Observations: Math Skills Missing in NTID Students from Placement Tests and in Class

NRSC/DeafTEC Math Conference 2022

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NTID Math Coordinator Responsibilities

- Set up and carry out math placement test
- Determine incoming student math placements
- Advise students on their placements
- Liaise with RIT School of Mathematical Sciences
- Work with RIT Registrar



Summer Vestibule Program (SVP) -Math Placement Test

- Taken online over the summer
- 50 questions Prealgebra through College Algebra
- 7 questions Trigonometry
- Faculty team reviews/confirms math placement
 - Review math placement test results
 - Review HS/College transcripts
 - Review ACT score if given

Observations from Placement and Interviews

- Students are missing basic skills that help them succeed in math courses
- Students have seen the content but don't remember how to solve
 - 2 + 5 = ?
 - Graphing

Students must master skills to be ready for the next course

NTID SVP Math Placement Statistics

Math Course	SVP 2018	SVP 2019	SVP 2020	SVP 2021	SVP 2022
Prealgebra	21.2%	21.2%	22.4%	26.3%	35.1%
Advanced Mathematics (College Algebra)	22.4%	29.8%	25.0%	20.0%	16.0%

Areas of Weakness for Today's Students

- Number Sense
- Fraction Skills
- Word Problems
- Graphing
- Academic Maturity

Number Sense

- Computing numbers without using a calculator
- Being able to factor numbers
- Visualizing numbers using different approaches
 - Ex: 4(15)
- Developing estimation skills

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Fraction Skills

- Determining the lowest common denominator
- Having confidence working with fractions
- Understanding and incorporating fractions everywhere
 - Word Problems
 - Algebra Equations
 - Real life experience

Word Problems

- Using word problems in every lesson
- Being able to solve multiple step fractions
- Identifying key terms and breaking word problems into parts

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Graphing

 Applying different approaches to graphing algebraic equations

- Identifying slope and y-intercept
- Using table to plot coordinates
- Determining x-intercept and y-intercept

Knowing parent functions

Academic Maturity

- Having notes and materials ready for class
- Realizing that there are different ways to approach and to solve problems
- Having confidence to ask meaningful questions
- Independently concluding if an answer make sense
- Doing assignments on time

Time for Q & A

with Moose and Matt Stefano

Matt Stefano: Contact Information

Any questions? Email me at <u>mjsntm@rit.edu</u>