Instructional Equity through the Implementation of Best Practices

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Presenters

Dr. Jonathan Ponds - Superintendent/Principal

Mr. James Knipper - Director of Curriculum & Instruction

Ms. Dana Genatt - 3rd Grade Teacher

Ms. Danielle Carrione - 4th Grade Teacher

Ms. Katerina DiCicca - Middle School Math Teacher

Ms. Lisa Perez - Middle School Language Arts Teacher

Session Objectives

Participants will:

- Learn how best instructional practices ensure equity within an inclusion model, whereas all students receive quality tier-1 instruction
- Gain exposure to how the best practices allow for a deep transfer of knowledge
- Develop an understanding of Best Instructional Practices and their implementation within a K-8 setting

Demographic Data

Demographic	Percentage of Student Population
Hispanic	55.8%
Caucasian	28.0%
Asian	11.2%
African American or Black	1.9%
Native Hawaiian or Pacific Islander	1.2%
Economically Disadvantaged	53.3%
Students with Disabilities	16.5%
ELL	3.4%

Identified Home Language: English - 56.1% Spanish - 28.3% Arabic - 4.4% Other - 7.8%

Student Growth

Subject	Schoolwide Percent Proficient 2014-15	Schoolwide Percent Proficient 2017-18
ELA	46%	67%
Math	36%	45%

ELA Proficiency by Demographic

Demographic	Percent Proficient 2014-15	Percent Proficient 2017-18
Hispanic	43%	63%
Caucasian	43%	64%
Econ Dis.	30%	57%
Non-Econ Dis.	61%	79%
St. w/ Disabilities	7%	18%
General Education	54%	76%

MATH Proficiency by Demographic

Demographic	Percent Proficient 2014-15	Percent Proficient 2017-18
Hispanic	33%	39%
Caucasian	31%	41%
Econ Dis.	25%	39%
Non-Econ Dis.	47%	52%
St. w/ Disabilities	14%	9%
General Education	41%	52%

How Did We Get Here?

Targeted Ongoing Professional Development

- Dr. Greer Burroughs, TCNJ → 2016-Present
    - Buddy Reading, Close Reading, R.T. and Socratic Seminar
- Dr. Rachel Snider, TCNJ & Dr. Dan Battey, Rutgers

  2017- Present
    - Numberless W.P., Problem Based Instruction, Socratic Seminar
- Dr. Judith Harrison, Rutgers → 2018-Present
    - Differentiation & Modifications

ELA Overview Of Best Practices

Grades 1 & 2 → Buddy Reading & Close Reading

Grades 3-6 → Reciprocal Teaching

Grades 7 & 8 → Socratic Seminar

Buddy Reading & Close Reading

Buddy Reading

- Builds fluency and comprehension
- Improves reading accuracy

Close Reading

- Multiple passes to build deep analysis
- Logical arguments and critiquing reasoning of others
- Identify evidence and apply critical thinking skills

Reciprocal Teaching

Grades 3-6

- Student led discussion
- Small group reading session
- Teacher releases control to students
- Students rotate through 4 key roles

1. Summarizer
2. Clarifier
3. Predictor
4. Question Generator

Students implementing Reciprocal Teaching

Implementation

Identification

- Utilize data
  - Running records, DRA's, previous year's data, STAR results
- Grouping (pending current students)
  - Homogeneous Grouping: group based on similar, independent reading levels
  - Heterogeneous Grouping: group based on behavior, communication skills, skill level
- Do **not** exceed 4 students per group

