

# EXPERIENCE WITH THE AUDIENCE RESPONSE SYSTEM AS A FORMATIVE ASSESSMENT TOOL IN FIRST YEAR MEDICAL CURRICULUM

Weronika Zielinska, Wojciech Pawlina, M.D.,  
Mayo Clinic College of Medicine, Rochester, MN, USA

**Purpose:** To determine whether the Audience Response System is a useful tool for knowledge assessment in first year medical school curriculum

**Methods:** Revision in the medical curriculum at the Mayo Clinic College of Medicine opened a possibility to introduce new methods for evaluation and assessment of the medical students. During 2006/07 academic year, the audience response system (ARS) was utilized as a self-assessment tool. Faculty teaching in several 6-week long didactic blocks used ARS-formatted questions, which were integrated with PowerPoint® presentations. The students were able to get real-time feedback while preserving the anonymity of their answers. Individualized progress reports of student performance during each of the briefing sessions were generated allowing the students to identify areas of their strengths and weaknesses in lecture material. At the end of the course students' average scores on their daily course performance were correlated with their final examination at the end of that block. The faculty's and students' experience with this new technology was also surveyed at the end of a teaching block.

**Results:** First year medical students reported the ARS to be a valuable, user-friendly way of knowledge self-assessment that considerably improved their performance and increased their attentiveness in class. The faculty also stressed the ease of use of this system, as well as its effectiveness in motivating students in their performance. There was a positive correlation (RSQ= 0.711) between the students' average daily performance and their final assessment scores at the end of the 6-week long block.

**Conclusions:** Use of the audience response system as a means for providing feedback is an effective way of knowledge self-assessment for students. It can serve as a guide for students in the adjustment of their learning strategies. It is also a useful guide for faculty in identifying students' educational needs and a way to monitor their progress in a curriculum with a more self-directed study format.1

**Contacts:**

Weronika Zielinska - Zielinska.weronika@mayo.edu

Wojciech Pawlina - Pawlina.wojciech.@mayo.edu

Address : 200 First Street SW  
Stabile Building 9-38C  
Rochester, MN 55905

Phone: (507) 538- 0584

Fax: (507) 284-2707