few specific issues. Instructors find this to be helpful, in that a comprehensive critique is hard for students to assimilate, and can overwhelm them, whereas a discussion of a few key points can sometimes be more helpful than a longer conversation. Thus this tactic not only enables instructors to interact with all the students in a seminar class at key moments during the semester, it can also provide better feedback. When employing this tactic, it is important to make sure the students understand that not every issue with their work can be addressed.

2. **Peer review**

One interesting form of formative assessment is peer review, a practice in which students critique each other’s work. Often students provide each other with mock grades, but these grades seldom count directly toward the course grades. In some cases, peer review is used largely to provide formative feedback when there are simply too many students for the instructor to do so alone. This usually does not apply in the Yale-NUS context give the small class sizes but there are still sound pedagogical reasons to use peer review. Many Yale-NUS faculty working group participants tried peer review in some form with mixed, as well as quite promising, results.

Some members of the faculty working group suggested that the best use of peer review is to educate the reviewer, rather than the reviewed. By applying an appropriate rubric to another student’s work, students achieve a perspective concerning rigorous thinking and excellent work that is sometimes difficult to obtain when the students consider their own work. This might be explicitly pointed out to students by focusing students on the quality of the review they are doing as well as on the feedback they receive. In this way, student learning is greatly increased and students recognise the value of such an exercise.

There are several advantages of peer review. First, it requires collaboration, teamwork and cooperation, essential workplace skills. In addition to developing these skills, students who have experience in evaluating work as well as in being evaluated in a collaborative way will be much better off in internships and full-time work.
Another positive element of peer review is that it can be used for non-written work, such as peer feedback on participation in discussion-based seminars or with student presentations.

Another key element of peer review that can be helpful is to expand it from a one-on-one binary exercise to a group exercise. In this mode, a student’s work is discussed by the whole group. This is a mode often employed in writing workshops. It is important in this context to guard against the devastation that can come from overly harsh or personalised critiques – but in the experience of those who have tried it here at Yale-NUS, our students are frank, but very polite, and thus the extremes of the potential difficulties can be avoided. However, monitoring of the discussion by the instructor, particularly if the discussion is online rather than in person, is key to maintaining a constructive approach. If the atmosphere is supportive, such group discussions can be particularly useful in helping students differentiate between stronger and weaker work.

Sometimes peer review fails. In the experience of the faculty working Group, this tends to occur when students lack understanding of what good work entails. This can be avoided by providing an explicit rubric for the students to work with, but even then sometimes students have difficulties identifying the rubric elements in the work they are critiquing. Furthermore, peer review is more likely to be problematic when the format and goals of the work are very new to the students, or when there is technical material that needs to be assimilated before good work can be accomplished. In such cases a more direct instructional mode may be appropriate. When employing this tactic, it is important to make sure the students understand that not every issue with their work can be addressed.

3. Reading responses and submitted questions

A common practice in text-based courses is to require students to submit some kind of reading response. The primary use of this practice is to ensure that the students do the reading, and think about it before class. It also enables instructors to find out what kinds of issues and questions the students are interested in pursuing. Sometimes there is a prompt for the responses; however, more often they are free form. In some cases, students are encouraged to respond to each other on an online forum. Other times, only a few students are required to respond to any particular assignment. In general, some kind of participation points are awarded so that students fulfill the requirement.

While assessment may not be the primary goal of these assignments, instructors can make good use of these exercises for formative assessments of both writing skills and understanding of content. This is more commonly done when there are limited numbers of students responding at any one time, but it could also be done when all students respond by selecting particular students and moments that seem most productive. Furthermore, this can be done either publicly or privately, in a binary or a collective manner. Indeed, the nature of the feedback can vary depending on the message that is to be conveyed.

A variant on reading responses is to require students to pose questions. This can also be done in courses that are not primarily text-based. Some technique is generally required to make this successful – simply pausing in a lecture or seminar and asking, “Are there any questions?”, is generally not effective, as it requires students to frame a question and put themselves forward in front of their peers as potentially ignorant.