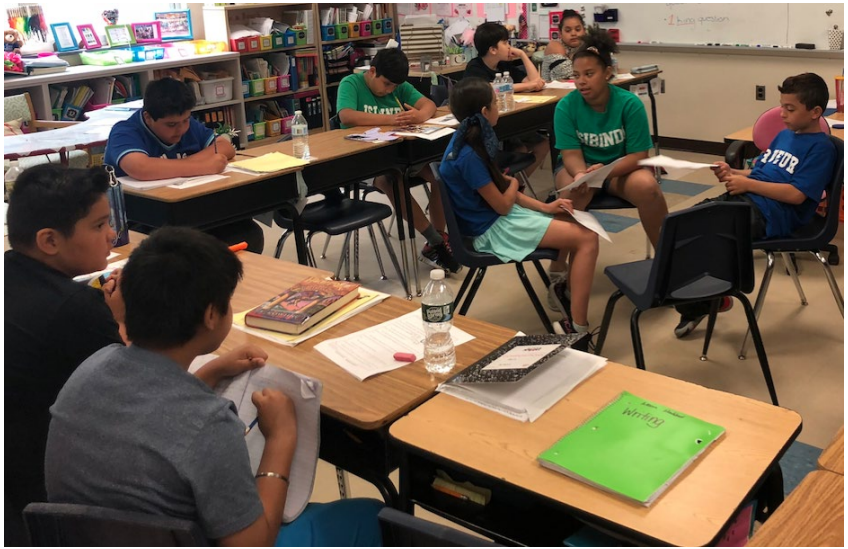
Implementation Cont.

Functionality

- Daily Rotation: students are rotated each day to work in a new spot
- Flexible Seating: improves focus and interaction among peers (desks are always an option)

Students successfully complete RT while using flexible seating

Accountable Talk: THe process



Fourth graders using accountable talk for the first time! The outer circle observes and records the inner circle.

Communication strategy

Student led discussion

Deeper meaning

Accountable Talk: Discussion Stems

• I have a question about…
• I agree/disagree with…because…
• That reminds me of…
• Could you please clarify what you mean when you say…
• I came to the conclusion…because…

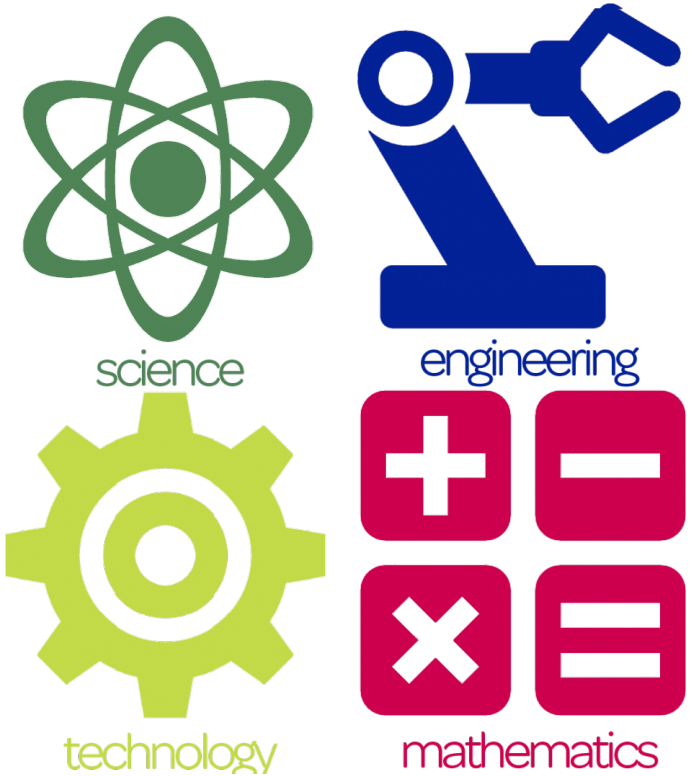
RT: Nonfiction

Benefits:

- Builds vocabulary
- Cross-curricular instruction
- Strengthens knowledge and exposure

Differences:

- Roles
- Text structure
- Communication



RT: Nonfiction Grouping

NonFiction Group Video

- Heterogeneous Grouping
  - Student with special needs
  - English Language Learner
- Pre-reading discussion
- Clips of RT discussion without student read aloud

