

Reading Comprehension across the curriculum

- We read all through the day
- Reading is more than decoding and fluency

- Reading comprehension is one of the biggest challenges for children in the K-12 curriculum
- Reading scores tend to decline in schools that serve adolescents as the emphasis shifts from fluency and factual understanding to...
High-level skills like reading comprehension requiring inferential thinking.

What should we all know about reading comprehension.

- Factors within the reader, within the material, and within the context all influence the reader's level of understanding or comprehension of a text. The more a student knows about a topic before reading, the more information the student will take from the situation. Personal reasons for reading, individual motivation and purpose, will also influence comprehension, as will the context where one reads and the requirements of what must be done when the reading is finished. In addition, text characteristics such as page layout, density of ideas, vocabulary level, and language style also will shape a student's understanding. Effective readers learn to negotiate the complex interactions among these various elements to arrive at comprehension.

What should we all know about reading comprehension.

- Teachers need to provide explicit purposeful instruction in research-based strategies. Instruction builds on what is known from studies in cognition, vocabulary, and language development.

What should we all know about reading comprehension.

- Effective Teachers:
 - Model Strategies and Guide Students through behaviors used by expert readers.
 - Help students identify what learning strategies work best for them and when it is appropriate to make a choice among the strategies they know.
 - Assist students in applying strategies to different text types, including narration and exposition.
 - Guide students to become independent learners who are able to assess the requirements of the learning situation, choose the appropriate strategy for the setting and purpose, and monitor their success in processing the information and accomplishing their goals.

What should we all know about reading comprehension.

- Among the comprehension processes that need to be taught in all classrooms are the following:
 - Thinking aloud
 - Predicting
 - Attending to text structure
 - Constructing visual representations of ideas
 - Making text-to-self, text-to-text, and text-to-world connections
 - Generating questions
 - Making inferences
 - Determining importance or significance
 - Synthesizing and summarizing

Research Base and Rationale

- Key reading comprehension strategies for middle/secondary:

activation of prior knowledge	Connector
deciding what's important in a text, synthesizing information, paraphrasing main idea	Passage Master
self-monitoring comprehension, repair faulty comprehension, ask yourself questions	Questioner
analyze text for unknown vocabulary, use context clues	Vocabulary Enricher
visualize textual information, use graphics to represent thinking	Illustrator

Robb (2000)

THE RELATIONSHIP AMONG TIME SPENT READING,
READING ACHIEVEMENT, AND VOCABULARY
ACQUISITION OF FIFTH GRADERS

Percentile Rank on Standardized Reading Test	Minutes of Independent Reading Outside of School Per Day	Estimated Exposure to the Number of Words Per Year
98	90.7	4,733,000
90	40.4	2,357,000
70	21.7	1,168,000
50	12.9	601,000
20	3.1	134,000
10	1.6	51,000

Research Base and Rationale

- Key reading comprehension strategies for middle/secondary:

[Reading Strategy Checklist](#)



Effective Inclusive Practices ...
What they are and what they are not.

Effective Inclusive Practices

What they are ...

- Practices that promote membership in the classroom
- Practices that are evidence-based
- Practices that involve team planning
- Practices that involve effective use of co-teaching and/or paraprofessional support
- Practices that have measurable outcomes for student performance

Effective Inclusive Practices

What they are not ...

- Practices that assume that "being there is enough"
- Practices based on activities rather than outcomes
- Practices that fail to use co-teaching and paraprofessional support in an effective and meaningful way
- Practices without research support

Rationale for Effective Strategies in Inclusive Classrooms

- Accountability and high standards (NCLB, 2001)
- Access to general curriculum (IDEA, 2004)
- Active engagement correlated with and functionally related to student achievement (Heward, 1994; Rosenshine & Bernliner, 1978)
- Active engagement correlated with and functionally related to reduction in off-task and disruptive behavior (Heward, 1994)

A Model of Effective Inclusion

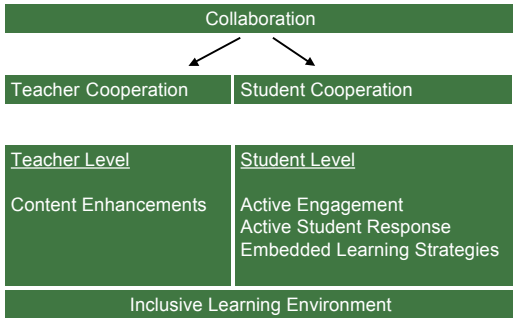
Includes:

- a philosophy or spirit of inclusiveness
- and the practical strategies to support that philosophy

Successful Inclusion builds upon a foundation of community.