Some workshop participants report considerable success in asking students to submit a question at the end of each lecture or class, particularly in courses with technical and scientific content. Such questions serve several purposes. First, they function as a kind of attendance check, as students get a small amount of credit for each class they submit a question. Second, they provide the instructor with immediate feedback about what difficulties the students are facing. A few questions can be selected for explicit response either at the next class or online. Third, students who are thinking about what question they might ask at the end of class, are preparing themselves mentally for actually assimilating the material during class. Finally, requiring questions is also a useful tactic when dealing with student presentations, as it ensures that the “audience” or students remain attentive and receptive to learning while their classmates present.

4. Blogs and other public forums

An increasingly common practice is to create class blogs or forums for students to discuss the course. In some cases, blogs/forums build on reading responses,
which are used as initial posts. A variety of other approaches to what the posts should address or attempt to accomplish are possible. Interestingly, this approach is often unpopular with the students. Faculty tend to assume that students will positively respond to any form of social media used in classes, since they are generally highly engaged with such platforms in their daily lives. However, this is not always the case.

The key to making blogs or other social media work in a course is the instructor closely following posts on a regular basis (that is, as often as the posts appear). In particular, the instructor must be seen by the students to be paying attention. That requires effort on the part of instructors, either by posting their own comments or blog posts regularly, or by providing formative feedback in some other way.

5. Reading drafts, unrecorded or low-weight grading

Our faculty have a wide range of practices concerning reading and commenting on drafts of papers. Some do not read drafts at all, but rather make themselves available for discussion prior to the submission of written work. Others read and comment extensively, to the point of line editing early drafts. This latter approach obviously takes a great deal of time and effort, and results in strong, final papers. However, these papers are not wholly the student’s own work, and arguably should be graded at a different standard, given the extensive commentary that they have already received.

In most situations one could consider the pros and cons of each of these approaches on a case-by-case and course-by-course basis, taking into account the goals and enthusiasms of the individual faculty members involved. However, this is greatly complicated by the common curriculum. Students who do not have extensive faculty feedback on drafts might produce work of a lower standard, and they feel deprived, both with respect to the grade they ultimately receive, and in terms of the attention (or lack thereof) they have received. Sometimes there is a problem when not all students are aware of the level of assistance that is available. One of the easiest ways to have discrepant levels of support for different students is to comment extensively on drafts of those students who submit drafts for review (versus those who do not submit drafts).

Consequently, it is strongly recommended that faculty members state clearly in the syllabus the level of help students can expect in this regard, as it will enable more timid students to ask for assistance with confidence, and prevent bolder students from trying to extract more than the faculty member is willing to or should provide. It should be noted that some faculty, particularly junior faculty, feel uncomfortable when faculty colleagues take an expansive attitude towards giving feedback on drafts, as adopting similar standards might endanger their research careers. Also, the opposite danger exists: potentially endangering their teaching career by not doing so. Thus faculty members teaching common curriculum courses may have to come to some consensus on these matters versus in major or elective courses.

One potentially useful practice is to have an early assignment that is graded, but with very low weight. This practice is intermediate between summative and formative assessment. The goal of a formal mark is to ensure that the assignment is taken seriously, rather than to contribute to a summative assessment. In this way, professors can award a few points for carrying out tasks such as reading responses. By doing this early in the semester, the instructor has an opportunity to set standards and identify the particular difficulties that individual students and the class as a whole are experiencing. Furthermore, this practice works particularly well when paired with the “10-minute office hour” approach noted above.

When adopting this approach, two actions are recommended. First, it is of little use if the grading is not done quickly, so rapid turnaround well before the next assignment is due is key. Second, the marks given should be on the low side; this encourages students to work hard and provides clear rewards when students do so without jeopardizing their final grades. It should be noted that this practice works equally well with mid-term exams and other repeat exercises (i.e., papers).