RT: Nonfiction In Action

Skills to Notice

- Activating prior knowledge
- Identifying and strengthening vocabulary
- Utilizing the text to infer
- Making inferences based on prior knowledge or related texts
- Connections
  - Text to text
  - Text to self

Student Nonfiction R.T. Video

Equity in RT: Technology

Modifications	Benefits to Student
Technology	● Increases student engagement ● Supports comprehension ● Strengthens writing ● Offers differentiation ● Helps students with learning disabilities (ie: Dyslexia)

Equity in RT: Differentiation

Modifications	Benefits to Student
Differentiation	● Strengthens fluency ● Removes stress of reading ● Allows for continual growth ● Challenges higher learners ● Fosters stronger discussions ● Supports higher-order thinking

Equity in RT: Outcome

Modifications	Benefits to Student
Expectations	● Builds confidence ● All students are successful ● Supports the remedial learners ● Pushes the advanced learners

Reciprocal Teaching: Assessment

How to Assess

- Discussion rubrics
  - Individual
  - Group
- Notebook rubrics
- Student self-assessments
- Contribution rubric
  - Self-evaluation
  - Video recording feedback

Reciprocal Teaching: Data

Teacher's Roles
★ Assess
★ Monitor
★ Record

- Future grouping
- Student grading
- Individual feedback
- Self-assessing
- Identify abilities

Socratic Seminars in Language Arts
Grades 7 & 8

- Student-led discussion
- Open-ended questions
- Formal debate based on text
- No designated roles

7th-8th Grade Prerequisites

- Students have mastered all four RT roles
- Accountable Talk
- Higher-order thinking

Preparation

The Day Before Seminar

- Students read 2-3 articles
  - independently
- Annotate text
- Create higher-order questions
- Research if needed

An example of annotations

Classroom Layout

Inside Circle

- 4 heterogeneous groups
- Hot Seat
- Student-led discussion

Outside Circle

- Observe/ take notes
- Offer feedback
- Jump into the hot seat if "burning question"

Inside circle layout

Teacher’s Role

- Facilitate safe environment for discussion
- Track each student using observation checklist
- Provide verbal feedback to inner circle
- Assure the inner circle meets all expectations

Equity in Socratic Seminars

Differentiation

- Text provided in alternate language
- Diverse text levels
- Student Translators
- Questions Stems
- Guided Reading

Equity in Socratic Seminars (Cont.)

Reluctant Speakers

- Whiteboards
- Goal Setting

ELA Socratic Seminar Video

Student Socratic Seminar Example Video

ELA BREAKOUT

Elementary/Intermediate: Grades 3-6
Activity:
Reciprocal Teaching
Presenters: Danielle & Dana

Secondary: Grades 7-12
Activity:
Socratic Seminar
Presenter: Lisa

Mathematics Overview Of Best Practices

Focus: Modeling & Reasoning

Grades 1 & 2 → Numberless Word Problems

Grades 3 -6 → Problem Based Instruction

Grades 6 -8 → Socratic Seminar in Mathematics

Numberless Word Problems

Benefits

- Opportunity to understand the context of a word problem without worrying about the numbers or operation
- Engage in accountable talk vs. doing something with the numbers
- Differentiate for all learners

Numberless Word Problems

1. Read the first part of the word problem together
2. Question to lead to conversation
3. Enter number
4. Questions to lead to conversation
5. Enter number
6. Questions to lead to conversation
7. Use mathematical strategies to solve.

Numberless Word Problems

Questions that the teacher should ask

- What do you know?
- What numbers would be reasonable?
- What does the new information tell you?
- What operation does this situation make you think of?
- What questions could you ask?

Numberless word problems

Sample Word Problem

Mary had ____ pencils. She lost some of her pencils. Now Mary has ____ pencils. How many pencils did Mary lose?

