

TECHNICAL AND METHODOLOGICAL ISSUES FOR QUICK EVALUATION OF TESTS AND EXAMS OF STUDENTS

Valentina Vassilenko

Universidade Nova de Lisboa

The objective grading and classification of students is a very important task. The growing use of written response tests in the education sector provides fertile domain areas for the application of computer based technology for quick and objective grading of student's exams, especially when the quantity of students is very big.

The use of Multiple Choice Question (MCQ) in paper-based exams is a very popular choice in the international certificate exams because it is very fast to grade and it does not let the student write any unnecessary information. However, the preparations of such tests is not a simple procedure and usually there is no available database of MCQ for the specialized discipline in higher education.

From other side, in the international tests, a specialized machine for grading MCQ paper based exams is used. This machine is very expensive and it needs a special trained operator to operate the machine correctly and efficiently.

In this communication, we report our experience in automatic classification and scoring of student examination by using:

- computational program DIPLOMA for correct preparation of MCQ exam test paper with 20-30 questions with five choices for each question;
- resources of program REMARK for detect the correct answers by comparing each paper with a pre scanned test paper that contains the correct and automatic classification and scoring.

These tools were successfully tested at Physics Department our university for the physics-based disciplines such as Electromagnetism, Mechanics, Thermodynamics, and Optics, etc, where the number of students is around 300-900.