RESEARCH QUESTION

What was the impact of a curriculum revision on the ability of practical nursing students to process numeric information?

BACKGROUND

❖ MATH pre-requisite deleted due to PN curriculum alignment August 2009.
❖ Some Nursing students struggle with Math for dosage calculations for medication administration

PLAN

❖ Review grades in Math exams in PN 120 (Introduction to Practical Nursing)
❖ Compare/Contrast those scores with grades earned in optional MATH courses as noted on student transcripts
❖ Compare/Contrast those scores with scores achieved on the pre-admission TEAS test

DATA COLLECTION

❖ Grades in Math Courses taken prior to admission as noted on transcript
❖ Grades in MATH on TEAS test
❖ Grades Earned on Math Exams in two first semester nursing courses
❖ Grades placed on an excel spreadsheet

RESULTS

❖ Neither the TEAS Score in Math, nor grades in optional Math courses prior to admission served a reliable predictors of proficiency in math for dosage calculations:
  ➢ 23% of the class performed below the PN Program threshold of 76% in Math for Medication Administration
  ➢ 54% of the students scored below the preferred threshold of 90% in Math for Medication Administration

ACTION PLAN

❖ Administration of a Math Pre-Test
❖ Student counseling based on pre-test results
❖ Student referrals to the PN Success Center
❖ Collaboration with the Math Resource Center to provide assistance for PN students. (This intervention was more successful than tutoring provided by nursing instructors)
❖ Remedial assignments following each Math Exam as needed.

NEXT STEPS

❖ We continue to evaluate proficiency in Basic Math as evidenced by scores on the MATH portion of the HESI pre-admission Exam
❖ Math Review Assignment replaced pre-test
  ➢ Students self-assess proficiency in Basic Math
❖ The Math Resource Center trained tutors for specific needs of nursing students
❖ Jeff Lewis, Math Tutor, works with PN students to provide a review of basic math