

Electronic Toys or Legitimate Learning Tools? Using Audience Response Systems in the Classroom to Enhance Student Learning

ROUNDTABLE PRESENTATION

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EDUCATIONAL GOALS AND OBJECTIVES

At the conclusion of this session, participants will be able to:

1. Describe an “audience response system” and have a basic understanding of how they work.
2. Give examples of how audience response systems might be used in a physician assistant program to enhance student learning.
3. Discuss ways in which audience response systems may help PA faculty to be more effective teachers.
4. Discuss possible advantages and disadvantages of incorporating an audience response system into a PA program curriculum.

INTRODUCTION

Physician assistant students are active learners. Most of them have grown up in a highly technologically-driven world, where the widespread use of the Internet, cell phones, I-pods, PDAs, and WiFi, is so commonplace that most have never known anything different. Students not only desire but perhaps require more than education: they need to be entertained and actively engaged as learners.

Various methods of active learning are used in medical education, with classroom discussion being one of the most common. Clinical problem solving, for example, is taught more effectively in group sessions. Many PA programs incorporate problem-based learning (PBL) into their curricula as a method of engaging students in active learning. Despite the widespread availability of educational technology, most physician assistant programs continue to rely on the extensive use of Socratic lectures as the mainstay of teaching. While this may be the most efficient method of teaching, research has shown that this may not be the most effective way for students to learn. Furthermore, many PA educators do not feel knowledgeable about the various types of educational technologies available, and therefore may avoid using them as an adjunct to teaching.

There has been a substantial amount of research conducted on the use of audience response systems (ARS) in high school and undergraduate education. These studies have consistently shown that students who use ARS in the classroom are more engaged, retain knowledge better, score higher on achievement tests, and enjoy the experience more. This has been attributed, at least in part, to the ARS requirement that students remain actively engaged in the class participation.

Teachers also report that using ARS helps them gauge students' level of understanding on the material being presented, allows them to give prompt feedback to student questions, and fosters a more interactive environment for teaching.

While the research on ARS seems to support the use of this technology in these academic settings, there is a paucity of data about the use of this interactive educational tool in medical education. We will briefly discuss our initial attempt at incorporating an audience response system into the physiology course at the Oregon Health & Science University PA program. During this session, attendees will have a hands-on opportunity to use an audience response system. The roundtable discussion that follows will focus on the applications of this technology in physician assistant education.

References

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