

MANAGING COMPETENCY-BASED GRADING IN MUSIC THEORY

RICHARD A. WILLIAMSON, DMA
ANDERSON UNIVERSITY (SC)

In competency-based assessment, instructors determine course outcomes (specific things students must learn), assessment measures (performance behaviors that demonstrate learning), and standards for determining the degree of student achievement.¹ When grading assignments, instructors use rubrics, with which they separately rate achievement of various components of the desired performance using a qualitative scale. Competency-based assessment promises to make instruction more relevant to desired outcomes and to shift students' focus from grades to learning. It can enhance learning by focusing feedback on specific aspects of students' performance, especially when instructors allow students to revise their work. Based on student ratings and comments, competency-based grading has moved my classes toward these goals.

This practice also brings challenges, however. Having too many objectives makes assessment unmanageable, so instructors may have to make significant course revisions. Outcomes must be measurable, and assessments must actually measure achievement of the outcomes. Instructors must generate final grades that make sense and work for their institutions. Students may find it difficult to track their standing in the course because they cannot simply average percentage scores for activities, so the instructor needs to help them know where they stand. If instructors allow students to revise assignments, the instructors may need to manage their work load differently, and they must prevent students from taking initial submissions lightly. This essay presents some solutions to these problems.

COURSE OBJECTIVES

Courses exist not for instructors to cover material, but for students to learn it. Therefore, the effectiveness of a course depends on what students can do when they complete it, not what the teacher does during class. Instructors who aspire to create courses that focus on student learning, must determine specific, observable student behaviors that demonstrate content knowledge or skill development. These behaviors are the course objectives, or outcomes. Specific outcomes help instructors choose useful activities and relevant assessment measures. They also help students prioritize their efforts.

If course objectives are to direct students to what is most important, teachers must select the objectives wisely. To keep assessment manageable, one should limit the number of objectives. An important criterion for including any course objective is that it be essential to passing the class. If it is not worth making a student repeat the course if he or she fails to meet a particular objective, the objective is not worth including as a *course-level* objective. For example, to pass a musicianship

¹ See "Further Reading" for sources on competency-based assessment.

course, students might be required to demonstrate competency in each of the following four objectives:

- Read, dictate, and interpret rhythms using modern idioms and techniques.
- Read and dictate chromatic melodies.
- Dictate short harmonic progressions that include chromatic harmonies.
- Play short chromatic progressions with correct voice leading and transpose them to new keys.

It helps students to understand course objectives in terms of specific desired behaviors. Instructors should communicate and demonstrate what students must be able to do both in general terms and specifically for each assignment. Demonstrating the required level of performance helps students understand not just *what* to do but also *how* to do it. Giving several opportunities to demonstrate achievement of each course objective yields more reliable performance data. It also allows the instructor to account for progress over time by weighting later assignments more heavily or factoring out earlier assignments. In some cases, several similar assignments will suffice. For instance, the objective, “Use dissonance according to specific stylistic practices,” might be measured by assessing dissonance treatment over several part writing exercises.

In other cases, the assignments might address different aspects of an objective. In an undergraduate harmony course, for example, the objective, “Use extended and altered tertian chords in popular music contexts,” could encompass the following component skills:

- Spell diatonic and altered 9th, 11th, and 13th chords accurately.
- Label diatonic and altered 9th, 11th, and 13th chords using pop chord symbols.
- Identify diatonic and altered 9th, 11th, and 13th chords in context.
- Realize ii-V-I progressions using diatonic and altered chords and various standard voicings.

Tasks designed to measure performance on the component skills (in this case, quizzes, part writing, composition, analysis, and keyboard) form the basis for assessing performance on the larger course objective. Whereas students must demonstrate competency for all course-level objectives, there can be more flexibility with component skills. A person who masters most but not all of the component skills pertaining to a course-level objective can pass the objective, but with a lower rating than one who masters all component skills. Moreover, skills that are relevant and worthwhile, but not *in themselves* essential to passing the course can be included as components of a larger course outcome if they contribute to achieving it.

For instance, in a core harmony course one might consider a person able to use 9th, 11th, and 13th chords if they can spell, identify, and label them sufficiently to derive chord symbols from printed notation and to determine chord tones from lead sheet notation. Correctly realizing these chords in specific stylistic contexts—whether in writing or performance—represents a higher level of mastery that might not be essential to *passing* the entire course. (In a more advanced course, realizing such progressions might well be essential to passing.) At any rate, practicing these skills during the core course can contribute to mastering the more fundamental ones by having students approach the material from a variety of perspectives, using different modalities, and showing

practical applications. It also provides the instructor with information that can help distinguish between mere competence and proficiency.

