

THE NBME FLEXIBLE BLUEPRINTING SYSTEM FOR CUSTOMIZED SUBJECT TESTS

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Summary:

In this Electronic Demonstration, the authors will exhibit the Flexible Blueprinting System under development at the National Board of Medical Examiners (NBME). Currently in pilot testing with introduction scheduled for 2005-06, this system will enable medical schools to construct and administer basic science exams tailored to course content using items from NBME subject test pools.

Abstract:

The NBME currently provides discipline-based basic science and clinical subject tests for use as end-of-course and end-of-clerkship exams. While most US schools use these exams for required clerkships, utilization in basic science courses is substantially lower, reflecting school-to-school variation in basic science instruction and increasing popularity of integrative curricula.

To make basic science subject tests more useful to schools, the NBME is developing the Flexible Blueprinting System. To use the system, an authorized medical school faculty member logs onto an NBME website and creates a “test blueprint” specifying the disciplines and organ systems to be covered, along with target item counts in individual topic areas.

The test blueprint is passed to automated test assembly software, which builds a draft exam to those specifications and selects some “substitute” items. The draft exam is reviewed over the web by course faculty, who replace items to improve the fit to course content and define the scores to be reported. Subsequently, the test is computer administered at the school under proctored conditions using a secure web browser, students’ responses to items are scored at the NBME, and rosters of scores are posted electronically. Optionally, course faculty can also review item-by-item summaries of their students’ performance over the web.