Differentiation (Sample after numbers are entered)

Remedial - 10, 5 (Base Ten Frame)
On-Level- 13, 8 (2 digit - 1 digit)
Enrichment- 23, 12 (2 digit - 2 digit)

Equity in Numberless Word problems

- Enhances social interaction and communication skills
- Inclusion
- Time management
- Opportunity for kinesthetic learners to thrive
- Conceptual, visual, and concrete
- Builds confidence at an early age
- Teaches them to ask questions
- Learn how to use “failure” as a tool

Problem - Based Instruction Grades 3-6

- Instructional strategy
- Team based environment
- Resolve complex problems in realistic situations
- Ensures high quality learning outcomes
- Builds communication, critical thinking, conflict management, and mathematical thinking

Problem - Based Instruction: Benefits

- Opportunity for higher-order thinking
- Exposure for ALL learners
- Increased engagement
- Strengthens confidence
- Make mathematical connections among peers & build vocabulary
- Enhances communication skills

Equity in PBI

How does it benefit ALL learners?

- Every task can be modified for your students' needs
- Meet the needs of visual, auditory, and kinesthetic learners
- Learn through exploration and communication with peers
- Help to improve social skills and build peer relationships
- Questions are a powerful tool
- Failure is a stepping stone to success

Problem - Based Instruction: Structure

Before

1. Quickly review **learned** skills needed for the day's task
2. Clarify any questions

During

1. Present task & release control - let students explore the task at hand & **listen**
2. Questioning your learners is **key**
    a. Do **not** give answers
    b. Guide through questioning (pleasantly surprising results)

After

1. Purposefully choose groups to share their findings
    a. Identify groups that have different explanations or processes
2. Clarify any misunderstandings
3. Begin differentiated math groups

Socratic Seminars in Mathematics Grades 6-8

What is a Socratic seminar in mathematics?

- Collaborative mathematics discussion
- Apply math strategies, recall math vocabulary, and make connections to solve the problem at hand

What are the benefits?

- Promotes reasoning skills
- Application of math strategies and concepts
- Higher order thinking
- Increases success with challenging tasks through collaboration and accountable talk

Socratic Seminars in Mathematics

When can a Socratic seminar be used?

- Introductory lesson to allow students to engage in complex material

- Culminating activity

Classroom Layout

- Four heterogeneous groups
- Two inside circles of students surrounded by two outside circles of students
- Two seminars will be conducted at the same time

Classroom setup

Inside Circle

Expectations

- Use mathematical vocabulary
- Demonstrate a deep understanding of the concept
- Offer questions to peers
- Apply prior knowledge of concepts and makes a connection

Accountable talk
for Socratic Seminars in Mathematics

- I agree/disagree with ... because...
- Your strategy makes me think of ...
- I would like to add to ..
- I can prove my answer by ...
- Is there another way to solve that problem?
- Why did you choose that operation?

Outside Circle Expectations

- Listen attentively to the ideas and opinions of others
- Record information comparing the collective response of the inside circle
- Complete the reflection form
- Jump in the hot Seat

Teachers Role

- Foster an environment conducive to mathematics discussion
- Observe and record student responses
- Offer verbal feedback to the inner circle (only when necessary)
- Assure both the inner and outer circle meet expectations

Choosing a Socratic Seminar Question

Choose a question that…

- Promotes and encourages discussion
- Has multiple entry points
- Incorporates complex and higher order thinking
- Incorporates the topic(s) you would like to focus on

Differentiation

- Multiple entry point questions
- Question provided in alternate languages
- Student translators
- Question stems

Equity in Math Socratic Seminars

- Allows for all students to engage in higher order thinking through collaboration
- Builds peer support and social relationships
- Provides equal opportunity for all students to contribute to strong class discussion with peer and/or teacher support

Math BREAKOUT

Elementary: Grades K-2
Numberless Word Problem
Presenter: Dana

Intermediate: Grades 3-6
Problem Based Instruction
Presenter: Danielle

Secondary: Grades 7-12
Activity: **Socratic Seminar**
Presenter: Katerina