

Support for Explicit Instruction

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WEBINAR FOR EXPLICIT INSTRUCTION TOT PARTICIPANTS

MAY 2015

ANITA L. ARCHER, PHD

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Explicit Instruction Hattie & Yates, 2014

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IES Practice Guides

- **What Works Clearing House**
- **Institute of Education Science**

- These guides:
 - synthesize the best available research
 - share practices that are supported by evidence

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IES Practice Guide

Improving Reading Comprehension in Kindergarten Through 3rd Grade

- **Recommendation 1.** Teach students how to use reading comprehension strategies.

- **Recommendation 2.** Teach students to identify and use the text's organizational structure to comprehend, learn, and remember content.

- **Recommendation 3.** Guide students through focused, high-quality discussion on the meaning of text.

Improving Reading Comprehension in Kindergarten Through 3rd Grade

- **Recommendation 1. Teach** students how to use reading comprehension strategies.
- **Examples of Effective Reading Comprehension Strategies**
- Students develop and attempt to answer questions about the important ideas in the text while reading, using words such as *where* or *why* to develop their questions.

Recommendation 1. Teach students how to use reading comprehension strategies.

I do it.

Who What

Where When

Why How

- Thomas Alva Edison lit up the world with his invention of the electric light. Without him, the world might still be a dark place. However, the electric light was not his only invention. He also invented the phonograph, the motion picture camera, and over 1,200 other things. About every two weeks Edison created something new.

Recommendation 1. Teach students how to use reading comprehension strategies.

We do it.

Who What

Where When

Why How

Thomas A. Edison was born in Milan, Ohio, on February 11, 1847. His family moved to Port Huron, Michigan, when he was seven years old. Surprisingly, he attended school for only two months. His mother, a former teacher, taught him a few things, but Edison was mostly self-educated. His natural curiosity led him to start experimenting at a young age with electrical and mechanical items at home.

Recommendation 1. Teach students how to use reading comprehension strategies.

You do it.

Who What

Where When

Why How

When he was 12 years old, he got his first job. He became a newsboy on a train that ran between Port Huron and Detroit. He set up a laboratory in a baggage car of the train so that he could continue his experiments in his spare time. Unfortunately, Edison's first job did not end well. He was fired when he accidentally set fire to the floor of the baggage car.

IES Practice Guide

Teaching Math to Young Children

Recommendation 1. Teach number and operations using a developmental progression.

Recommendation 2. Teach geometry, patterns, measurement, and data analysis using a developmental progression.

Recommendation 3. Use **progress monitoring** to ensure that math instruction builds on what each child knows.

Recommendation 1. Teach number and operations using a developmental progression.

Examples of a specific developmental progression for number knowledge
Developmental Progression

Subitizing (small-number recognition)	Subitizing refers to a child's ability to immediately recognize the total number of items in a collection and label it with an appropriate number word. When children are presented with many different examples of a quantity (e.g., two eyes, two hands, two socks, two shoes, two cars) labeled with the same number word, as well as <u>non-examples</u> labeled with other number words (e.g., three cars), children construct precise concepts of one, two, and three.
Meaningful object counting	A child is ready for the next step when, for example, he or she is able to see one, two, or three stickers and immediately—without counting—state the correct number of stickers. Meaningful object counting is counting in a one-to-one fashion and recognizing that the last word used while counting is the same as the total (this is called the <u>cardinality principle</u>). A child is ready for the next step when, for example, if given five blocks and asked, "How many?" he or she counts by pointing and assigning one number to each block: "One, two, three, four, five," and recognizes that the total is "five."

Recommendation 1. Teach number and operations using a developmental progression.

I do it.

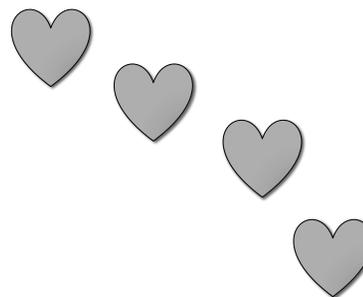
(Counting objects to 4)



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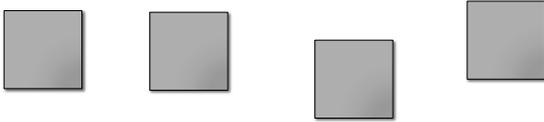
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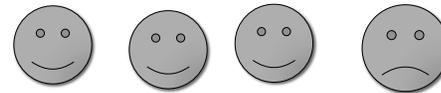
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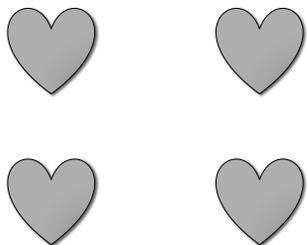
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(Counting objects to 4)