6. Tutoring

One key formative assessment is provided by instructors who are not formally part of the course teaching team. Such tutoring can be done one-on-one or in groups. Ordinarily, it is up to the students to request such help, although sometimes an instructor will refer a student to appropriate resources such as the Writers’ Center, the Library staff, or other tutors. The advantage of this approach is that students who have a level of achievement at the ends of the distribution of the class (either
below or above the main distribution) can be given appropriate instruction without overburdening the course instructor. This seems a particularly important aspect of tutoring for our common curriculum courses. However, such tutoring works best when the issues experienced by a student are general rather than specific to the course content, since outside tutors cannot be expected to be conversant in the nuances of each course, unless tutors are specifically assigned to and trained in the course itself.

Peer tutoring is also a tool that can be deployed when proper training is provided to student tutors. Student tutors benefit from training in how to provide instruction on learning, rather than to simply provide answers. In particular, it is good for tutors to pay close attention to coaching the students without doing the work for them. One strong argument for setting up college-sponsored, peer tutoring programs is that it would enable such training to be mandatory for the peer tutors and to ensure a quality and consistency of training that would help protect our students against issues of academic integrity.

II. Best Practices in Summative Assessment

A. Definition of Summative Assessment

For the purposes of this document, the key difference between formative and summative assessment is that while all assessment might be formative (contributing to student learning), summative assessment is the culmination of graded assignments throughout the semester that results in one final grade for individual students and is recorded on a student’s transcript. At the end of each semester, instructors assign students a letter grade (A-F) that corresponds to a Cumulative Average Point (CAP) ranging from 0.0 to 5.0.

Furthermore, summative assessment is what appears on transcripts sent to employers, graduate programmes, and fellowship programmes. Consequently, when faculty members develop priorities and design a procedure for summative assessment, they are determining how to evaluate students; how to aggregate multiple assessments into a single final course grade; and how to make choices about reporting students’ learning experiences to them and to external parties.

The goal of summative assessment is primarily to evaluate student learning, as opposed to formative assessment, which aims to monitor and improve student learning during the semester. Summative assessment aligns with the intended learning goals for a course, in that a student’s final evaluation reflects his/her competency in the course material. Generally, summative assessment happens after learning and formative assessment have already taken place; students have received feedback and completed reading and class discussions, and are now being assessed on their understanding of the subject matter and their abilities to communicate it. While formative assessment could be said to be process-oriented, summative assessment is largely project-oriented, focusing on a final product that is produced for evaluation and ultimately, a grade.

Thus, establishing clear and complete expectations for assignments is imperative, since summative assessment results in a tangible and external evaluation grade. Well-designed summative assessments allow students to demonstrate a wide range of knowledge and skills instead of requiring knowledge or skill sets that are too narrow or incomplete. Summative assessments are produced for a professor’s evaluation, rather than alongside the professor, as in formative assessment. Section A presents a taxonomy of summative assessment. Section B addresses specific summative assessment methods.

B. A Taxonomy of Summative Assessment

The following are five principles of summative assessment:

1. **Methods of summative assessment reflect learning goals.** The components and weighting of these components that make up summative assessment derive from and reflect student accomplishment of learning goals and their importance. For instance, if verbal communication skill is a significant learning goal then it might be make up 40% of in-class verbal participation for the final grade. Likewise, if developing writing skills is a central learning goal for the course, then a professor provides formative assessments throughout the course for students to practise their writing before summative assessments. When designing formal summative assessments, a professor might work backwards from a set of learning goals in order to formulate an assessment assignment, as opposed to creating an assignment and attempting to describe the learning goals after formulating an...
assessment assignment, as opposed to creating an assignment and attempting to describe the learning goals after formulation. Learning goals can be considered the intent of each summative assessment; learning goals are the alignment of professors’ expectations and student work.

2. Methods of summative assessment incentivise and reward effort and improvement across the semester. Incentivizing effort for students yields deeper learning. When improvement is rewarded in ways built into the structure of summative assessment, it gives students who perform well in the beginning of the course incentive to keep investing/making an effort and motivates student who have not done well initially to invest more effort. When summative assessment is too high-stakes or when an overall summative assessment comes without formative assessments throughout the semester, professors risk losing buy-in from students in the learning process. Furthermore, if summative assessments are weighed too heavily in the final grade, students will lose interest in developing long-standing learning practices and will instead become results-focused instead of process-oriented.

