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#### **Abstract**

Introduction: Learning by doing appeals to many teachers and students who enjoy the practical application of new knowledge. When learners are able to demonstrate the upper levels of Bloom's taxonomy - application, synthesis, evaluation - the students almost assuredly have demonstrated an "enduring understanding" of the content material.

## My Quiz is Better or It Takes a Semester to Build a Quiz

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#### Introduction

Learning by doing appeals to many teachers and students who enjoy the practical application of new knowledge. When learners are able to demonstrate the upper levels of Bloom's taxonomy—application, synthesis, evaluation—the students almost assuredly have demonstrated an "enduring understanding" of the content material (Wiggins and McTighe, 1998). Gallavan reminds educators that "Assessment means much more than just a test" (2009, p. 6) It should also be "appropriate and authentic" and "Learners should be given (and should help develop) alternative assessments" (ibid, p. 8).

With these principles in mind, students were organized into four "family" groups in a graduate English as a Second Language assessment course and asked to choose a chapter from the text to teach to the class. The learning objective for the class was two-fold: 1) to provide graduate students with a theoretical framework to support their future practice in creating assessments for culturally and linguistically diverse (CLD) students, and 2) to create assessments in the graduate class itself. Each group created two quizzes (one quiz for each of two chapters) designed to test knowledge and understanding of the content material. Each group had to convince their classmates to take their quiz as the best one to demonstrate the enduring understandings of the chapter information. Groups also administered and graded their quizzes. Thus, the assessment became more than just a test; it was appropriate and authentic for them as in-service and preservice teachers. Moreover, they were developing their own assessment with an alternative approach. The opportunity to create a quiz for the class satisfied both goals by reinforcing the content information regarding assessment of CLD students and by creating quizzes to assess their knowledge and understanding of the chapter content.

## Not Your Mother's Quiz

Although not unusual for graduate students to contribute questions for a quiz or even to create quizzes, this assignment consisted of several pieces designed to reach all levels of Bloom's Taxonomy of Learning. To prepare the graduate students for the assignment, the class was introduced to Wiggins and McTighe's Backward Design Model (1998) and the concept of teaching for deeper understanding. Part of the preparation included

- 1. Discussing the process of testing for deeper understanding and knowledge;
- 2. Defining formal, informal, formative, and summative assessments;
- 3. Discussing alternative forms of assessment,
- 4. Contrasting convergent and divergent questions; and
- 5. Presenting an overview of writing test items.

The quiz assignment was due after the 8th and 11th weeks of a 16-week semester.

All four groups were responsible for writing two complete quizzes to practice what Popham (2005) highlights as guiding considerations: what to assess and how to assess it. The first quiz covered Chapters Four and Five; the second quiz covered Chapters Six and Seven. This step assured that all groups were attentive to the presentations. Quizzes were given at the beginning of the class following the two chapter presentations with a 30 minute time limit to allow for grading, discussion, and closure.

Each group had to determine what information was important for them to know and understand as in-service teachers and teacher candidates, so essentially they were creating mini-instructional objectives for their chapters. For example, Group Three focused on the information in Chapter Four, "Assessment of Acculturation," by including definitions of acculturation, assimilation, and enculturation and the impact these stages might have on student learning. The group also discussed how to assess culture and acculturation and how to use this information to guide student instruction. After the group presentation, each individual group compared notes and went over the handouts. Their next step was to decide how to assess the information.

In designing their quizzes, students were asked to consider the cognitive domain using Bloom's levels of knowledge and understanding. Fortunately, each chapter of their text, Assessment Accommodations for Classroom Teachers of Cultural and Linguistically Diverse Students, began with connections to the TESOL/NCATE standards as well as to the Center for Equity and Excellence in Education (CEEE) Guiding Principles, so students were aware of the key elements in the relevant content standards for each chapter topic.

Quiz directions included the following requirements: a value of 25 points, convergent questions based on the group's choices to address knowledge and understanding, four copies of the quiz (one for each group), and one copy with answer key for the instructor.

