Gap Group Project

Students with Disabilities

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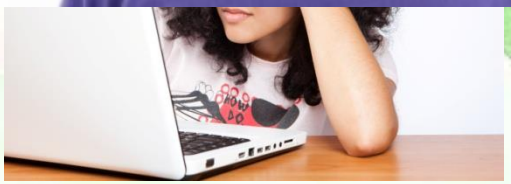
Developed as part of the Leadership III course in the NSF Middle School Mathematic Specialist Grant project in conjunction with Virginia Mathematics and Science Coalition, Virginia Commonwealth University, University of Virginia, and Norfolk State University.

Students with Disabilities

- Do we really know how they feel?



Working with Student with Disabilities

Best Practices

Best Practices for Math Inclusion

"Many teachers of students with learning and behavior disorders indicate that they have very little knowledge of the NCTM Standards" (Vaughn, Bos, Schumm, 2007, p. 398)

Source: Teaching Students Who are Exceptional, Diverse, and At Risk in the General Education Classroom by S. Vaughn, C. Bos, and J. Schumm

Best Practices for Math Inclusion

NCTM recommendations

- Do not alter curricular goals to differentiate students; change the type and speed of instruction.
- Make mathematics education student oriented, not an authoritarian model that is teacher focused.
- Encourage students to explore, verbalize ideas, and understand that mathematics is part of their lives.
- Provide opportunities on a daily basis for students to apply mathematics and to work problems that are related to their daily lives. Relate what they are learning to real-life experiences.
- Teach mathematics so that students understand when they can estimate an answer and when they need to compute an exact answer.
- Teach problem solving, computer applications, and use of calculators to all students.
- Teach students to understand probability, data analysis, and statistics as they relate to daily decision making, model building, operations, research, and application to computers.
- Shift from relying primarily on paper-and-pencil activities to use of calculators, computers, and other applied materials.

Source: Teaching Students Who are Exceptional, Diverse, and At Risk in the General Education Classroom by S. Vaughn, C. Bos, and J. Schumm

Best Practices for Math Inclusion

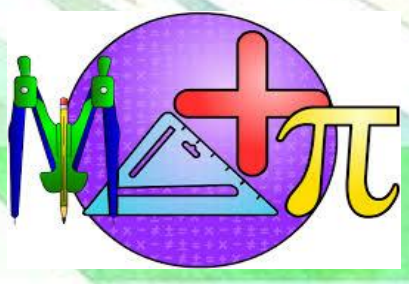
NCTM | NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

A valued partnership

National Association of naset Special Education Teachers

Best Practices for Math Inclusion

- Teach and adapt an appropriate curriculum
- Teach both explicitly and constructively
- Teach for understanding
- Utilize a problem-solving approach
- Utilize techniques of effective instruction
- Model thinking and problem-solving strategies
- Promote connections and communication
- Promote a positive attitude
- Use multiple representations
- Incorporate technology

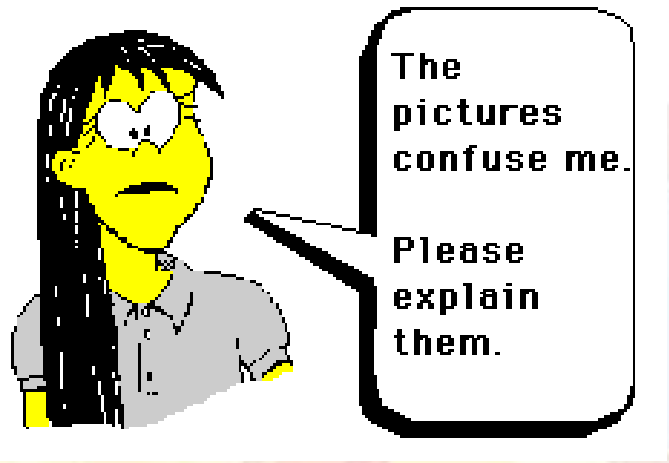


Source: Teaching Inclusive Mathematics to Special Learners, K-6 by J. Sliva

Specific Disabilities

Student Challenges and Instructional Strategies

Visual Processing



Key Words:

- figure ground
- visual discrimination
- reversal
- spatial perception

Visual Processing

Potential Challenge	Intervention Strategy
Seeing small print or print with many distracters	Use larger font size with fewer problems on a page

Auditory Processing

Key Words:

- auditory discrimination

Auditory Processing

Potential Challenge	Intervention Strategy
Following oral directions	Keep directions simple and give verbally and orally

Motor Processing

Key Words:

- Visual-motor integration

Motor Processing

Potential Challenge	Intervention Strategy
Completing work in a timely manner	Break written assignments into shorter increments

Memory Deficits

Key Words:

- short term
- long term
- sequential

Memory Deficits

Potential Challenge

Retaining skills from one day to the next

Teach strategies for accessing and retrieving stored information

Intervention Strategy

Attention Problems

Key Words:

- Attention Deficit Disorder
- Attention Deficit Hyperactivity Disorder

Attention Problems

Potential Challenge	Intervention Strategy
Missing pertinent information	Have students restate information or directions

Language

Key Words:

- expressive language
- receptive language

Language

Potential Challenge	Intervention Strategy
Following verbal explanations	Model *Think Aloud* Strategy

Cognitive and Metacognitive

Key Words:

- cognition
- metacognition

Cognitive and Metacognitive

Potential Challenge	Intervention Strategy
Solving word problems, patterning, sequencing	Develop students' reflective thinking skills

Students with Disabilities

Working with Students and Parents

Working with Students and Parents

The Individuals with Disabilities Education Act

National Center for Learning Disabilities

Working with Students and Parents

It is important to take the time to build a partnership with parents by using conversational language and helping them to understand the terms and acronyms that are unique to professionals in the school setting.

Best Practices for Math Inclusion

"Parents often feel overwhelmed by the amount of information they are provided and the technical terms that are used; they can be intimidated by the number and qualifications of professionals present at meetings. This results in parents who are present but not active, collaborative members" (Vaughn, Bos, Schumm, 2007, p. 398)

Source: Teaching Students Who are Exceptional, Diverse, and At Risk in the General Education Classroom by S. Vaughn, C. Bos, and J. Schumm

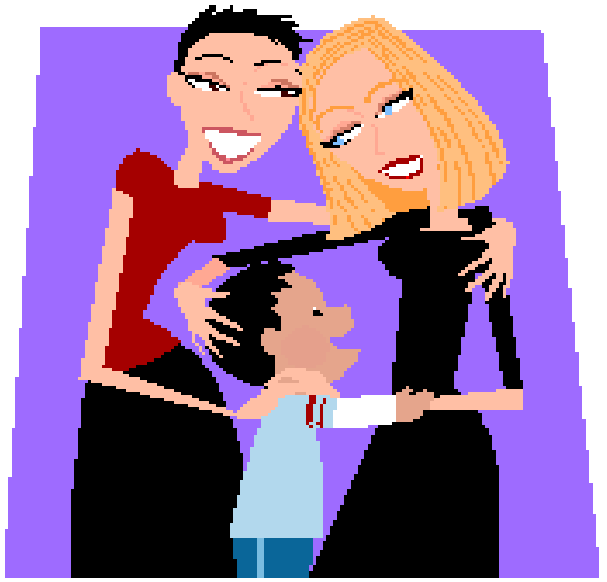
Working with Students and Parents

Benefits of parental involvement

- Ensures school-to-home continuity
- Increases expectations for students and results in academic and social gains
- Provides a safeguard so that needs of the student are discussed and met by the school system
- Shares significant insight about the student

Working with Students and Parents

Parent collaboration strategies



- Work toward a common goal
- Build positive relationships
- Focus on needs and interests of the student
- Respect parents values and opinions

Working with Students and Parents to Change the Self-perception!

Working with Students and Parents

Student collaboration strategies

- Include students in the IEP process
- Encourage self-advocacy

Quick Reference Guide: Students with Disabilities

References

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