

**A Brief Description of Standard Setting Techniques
Used by NCDPI to Evaluate/Generate Academic Achievement Standards**

The following information was excerpted from *Setting Standards for Alternate Assessments (Synthesis Report 42)* which was published in April 2002 by the National Center on Educational Outcomes in collaboration with the Council of Chief State School Officers (CCSSO) and the National Association of State Directors of Special Education (NASDSE).

Although the language for the chart was described in the report on setting standards for alternate assessments, the same techniques are used also to set standards on traditional multiple-choice assessments. Data from a combination of the techniques included in the chart were used to set the recommended standards for the North Carolina End-of-Course Tests of English I, Algebra I, and Geometry.

Standard Setting Techniques

Technique	Description
<p>Contrasting Groups (Data collected from teachers during the fall and spring 2006-07 administrations of the EOC tests applied empirically to fall and spring data for 2006-07.) Data were analyzed during October 2007.</p>	<p>In this technique, a group of teachers familiar with the students, and with the definitions of the various groups into which the students are to be placed, separate the students into these groups based on their observations of the students in their classroom (Livingston & Zeikey, 1982); then, the assessment scores in each of the groups are calculated. The distribution of scores among the different groups is examined; typically, where the scores between the two groups overlap is where the “cut score” between the two groups is set since this the point at which the classification errors are minimized. The Contrasting Groups technique can be used with any type of assessment.</p>
<p>Bookmarking or Item Mapping (Two-day session held in Raleigh at NCDPI on October 15-16, 2007 with approximately 20 English I teachers, 15 Algebra I teachers, and 15 Geometry teachers and experts working with Pearson Educational Measurement to establish recommended cut scores).</p>	<p>In this technique, an appropriate group (either an expert panel, a representative group of users, or a policymaker group) reviews a specially-constructed test booklet that is arranged in item difficulty order (Lewis, Mitzel, & Green, 1996). The standard setter (panelist) is asked to mark the spot in a specially constructed test booklet (arranged in order of item difficulty) where a set percentage of minimally-proficient or minimally-advanced students would pass the item. An alternate method is for the standard setter (panelist) to mark where the difference in performance of the proficient and advanced student on an exercise is a desired minimum percentage of students. The Item-Mapping technique can be used with both multiple-choice and constructed-response assessments.</p>
<p>Reasoned Judgment (This technique was used during the week of October 18-29, 2007 to analyze data from various techniques and to make recommendations to agency leadership. The input from staff included staff from EC, Testing, and Curriculum and School Reform)</p>	<p>This technique is described as the most straight-forward manner in which to set standards. This technique requires an appropriate group (either an expert panel, a representative group of users, or a policymaker group) to examine the score scale and to divide the full range of possible scores into the number of desired categories (Kingston, Kahl, Sweeney, and Bay, 2001). For example, a 32-point scale might be divided into 4 categories of approximately equal number of points (or different numbers of point in each of the categories), as the group sees fit. The advantage of this strategy is that it takes little time, requires little in the way of process, and does not hide the standard setting in a cloak of mysterious statistical procedures. Presumably, the rationale for the choices is relatively evident. This method can be used with both multiple-choice and constructed-response assessments.</p>