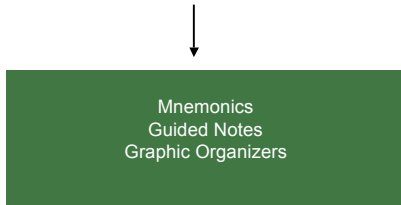
- Students develop a sense of membership, teachers establish a positive, inclusive learning environment

A Model of Effective Inclusion

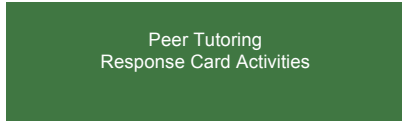


A Model of Effective Inclusion

Teacher Level: Content Enhancements

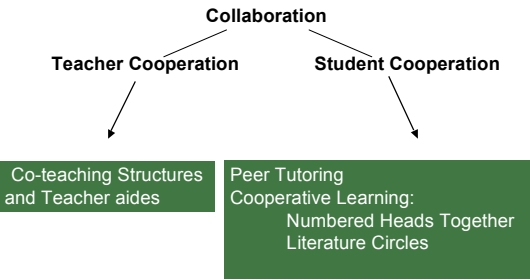


A Model of Effective Inclusion



Student Level: Active Engagement

A Model of Effective Inclusion



Co-teaching Structures and Teacher aides

Peer Tutoring
Cooperative Learning:
Numbered Heads Together
Literature Circles

“Teach More in Less Time”

Providing instruction with high levels of active student participation is important for all learners, but it is particularly important for students with disabilities: "for children who are behind to catch up, they simply must be taught more in less time. If the teacher doesn't attempt to teach more in less time. . . the gap in general knowledge between a typically developing student and a student with a disability becomes even greater " (Kame'enui & Simmons, 1990, p. 11).

Active Student Response

- Active Student Response (ASR) - an observable, measurable, curriculum-related response to teacher-posed questions or instructions.
- Extensive research base demonstrates the relationship between increased ASR and student achievement
- Three easy-to-do strategies that promote ASR
 - (1) Guided Notes
 - (2) Response Cards
 - (3) Peer Tutoring

Heward (1994)

Why use Guided Notes?

Some disadvantages of class lectures

- Content is often disorganized and unevenly presented. Students may have difficulty figuring out what is important
- Students are often passive observers rather than active participants
- Many students with special needs lack effective note taking skills (Hughes & Suritsky, 1994)
 - Discriminating between important and unimportant information
 - Listening/language deficits
 - Motor skill deficits

Guided Notes

Guided notes (GN) - a handout that "guides" students through a lecture, presentation, or demonstration with background information and cues for writing key points.

NAME _____ DATE _____

AZTEC CULTURE

A. THE AZTEC PEOPLE
 Hoebacking farmers _____ who were the strength of the empire.

Average size of the people

- Women averaged _____ ft. 5 inches
- Men averaged _____ ft. 3 inches

B. SOCIETY
 There were sharp divisions between their social classes. Their rules covered many aspects of social life.

Example of a rule - what people of different classes could wear

- The common people would wear a material made from the agave plant
- The higher class could wear _____

Tlax _____

The hairbraid that all men wore

- A long strip of cloth that was draped around the waist, passed between the legs and tied in the front
- They also wore a tunic - a white cloak
- Women wore an ankle-length skirt called a _____

Common people - everyday clothes were white

Noted families

- Dressed as the common people did
- However, the material they wore was made from cotton and their clothes had designs
- The king wore a _____, an ornament in his hair

C. HOUSING
 The common people only had ear rooms

- Partitioned the sleeping area from the cooking area
- Walls were built from _____ and mud
- Roofs were made from reeds and grass

Advantages of Guided Notes

- Students must actively respond to and interact with the lesson's content.
- Because the location and number of key concepts, facts, relationships are highlighted, students are better able to determine if they're "getting it."
- Students produce a standard set of accurate notes for subsequent study.
- Teachers are required to prepare the lesson carefully.
- Teachers are more likely to stay on-task with the lesson.

Research on Guided Notes

Nearly 20 years of empirical research has shown functional relationships between guided notes and increased student achievement ...

- across a wide-range of students (e.g., students with learning disabilities, cognitive disabilities, giftedness and talent, non-disabled students),
- in several settings (i.e., urban and suburban upper elementary through university),
- and in a variety of content areas (e.g., science, social studies, math)

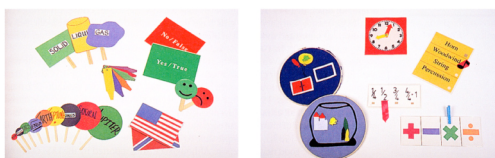
(Austin et al., 2002; Beckley, 1996; Itoi, 2004; Kline, 1986; Lazarus, 1993; Pados, 1989; Sweeny et al., 1999; Wood, 2005).