3. Methods of summative assessment reduce the probability of debilitating anxiety among students while also maintaining academic rigor. This can be accomplished through careful weighting of components with other continuous assessment methods. This goal might be achieved by giving students different mechanisms for demonstrating these different forms of learning, e.g. presentations, discussions, essays, problem sets/discrete answers, individual versus collaborative projects, and closed versus open-book projects. The effectiveness of this strategy depends on how broad the learning goals are for the course. Students learn and produce work differently; a student who excels on a written examination may not excel at in-class presentation and vice versa. Summative assessments can offer ample room for students to demonstrate knowledge and skills that play to their strengths.

4. Summative assessment allows excellence to be identified and recognised among Yale-NUS colleagues and outside audiences. Summative assessment techniques allow honours review committees, graduate school admissions committees, and potential employers to identify excellent candidates through differentiation. Summative assessment can be viewed as a meaningful indication of how well a student has mastered the course material and how well he or she can communicate that mastery. This principle also dictates that the standard of grading must be recognised in reference to a common measure: that is, that a grade is only meaningful in context. The “common measure” can range from a systemic method of grading (e.g. a rubric), to a clear set of expectations laid out for each assignment.

5. Summative assessment is based on clear, consistent, fair and reasoned expectations. While formative assessment can be scaled according to the setting and circumstances, summative assessment often consists of a project- or product-based grade. Where formative assessment methods can vary based on each student's learning style and needs, summative assessment requires a baseline of consistency since each student will submit completed assignments based on the same assignment information. Thus, professors ideally design fair assessments with clear expectations; summative assessments are only effective if both professors and students clearly understand the expected work product or outcome.

C. Modes of Summative Assessment

The following are eight modes of summative assessment procedures. Although not an exhaustive list, it encompasses the most common modes of summative assessment and describes the benefits and drawbacks of each.

1. Examinations

Examinations are one of the most obvious modes of formal summative assessments. On the whole, formal assessments can be perceived to be “fairer”, since a common standard is present. If the assessment has multiple choice questions, for instance, each student has an equal and fair chance of objectively scoring well. Examinations are also a relatively quick and straightforward method of determining knowledge of material. There are a variety of exam types, including essays, multiple choice, oral presentations, and short answer questions.

However, examinations are often high-stakes and can cause stressful situations in which students perform poorly/worse or in a manner that does not truly reflect their mastery of the material. In addition, examinations are given at one point in time and for a set amount of time, which often results in students cramming beforehand and retaining a superficial understanding of the material. Furthermore, frequent examinations can inherently communicate to students that deep grasp of material is
unnecessary as long as they focus on the test material.

A final exam is a true summative assessment, a concise and convenient method of assessment at the end of a course. Professors can use study guides, thus guiding students’ learning and effectively communicating expectations of knowledge of the course material. Final exams in conjunction with formative assessments throughout the semester may offer insight into the effectiveness of the course.

As with examinations, high-stakes testing can have unintended or negative consequences, such as students demanding study guides or a more focused study path to take when preparing for the exam, thus focusing on a product or outcome instead of learning. Final examinations are also high-stake assessments, and students’ preparedness for a final test in a course can vary dramatically based on other final exam/paper schedules during the same time. Similarly, since final exams are also limited in length and setting, unexpected illness or stress may cause an inaccurate assessment. Furthermore, final examinations play to individual students’ strengths as “test-takers” and students who may not cope well with stress can perform poorly despite mastery of the material. Finally, final exams are solely summative assessments, eliminating the flexible nature of formative assessments.

3. Term papers

With term papers, students are asked to produce a formal piece of writing reflecting learning goals and course materials. There are essentially two types of term papers: product-driven papers, in which students are asked to demonstrate knowledge that was taught within a course, and process-driven papers, in which students are asked to research external material in order to evaluate a student’s competency in certain academic skills. Assignment questions can be open-ended, offering a degree of freedom and autonomy to students to present their complete knowledge and skills for assessment.