RATINGS AND GRADES

To determine a meaningful course grade, one must first collect accurate performance data. Instructors can improve the validity of their data by carefully designing assessment activities to measure desired objectives. They can enhance the reliability of the data by assessing each competency across several assignments. The scores collected for each competency form the basis for an overall assessment for that competency. The overall assessments for individual course competencies, in turn, determine the final grade. The challenge in competency-based grading is to combine qualitative assessments of a number of more-or-less separate objectives into a composite grade that gives a fair picture of students' overall performance without the convenience of simply calculating percentage scores and averaging them.

ASSESSING INDIVIDUAL ACTIVITIES

Assessments of individual assignments should show students what to retain in future work and what to improve. A single summative grade does not provide this information. Instructor comments can provide such feedback if they are directed intentionally toward specific outcomes *and* all outcomes measured by the assignment are addressed. Otherwise, students may not connect what they have done to their achievement of stated objectives. One way to address this problem is to rate performance on each skill the activity is designed to measure separately without creating a single overall grade for the activity. For instance, in a counterpoint exercise, a student might demonstrate the ability to write rhythmically independent and balanced parts but have problems handling dissonance. The student would receive a high rating for the objective, "Arrange music with rhythmic balance among the parts," and a lower rating for the objective, "Use dissonance according to specific stylistic practices." Scores for each objective would be factored together over time and final grades determined using *objective* scores rather than *assignment* scores.

A simple qualitative scale facilitates rating of student performance. For instance, students might receive a rating for each objective to be assessed in an activity based on a rubric like this (Table 1):

Table 1. Individual Objective Grading Rubric.

4	Proficient
3	Competent
2	Marginal
1	Weak
0	Incomplete

The instructor should determine appropriate standards for each assessment item and communicate them to the students. Take, for example, a two-measure part writing exercise. To demonstrate proficiency on the objective, "Employ correct intervallic relations between voices," might require that the student completely avoid parallel perfect fifths, octaves, or unisons. The standard for

competence might be no more than one such error. In a 10-item quiz, proficiency could be defined as no fewer than nine correct answers, competence as no fewer than seven. Longer or more complex exercises might call for different standards.

It is possible, of course, to have a rubric with more or fewer ratings. Additional ratings allow for more nuanced assessment. However, they also increase the chance that instructors will make distinctions that seem arbitrary or insignificant. To make finer distinctions, teachers might rely to some degree on matters that are not *essential* to meeting stated objectives. When two or more instructors teach the same course, having more available ratings increases the chance for differences in scoring that are due only to instructor characteristics. This limits the usefulness of the information for curriculum assessment and planning. On the other hand, fewer ratings may produce more consistent grading, but they might also reduce the precision of assessments.

RATINGS FOR COURSE OBJECTIVES

To convert the several individual assessments for an objective to a single overall rating, one can apply criteria such as the following. (Letters refer to students whose scores are listed in Table 2, below.)

If more than half the ratings are 0, the overall rating is 0. (A)

Otherwise:

If any rating is 0, the overall rating is 1. (B)

Otherwise:

If all assessment ratings are the same, the overall rating is that rating. (C)

If there are equal numbers of two different ratings and:

If the ratings are adjacent (i.e., 3 and 4), the overall rating is the higher rating. (D)

If the ratings are not adjacent, average and round to the next lower integer. (E)

If there are unequal numbers of two different ratings, take more frequent rating. (F, G)

If there are three or more different ratings, average and round to the nearest integer. (H,I)

The following illustration (Table 2) is based on a recent class:

Table 2. Converting Individual Assessments into Overall Assessments for a Course Objective.

Objective	Students								
1: Create effective melodies following specific stylistic practices.	A	B	C	D	E	F	G	H	I
Assessment 1	0	2	3	2	1	3	4	2	3
Assessment 2	1	3	3	3	4	3	4	4	2
Assessment 3	0	2	3	2	1	4	3	2	3
Assessment 4	0	0	3	3	4	3	4	1	4
Overall Rating	0	1	3	3	2	3	4	2	3

DETERMINING COURSE GRADES

One can determine final course grades by applying a similar set of criteria to the overall ratings for all course objectives (Table 3) . (Letters refer to students whose scores are listed in Table 4, below.)

Table 3. Rubric for Converting Course Objective Scores into a Final Course Grade.

Grade	Standard
A	All scores 3 or higher AND 50% are 4 (A, B, C)
B	All scores 2 or higher AND 80% are 3 or higher (D, E)
C	All scores 1 or higher AND 80% are 2 or higher AND 60% are 3 or higher (F, G)
D	All scores 1 or higher (H)
F	Any score of 0 (I)

According to these criteria, students must present work for all course objectives to pass the class. To receive the "C" needed to progress to the next course, they must demonstrate competence (3) for more than half of the course objectives and can be weak (1) at no more than 20% of the objectives. Regardless of their performance on other objectives, students cannot earn a "B" with any score below marginal (2) or an "A" with any score below competent (3).