## The Moment of Truth: Taking the Quizzes

Student groups had to "pitch" their assessment as the choice quiz. When administering the quiz, procedures included several steps. 1) Each group placed their tests on the "test display table." 2) Volunteers from each group came to the front of class and described their group's test format to the class and explained why their group's test was important for student learning. 3) The groups made their selections after examining the tests on the test display table. Groups could choose the same test, but each group could only record their answers on one copy. Groups were not permitted to take their own quiz. 4) Once the choices were made, each group got one copy of the test. 5) Groups reconvened to their tables to discuss the questions and answers. Groups were allowed to use their notes as well. 6) If group members were not sure what a question was asking, they could ask the quiz writers for clarification. Quiz takers were also allowed to write comments on the questions for the instructor to arbitrate if necessary when she reviewed the completed quizzes. Group members who disagreed with each other

were allowed to write their own answers on the quizzes. 7) At the end of the testing time, the quizzes were returned to the quiz writers who then proceeded to grade their quizzes. It was not unusual for more than one group to choose the same test, but the most any group could grade would be three, so the grading time was minimal and feedback immediate. 8) The four tests were returned to the instructor to check and arbitrate if necessary.

#### Student results

The quiz grades were consistently at the A to B level when graded by the test designers and converted from points to percentages. Working collaboratively gave all students opportunities to negotiate their understanding of the topic. It also revealed how well the students had taken notes during each presentation. Writing the quiz gave students the chance to target information they considered important and gave students practice in writing their own quizzes using the information from theirs and their peers' presentations.

When the instructor reviewed the quizzes, she omitted some questions as part of the arbitration process and marked any questions that included double negatives, ambiguity, or multiple answers (more than on answer) for a single question. She chose not to preview the tests before they were administered so that students could use the raw examples for a critical analysis of test writing.

### Deconstructing the Quiz

After the quizzes were graded by the test designers, checked by the instructor, and returned to the groups, the last step involved a "deconstruction" of the quizzes. The instructor facilitated a whole group discussion of the content information and test writing strategies. At this point, the group reviewed basic test writing tips and how to format a test. Most of the review centered on writing good selected response items such as avoiding ambiguity, complex syntax, and unintentional clues; avoiding double negatives and negative statements in binary-choice items (true/false); and composing a clear, self-contained question or problem for a multiple choice item. The instructor also pointed out how to streamline the formatting for quicker grading.

#### Student Feedback

All students agreed on several points: writing a good quiz was not easy; retaining information increased because they had to think about the importance of information for retention; writing clear questions and creating good answers was challenging along with recalling the answers to their own questions.

#### Conclusion

Students used metacognition and metalanguage during the entire process of presenting the chapter, reviewing their notes, writing their quizzes, and grading them, thus reaching Bloom's levels of application, synthesis, and evaluation. Overall, the students agreed that this project was challenging and rewarding. Students realized that constructing good questions for any assessment is a timely and thoughtful process. They had to examine their notes for relevant and important information and then construct a well-honed question to elicit the appropriate response.

These key ideas appeared in the student-generated quizzes. They identified "quiz-worthy" information from their notes and discussed if, when, and how they were teaching such material. Students realized and articulated their understanding about how assessment criteria are created when writing

knowledge-based, convergent questions.

On end-of-term teacher evaluations, students wrote, "Loved the group/work quizzes—I feel I learned more from them than doing it individually..." and "liked group presentations of chapters and creating rubrics

and quizzes."

Gallavan tells us that effective assessments "involve an ongoing exchange of understanding between and among the teacher and the learners" (p. 23). When tied to enduring understandings and long-term outcomes, assessment can be approached with less trepidation by both the teacher and student. Teachers can create a formula for success when students comprehend the what, how, and why of assessment, and teachers can design assessments to match instructional strategies and fulfill curriculum expectations.

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