Term papers offer students an opportunity to use a variety of skills, thus giving professors better capability to evaluate a student’s development over the semester. With a product-driven paper, students may take a variety of approaches in answering the same question. With a process-driven paper, students go beyond course material in order to demonstrate their skill sets. Term papers with vaguely worded questions, or an assignment that asks students to perform external research on topics that were not specifically taught in class, may cause consternation among students. Students may object to being graded on material that was not explicitly presented in class and perceive the assignment to be unfair. It is, therefore, essential to explicitly communicate the skills that a professor is looking to examine and evaluate. In addition, providing formative assessment on drafts will allow professors to refine their expectations.

4. Projects

As with term papers, projects can either be product-driven or process-driven, depending upon a course’s learning goals. A project often means a student-designed product/process, which allows students freedom to develop proposals and showcase or demonstrate their strengths. Coupled with effective formative assessment, a self-driven project can be a good mode of summative assessment. In contrast to a comparatively formal final exam, projects can offer professors more insight into a student’s grasp of knowledge and capabilities, if not course material.

5. Portfolios

A portfolio is a compilation of student work assembled in order to evaluate a student’s quality of work as it developed over the course of a semester. A portfolio is often an archive of work products from throughout the semester and can be formatively assessed throughout the semester. Professors could have students review and revise previously summatively or formatively-assessed work for the semester and offer a new summative grade based on improvements made. Student portfolios arguably allow for a richer and more accurate picture of a student’s development in the course over time, as opposed to final examinations which examine only a student’s knowledge at one specific point in time.

Portfolios can come in a variety of forms depending on the course. Writing portfolios can include formative and summative assessments from the semester – old writing assignments, along with blog posts, journal entries, lab reports, or other projects. However, portfolios contain a large volume of information and may only be useful as an accurate gauge of a student’s development if professors have time to sift through all of the material for each student. In general, portfolios offer a concise look at
a student's development of skills and acquisition of knowledge during the course.

6. Performances

Performances can be final exams for classes such as music, dance, or other skills-based classes; performance can also encompass a presentation in front of a class. Performances are a combination of process- and product- orientation, making them an effective evaluation of skills-based course learning goals. Performances almost always are coupled with formative assessment throughout the course; students can also be evaluated on development and improvement throughout the semester.

IV. Application of Rubrics in Assessment

A. Definition of a Rubric

A rubric is an explicit representation of the evaluative criteria being used in assessment for a particular assignment. It lays out the expectations for any piece of student-produced work by dividing an assignment into component parts with clear descriptions of each part, which are then scored at varying levels of competency or completion. Rubrics are typically used for evaluation of assignments, to ensure that grading is consistent, and to align assignments with mastery of learning goals. Rubrics are used to define academic expectations and can be useful with consistency in grading, especially in courses in which more than one person is completing the assessments. Furthermore, they can be used for a wide variety of assignments, including papers, projects, presentations, portfolios and/or performances; they can also be used as formative or summative assessments. Rubrics also become advantageous in cases where it is impractical for professors to grade ‘blind’ (i.e. where professors will know the identity of the student being assessed) as a way to combat unintended biases related to gender, ethnicity, race, prior interactions, etc.

Rubrics can be used ‘behind the scenes’ by professors to arrive at a grade as well as shared with students to explain how that grade was calculated. Rubrics can, but need not be, shared with students. Rubrics can also, but need not be, shared with students in advance of the assignment being submitted in order to clarify the learning goals and expectations. They provide convenient points of reference for students while assignments are being completed, and can also act as a “goal” for an assignment as well as the rationale. For example, if a rubric contains scoring criteria for both quality of writing and content, students will understand explicitly that both are being evaluated in the grading process. With rubrics, students can also self-evaluate as they complete work, or ask peers to review their work before they submit their assignments.

As mentioned, a rubric can also be used to articulate clear goals and assessments between teaching colleagues sharing responsibility for evaluations. The existence of a rubric for common assignments across teaching sections can disseminate explicit, guided standards of learning goals across a course. Rubrics can be used as a standardization tool for grading in order to improve consistency; if developed jointly by a group or team of professors, each member could share his or her perceptions of the overarching learning goals and help to define them.

