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### Measuring the Relationship Between Mathematics SAT Scores, College Algebra, and Radiographic Physics

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#### Abstract

This study investigated the relationship between math SAT scores, college algebra grades, and achievement in radiographic physics in a sample of 119 subjects. Correlation coefficients were computed to explore the relationships between the predictor variables (math SAT and college algebra grade) and radiographic physics grades. The multiple regression of 0.49635 reflected a weak positive correlation between college algebra achievement and radiographic physics scores. College algebra achievement was found to be a statistically significant predictor ( $p < .01$ ) on academic achievement in a radiographic physics course at Armstrong Atlantic State University. This study suggests that college algebra grades could be considered in programmatic admission criteria.

### The Use of an Audience Response System in Imaging Sciences Classrooms to Increase Active Learning and Retention

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#### Abstract

Lecture-based, passive learning instruction is becoming less effective in today's information technology age. Introducing interactive technology into the classroom will engage the students and create a more student-centered, active learning environment, which may increase student learning and retention of that learning. The audience response system (ARS) is one type of interactive technology that has been used in the classroom for many years. This study was conducted over two semesters and involved both associate degree radiography and bachelor degree sonography students to determine whether or not the use of ARS in the classroom would increase student learning and retention of learning. Faculty strategically placed thought provoking questions within and at the end of a traditional lecture type class. I-clickers were used in the last half of the fall semester to compare mean scores on unit exams prior to and following the use of the clicker system to determine if student learning would be affected. During the spring semester i-clickers were used in every other unit to determine if any difference in retention of learning would be noted. Results indicated a statistically significant difference in retention of learning of the content covered in academic units using ARS compared to academic units where ARS was not used.

### The Use of Technology in Clinical Outcomes Assessment

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#### Abstract

Clinical competency is the basis of education standards in the radiologic sciences. Students are required to complete a number of clinical competencies and programs are required to report such findings to maintain accreditation allowing a student to take the certification exam. Traditional paper-based methods of documenting clinical outcomes required stacks of paper work. Program faculty and directors met difficulties in tracking the progression of students throughout the students' clinical experience. The use of computer technology to document and track clinical outcomes can provide direct access to reports for program faculty and students alike. The literature demonstrates the benefits of a computer-based documentation and reporting system, as well as barriers when first implementing such systems.