

COMMUNICATING STUDENT PERFORMANCE DATA TO SCHOOL TEACHERS

HOLMES-SMITH, Philip

School Research Evaluation and Measurement Services (SREAMS)

Australia

The results from national studies of student ability are analysed using Item Response Theory (IRT). This theory describes the relationship between the ability of students taking a test and the difficulty of each item on that test. Using the assumption that a test item is a hard item if only the brightest students answer it correctly and that bright students are those students who can answer even the hardest items correctly, IRT is a generalized iterative procedure that can be used to simultaneously estimate both the difficulty of items on a test and the ability of those taking the test. This talk will give an overview of this technique and will demonstrate its use in measuring student ability. In particular the use of IRT models to construct Maths ability scores will be briefly discussed and how the results are communicated to teachers discussed.