A holistic rubric does not have separate levels of performance for each criterion. Instead it usually consists of an assessment of multiple criteria to determine a single level of performance for the assignment as a whole. For example, a holistic rubric for a blog post might look like the following:

<table>
<thead>
<tr>
<th>3 – Excellent</th>
<th>2 - Good</th>
<th>1 - Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Includes at least two external sources</td>
<td>• Includes at least one external source</td>
<td>• Includes no external sources</td>
</tr>
<tr>
<td>• Effectively analyses content</td>
<td>• Summarises content but with limited analysis</td>
<td>• Provides only a limited summary of content and no analysis</td>
</tr>
<tr>
<td>• Correctly cites sources</td>
<td>• Correctly cites sources</td>
<td>• Poorly cited sources</td>
</tr>
</tbody>
</table>

Holistic rubrics are useful for quick and simple judgments about assignments, usually minor ones. They are useful for evaluating journal entries or blog posts, or other short assignments. Holistic rubrics tend to be relatively intuitive and efficient to score, and offer an effective snapshot of a student's overall achievement. Holistic rubrics are also useful as formative assessments to determine a student's
participation in class or overall performance. However, they are difficult to use for complex assignments because students could inconsistently fulfill various criteria of each level of the assessment. Holistic rubrics also do not allow for specific student feedback when offered without further assessment or comment; students do not receive more targeted feedback on which criteria they need to improve.

C. Advantages of Rubrics

1. Rubrics offer explicit clarity to both instructors and students about learning goals.

A rubric ideally evaluates a student's level of knowledge and various skills demonstrated by the student when doing the assignment based on their importance. Furthermore, with a rubric, students can, with a single glance, determine the learning goal(s) of the assignment. That said, it may not be as clear with generic rubrics for all types of projects.

In developing rubrics, professors determine for themselves the learning objectives for each assignment by writing the criteria and weighing them accordingly. If external research is heavily weighted for instance, students can safely infer that developing external research skills are a major goal for the assignment. A rubric therefore shows the measurement of attainment of the learning goals in different levels in relation to the module.

2. Rubrics offer consistency in grading within and between classes.

Grading based on an explicit and descriptive set of criterion with weighted importance of each objective guarantees that instructors grade on the same standards over time and can offer a safeguard against fatigue or comparison grading. Professors grading the same assignment across a number of sections can ensure that they are grading with the same consistent set of standards, rather than different or differing standards. This is especially important when multiple professors are grading the same assignment. Rubrics also help faculty avoid issuing grades based on unintentional or unconscious biases pertaining to race, ethnicity, gender, personality of students, forms of bias which research shows can often influence grading.

3. Rubrics enable effective feedback between professors and students.

If rubrics offer detailed levels of performance and are shared with students when they receive assignments, students can see a professor's immediate thoughts and evaluations of their performances. Doing so also allows for students to align their performances with professors' expectations. In addition, a clearly graded rubric can be useful in the event that students choose to attend office hours; instead of a professor having to recall the specifics of a student's paper, he/she can reference the student's rubric and offer concrete feedback based upon it.

4. Rubrics can speed up the grading process.

Rubrics, in general, offer clear and consistent guidelines for grading. If a professor grades consistently to a rubric, he/she does not have to go back through graded assignments to assess fairness across the class. Essentially, a professor can use a rubric as a checklist to determine a student's performance in an efficient and effective way.

5. Rubrics can help refine teaching skills and improve work through feedback.

Rubrics allow instructors to see how their classes could be improved on the whole. If a professor notices that a majority of students are scoring below average on a particular criterion (e.g., "Using external sources"), he/she can adjust instruction accordingly. Similarly, if a rubric is used consistently throughout the course, students can self-monitor their performances and improve accordingly with consistent feedback. Students can easily ascertain their strengths and weaknesses and work on those particular skills.


When a well-written rubric is in place, students can evaluate themselves and estimate their abilities. Armed with explicit expectations, students can ask their peers to review papers and to “grade” or evaluate the student's work according to a rubric. A rubric also offers students the ability to develop and test ideas in theory and practice.
D. Best Practices for Creating Rubrics

The following is a list of best practices concerning creating rubrics:

1. Clearly define the assignment and learning outcomes. Clarify which learning outcomes are being assessed for the assignment. Design the formative and summative assignments based on the learning outcomes of the module. Set expectations on the topic, the process that students are expected to follow, and the eventual product they will be expected to submit. Do this both in the actual assignment, and also verbally in class to allow for questions.