The following, based on a recent counterpoint class, shows the course objectives and how they translated into final course grades (Table 4):

Table 4. Objective Scores Converted to Final Course Grades.

Objectives	Students								
	A	B	C	D	E	F	G	H	I
1. Create effective melodies following specific stylistic practices.	4	3	4	3	3	3	2	4	0
2. Compose rhythmically fluent lines.	4	4	4	4	4	3	4	4	0
3. Arrange music with rhythmic balance among the parts.	4	4	3	4	4	3	4	1	0
4. Employ correct intervallic relations between voices in two and three parts.	4	4	3	3	4	2	2	1	0
5. Use dissonance according to specific stylistic practices.	4	4	4	3	3	2	1	4	0
6. Construct effective harmonic and tonal structures.	4	4	3	3	3	3	4	3	0
7. Demonstrate selected contrapuntal techniques.	4	4	4	4	4	2	4	4	0
8. Develop thematic material using selected techniques.	4	3	4	4	3	4	4	1	0
9. Analyze melodic, harmonic, rhythmic, contrapuntal aspects of tonal pieces.	3	4	3	3	2	2	2	3	0
Tally									
0's	0	0	0	0	0	0	0	0	9
1's	0	0	0	0	0	0	1	3	0
2's	0	0	0	0	1	4	3	0	0
3's	1	2	4	5	4	4	0	2	0
4's	8	7	5	4	4	1	5	4	0
Grade	A	A	A	B	B	C	C	D	F

MONITORING STUDENT PROGRESS

This approach to assessment is not compatible with an ongoing tabulation of current course grades, and some students find this quite frustrating. Nevertheless, it can provide them something more meaningful: an account of their performance on specific tasks and their progress toward achieving course goals. Periodic progress reports can give students a sense of where they stand in the class. In these, the instructor gives the current overall rating for each course objective rather than a single putative grade. Instructors can use the reports not only to monitor student progress, but also to direct students' attention away from mere grades and toward the things they are actually supposed to learn. The periodic progress reports can also provide the instructor with feedback as to the pedagogical improvement that might be required to help students meet specific objectives.

MANAGING THE REVISION PROCESS

Revising assignments allows students to respond to instructor feedback and improve their work. When reworking an exercise, students can review their strengths and focus their efforts on improving weaknesses. Unfortunately, students may abuse the privilege of rewriting and the amount of grading required could become prohibitive. Some simple guidelines, consistently applied, can ameliorate these problems:

- Accept no late submissions without a compelling reason
- Allow rewrites only if the original submission is complete and appears thorough
- Allow only one revision
- Accept rewrites only within a specified, brief time after returning the original attempt
- Limit the level to which rewrites can increase ratings, e.g., make the highest rating possible on a revision "competent" (3). Students who already have a "3" or "4" will have no reason to revise, so the instructor can focus her efforts on students who need the most help.

Moving to competency-based assessment takes effort and may require the instructor to reorient himself significantly. For me, the primary benefits have been more time spent on matters I consider important, assessments that more accurately convey my perception of student work, more frequent and productive communication with individual students about coursework, and greater student effort. Planning from desired outcomes has made me more selective about textbook readings and homework assignments. I am concerned more with the relevance of activities than their quantity. As a result, I devote more class time to individual and small-group practice, which allows for more individual feedback. This informal feedback, combined with periodic progress reports, helps both me and the students know not just how they stand in terms of grades but also how they are performing on specific tasks. Since I began using this assessment system, students seem more often to ask how they can improve their work than how they can improve their grade. (Of course, allowing them to revise assignments means that the one may lead to the other.) Having data at hand that is linked to specific behaviors makes it easier to give precise, practical feedback. Based on course evaluations, students actually feel more engaged and successful than in the past. This in itself is worth the effort required.

FURTHER READING

The following include information on competency-based grading, developing objectives, and creating rubrics.

Arter, Judith A. *Scoring Rubrics in the Classroom: Using Performance Criteria for Assessing and Improving Student Performance*. Thousand Oaks, CA: Corwin Press, 2001.

Voorhees, Alice Bedard. "Creating and Implementing Competency-Based Learning Models." *New Directions for Institutional Research* 2001, no. 110: 83.

Voorhees, Richard A. "Competency-Based Learning Models: A Necessary Future." *New Directions for Institutional Research* 2001, no. 110: 5.

Walvoord, Barbara E. *Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education*. San Francisco, CA: Jossey-Bass, 2004.

Wehlburg, Catherine M. *Meaningful Course Revision: Enhancing Academic Engagement Using Student Learning Data*. Bolton, MA: Anker Publishing Company, 2006.

The following website offers a searchable repository of sources on assessment:

National Institute for Learning Outcomes Assessment, "Searchable Publications," Accessed November 20, 2013, <http://www.learningoutcomeassessment.org/publications.html>