



Ability of PN Students to Process Numeric Information

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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