2. Keep the rubric manageable. Limiting a rubric to four to eight items makes it easier for students to follow, and for instructors to grade. Make sure each component is specific and concrete. If a term such as “soundness of argument” is used, make sure to clarify the definition of sound argument.

3. Communicate in a variety of ways to students, both to help them understand the assignment and to facilitate better feedback.

4. Consider and highlight common problems and pitfalls to avoid. Fit best practices into the higher levels of performance on a rubric and caution against pitfalls either verbally or in the assignment.

5. Create rubrics based on learning goals for each assignment and how the goals fit into larger course learning goals.

6. Use weighting as a tool to communicate your expectations and to define student efforts. Weigh criteria in your rubric according to their importance to the overarching learning goal(s) of the assignment.

7. Consider how the guidelines can make grading more consistent and easier/faster. Use concrete terms that can be understood across class sections and clarify the level of performance that is expected for competency for each particular criterion.

8. Think about the ideal submission for the assignment and how to assist students in achieving the assignment’s learning objectives.

9. Avoid vague terms such as “creative” or “interesting”, and instead make indicators specific when possible. For example, instead of “creative” perhaps “takes a new or risky approach”.

10. Get feedback on rubrics from other professors or students. Ask them to read for clarity of expectations.

E. Best Practices for Using Rubrics

1. Be consistent but also flexible when using rubrics.

2. In team teaching, be conscious of fundamental priorities common to all, and one’s own idiosyncratic preferences and priorities. Rubrics may contain some core items across all seminars but individual professors can add a few additional items specific to their learning goals or pedagogy.

3. Bring transparency to expectations, but know that all potential variances in grading cannot be completely resolved.

4. Weighting depends on the type of assignment and the kind of grading done: weighting does not actually capture the holistic overview of assessment.

5. If a single rubric will be used for an assignment that will be graded by a number of instructors, develop a method to emphasise consistent grading. This can be accomplished with a grading calibration workshop or through continuous feedback between and among faculty members.

6. Test-drive the rubric with assessors who are assessing the same module. Consider an example paper and weigh it against the rubric; does scoring 75% of the points on the rubric align to the numeric grade for the assignment? Do various components need to be weighed differently to produce a grade that more accurately represents a student’s performance?

7. Use the rubric for students to peer-review each other in class. This could be useful to students to glean the professor’s expectations, and to help the professor align his/her expectations with the students’. If students do peer review each other and grant grades higher than the professor’s, it could indicate a misunderstanding of expectations. Essentially, this exercise assists in determining a rubric’s effectiveness.

8. Provide an example paper and its graded rubric for students to understand the professor’s expectations against the rubric.
V. Communicating Assessment Outcomes to Students

A. Good Practices for Communicating Expectations and Grading Methodologies

The following is a list of good practices for communicating expectations and grading methodologies to students.

1. Establish clear, specific, and achievable course goals.
   - Establish clear, specific, and achievable course goals (e.g. be able to cite sources in MLA style) and make them consistent across sections.
   - Establish course expectations within syllabi at the beginning of the semester. Summarise course material goals, along with expectations for attendance and participation.
   - Define what we mean by “learning goals” for courses and ensure that they are consistent across class (please use course instead of class) sections.
   - Develop common understanding across the common curriculum on topics such as modes of inquiry, oral communication, class participation, etc. Consistency between course sections will enforce these expectations.

2. Define formative assessment and summative assessment.
   - Explain differences between formative and summative assessment forms. Clarify when students will be receiving formative and summative assessments and encourage them to attend office hours.

3. Be consistent.
   - Be consistent with grading criteria across the common curriculum sections. If and when a grade point scale is given, it should be consistent across the CC (spell out). Discuss to what degree grading practices should be discussed or explained to students (e.g. establishing a mean across sections).
   - Work towards consistency in the number and type of assignments across sections in Common Curriculum modules.
   - Ensure grading standards are relatively consistent across sections.
   - Policies on plagiarism, class attendance and participation should also be consistent across sections and modules.