Response Cards

- Response cards are cards, signs, or items which each student holds up to display his or her answer for the teacher.
- *Write-on response cards* are cards on which students mark or write their own responses for each trial.
 - Examples: Dry-erase boards (particle board), Laminated poster board squares, Individualized chalkboards
- *Preprinted response cards* are a card, or set of cards on which all possible answers are printed.
 - Examples: End punctuation marks, Parts of speech, Arithmetic operations

Heward, Gardner, Cavanaugh, et al (1996)

Examples of Pre-printed Response Cards



Heward, Gardner, Cavanaugh, et al (1996)

Advantages of Write-on Response Cards

- Flexibility of student response (multiple correct answers and creative responses are possible)
- Require a recall-type response, rather than simpler recognition-type discrimination
- Spelling can be incorporated into the lesson
- Students can learn by watching others

Heward, Gardner, Cavanaugh, et al (1996)

Some disadvantages of Write-on Response Cards

- Lower rates of Active Student Response compared to pre-printed response cards because of time needed to write and erase answers
- Error rates may be higher than with pre-printed response cards
- Variations in size and neatness of students' writing can make them difficult to see

Heward, Gardner, Cavanaugh, et al (1996)

Advantages of Pre-printed Response Cards

- Provide the highest rates of Active Student Response
- Can build students' repertoires with few errors by beginning with 2 cards and adding more
- Easy for the teacher to see
- Students can learn by watching others

Heward, Gardner, Cavanaugh, et al (1996)

Some disadvantages of Pre-printed Response Cards

- Limited to the responses printed on the cards
- Limited to recognition tasks only
- Not appropriate for lessons with too many different concepts/answers

Heward, Gardner, Cavanaugh, et al (1996)

Managing Response Cards Activities

- Model several learning trials and provide students with practice on how to use them.
- Maintain a lively pace during the lesson
- Provide clear and consistent cues when students are to hold up and put down their cards.
- Provide feedback based upon the "majority response."
- Don't let students think it's cheating to look at a classmates' response cards.

Heward, Gardner, Cavanaugh, et al (1996)

Research on Response Cards

Nearly 20 years of empirical research has shown functional relationships between response cards and increased student achievement ...

- across a wide-range of students (e.g., students with learning disabilities, cognitive disabilities, non-disabled students),
- in several settings (i.e., urban and suburban upper elementary through university),
- and in a variety of content areas (e.g., language arts, science, health, social studies, math)

(Christle & Schuster, 2003; Davis & O'Neill, 2004; Gardner, Heward, & Grossi, 1994; Lambert, Cartledge, Heward, & Lo, 2006).

Cooperative Learning

- Supporting struggling learners with peer support
- Criticisms of cooperative learning

Cooperative Learning

- Need for individual accountability
- Group reward and interdependence
- Students should perform roles that will make them successful

Numbered Heads Together

- Numbered Heads Together is a cooperative learning activity that requires participation from all group members

Steps in Numbered Heads Together

1. Students form groups of 3 or 4
2. Each student selects or is assigned a number
3. Teacher asks a question/presents a problem
4. Students discuss, write, solve problem
5. Teacher rolls a die or draws a number
6. Teacher calls on selected students to state their answers

Kagan, (1994)

Literature Circles

- Collaboration
- Developing Community

What are Literature Circles?

Traditionally....

- Like book clubs.
- They give students a chance to help each other with reading.
- They give students a chance to talk with other kids in class about what they read.



Literature Circles

Fiction Texts

- Questioner
- Clarifier
- Summarizer
- Predictor
- Artist



Cooperative Teaching and Learning

Co-teaching



Cooperative Teaching

Co-Teaching is an educational approach in which two teachers work in a coactive and coordinated fashion to jointly teach academically and behaviorally heterogeneous groups of students in an integrated setting.

(Bauwens, Hourcade, & Friend, 1989)

Benefits of Co-Teaching

- Improved teacher-student ratio
- Increases job satisfaction
- Reduces stress and burnout
- Decreases problems with generalization across settings
- Provides the expertise of two professionals in planning and problem-solving
- Provides students with a model of collaboration
- Allows students to work with teachers with different styles
- Increases the potential for students who are having difficulty to receive assistance

Barriers to Effective Co-Teaching

Conceptual

Historical separation between general and special education

Isolation of teachers within the present education system

Differences in training and levels of expertise concerning:

*instructional methodologies

*strategies

*legal procedures and processes

*experimental and clinical knowledge

Faulty assumptions, feeling of intimidation, and issues of credibility.

Pragmatic Barriers

- Insufficient time and flexibility within the school environment
- Lack of leadership and support a the state, local, and building levels
- Distinctions in language and turf
- Participant reluctance to participate or follow-through

One Teacher Lead, One Support

- lead teacher
- support teacher
- little planning



Cook & Friend, 1993

Station Teaching

- divide content
- share but separate responsibilities

After the video

- **3 teachers**
- **Use of a paraprofessional, teaching aid or volunteer**
- **Smaller groups**

Parallel Teaching

- same content
- deliver instruction to half the class
- joint planning

After the Video

- **Looks similar to station teaching**
- **More preparation time is needed**
- **Keep students backs to each other**
- **Teachers should face each other**

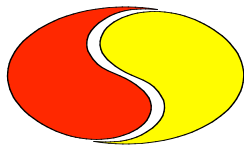
Alternative Teaching

- one large group, one small
- small group pre-teaches, reinforces or re-teaches large group
- joint planning

After the video

- Addresses a wide range of learners
- Can combine with other types
- Use for enrichment, remediation or pre-teaching

Team Teaching



- shared instruction
- coordinated activities in one lesson
- mutual trust and commitment
- co-planning

After the video

- Schedule special education students first
- Use cooperative learning
- Assign students' roles for success
- Mutual trust
- Equal knowledge of the content
- *Planning time is needed*