5. Communicate effectively with your students.
   - Communicate assessment information (e.g. due dates, assessment methods, etc.) in various forms throughout the semester, starting from the first day of a course. Ensure this information is consistent across sections.
   - Discuss methods that you will use to assess class participation and make this known to students.
   - Discuss different expectations when a module is graded CS/CU, as in the first semester of the students’ first year.
   - Provide oral feedback on drafts to students during office hours.

6. Communicate effectively with other instructors.
   - Teaching teams should schedule regular meeting times throughout the semester to discuss assessment and grading. This could be done at key points in the semester, when important assignments are due.
   - Discuss amongst the faculty how class dynamics may affect student participation and assessment practices.
   - Facilitate conversations across electives on the meaning of “hard” courses/majors, “tough” grading practices, “heavy” course workloads, etc.
   - Take into consideration the idiosyncrasies of particular common curriculum modules (e.g. FoS, SI, QR) concerning grading and assessment.
   - Develop a website (e.g. Sharepoint, Canvas, WordPress) to share materials (e.g., sample essays, rubrics, additional readings) with the teaching team.
   - Find ways to share expertise in various assessment skills (e.g. via the Teaching and Learning Centre).
   - Engage Vice Rectors in discussions about student performance and notify them of any concerns about a student immediately.

B. Good Practices for Communicating Feedback on Specific Assignments

1. Define what is meant by “learning goals”.
   - Define learning goals of each assignment. Be clear about the material assigned and the skills needed to complete assignments. Be explicit and consistent about expectations.
   - Develop learning goals that reinforce other parts of the curriculum. For instance, developing research skills early on allows instructors to build on those skills throughout the semester.
2. Provide formative feedback.
   • Formative feedback is most useful when provided early in and consistently throughout a course. Formative feedback helps instructors clarify their expectations; this is especially important in the first few weeks of class.
   • Explore ways to turn formative assessments into summative assessments, e.g., by breaking them down into smaller tasks with low stakes grades.

3. Discuss difference between learning and grading.
   • Discuss differences between learning goals and assessment criteria.
   • Discuss nuances between how much students are learning and how they are assessed. Ideally, grades would align to a student's learning process; discuss with students who feel that they are not being fairly assessed.

4. Encourage peer editing.
   • Encourage peer editing in class with specific guidelines and criteria. These criteria should be consistent across sections.
   • Peer editing allows professors insight into how their students perceive the assignments' learning goals.
   • When using a rubric, provide the same rubric for peer editing exercises: the exercise can help clarify whether or not the expectations in the rubric are clear.
   • In visual arts classes, encourage students to critique each other's work (they may be harsher in evaluating a student's critique of another student than of the artwork itself).

5. Provide anonymous essays as examples.
   • Provide anonymous essays as exemplars or concrete examples of high-quality work. These may be preferable to a rubric as it avoids students “shooting for a B” or quibbling over grades/points based on a rubric.
   • Share drafts and final essays as models of successful work but beware of students trying to imitate style/voice instead of developing their own.

6. Keep comments constructive and provide them in a timely manner.
   • Be mindful of your tone when communicating assessments to students. Begin with something genuinely positive about the work before suggesting ways to strengthen it. Avoid overly harsh criticisms. Be constructive.
   • Beware of giving positive feedback or grades on a draft, as students may think that no further revisions are needed. Ensure they understand that drafts are works in progress that need and should be improved. Unrevised good drafts are not acceptable as the final submission.
   • Ensure students receive feedback on their work in a timely fashion. Research shows that feedback is most effective when given soon after students submit their work. Professors may want to return students' work in batches rather than waiting until they have completed all grading.
   • Link comments to a set of explicitly pre-defined and distributed criteria. Teaching teams should consider what will work best for a particular course.
   • For in-class written or oral presentations, provide immediate feedback. Encourage students to give constructive yet critical feedback. Model this approach and acknowledge students who do so over the course of the semester.