IES Practice Guide
***Improving Adolescent Literacy: Effective
 Classroom and Intervention Practices***

- **Recommendation 1.** Provide **explicit vocabulary instruction**.
- **Recommendation 2.** Provide **direct and explicit comprehension strategy instruction**.
- **Recommendation 3.** Provide opportunities for extended discussion of text meaning and interpretation.

**Recommendation 1. Provide explicit
 vocabulary instruction.**

Vocabulary Routine

1. Introduce the word.
2. Introduce meaning of word.
3. Illustrate the word with examples (and non-examples).
4. Check understanding.

linear perspective Introduce the term and its meaning.

- parallel lines
- recede in the distance
- appear to get closer together and converge
- creates illusion of depth and distance

linear perspective Provide examples.



linear perspective Provide examples.



linear perspective Check understanding.

How did the artist use linear perspective to create depth and distance?



linear perspective A Street in Venice by Sargent

Check understanding.

How did the artist use linear perspective to create depth and distance?



Recommendation 2. Provide direct and explicit comprehension strategy instruction.

Use direct and explicit instruction for teaching students how to use comprehension strategies. As the lesson begins, it is important for teachers to **tell** students specifically what **strategies** they are going to learn, **tell** them **why it is important** for them to learn the strategies, **model** how to use the strategies by **thinking aloud** with a text, provide **guided practice** with feedback so that students have opportunities to practice using the strategies, provide **independent practice** using the strategies, and discuss with students **when and where** they should apply the strategies when they read and the importance of having the will to use the strategies along with the skill. Even if students know how to use strategies as they read, research demonstrates that they have to make the effort to actually use them when they read on their own.

Recommendation 2. Provide direct and explicit comprehension strategy instruction.

Getting the Gist

1. **Name the who or what the paragraph is about in a brief phrase.**
2. **Identify two or three important details about the topic.**
3. **“Shrink” the paragraph by stating or writing the main idea. (Say it in 10 to 15 words)**

(From Vaughn, et. al. Collaborative Strategic Reading)

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The Republic of Kenya is a country in East Africa. Ethiopia borders Kenya to the north. Kenya is bordered by Somalia to the northeast, Tanzania to the south, Uganda to the west. On the Southeast is the Indian Ocean.

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Kenya, an East African country, is surrounded by three countries and the Indian Ocean.

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Part of their history was a time of problems. At some times, other countries attacked to take over the country. There was much fighting. Kenya was made a British colony. That meant that Kenyans did not rule their own land. The native people of Kenya believed in independence. They did not want to be a colony. It took years, but they got their land back. Kenya became independent in 1963, and the Kenyan people declared not only their independence but formed a country. They took the name Kenya as the name of their country.

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Kenya, once a British colony, became an independent country in 1963.

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We do it.

There are different groups of people in Kenya. It was not one country before it became a colony. Different groups lived in different places and had their own languages and ways of living. After independence, they joined together in one country, but they still have differences. There are different culture groups within Kenya. While they are from the same region they have different histories. Each has its own traditions. Traditions should be respected. While most people in Kenya speak and write in English because of the colonial years, each culture has its own language and history. There still are problems having a united country.

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Different groups with different languages, cultures, and histories cause problems in Kenya.

IES Practice Guide April 2015
Teaching Strategies for Improving Algebra Knowledge in Middle and High School Students

Recommendation 1. Use solved problems to engage students in analyzing algebraic reasoning and strategies. (**worked problems**)

Recommendation 2. Teach students to utilize the structure of algebraic representations.

Recommendation 3. Teach students to intentionally choose from alternative algebraic strategies when solving problems.

Recommendation 1. Use solved problems to engage students in analyzing algebraic reasoning and strategies. (**worked examples**)

Analyzing and discussing solved problems can also help students develop a deeper understanding of the logical processes used to solve algebra problems.⁶ Discussion and the use of incomplete or incorrect solved problems can encourage students to think critically.

Solved problem: An example that shows both the problem and the steps used to reach a solution to the problem. A solved problem can be pulled from student work or curricular materials, or it can be generated by the teacher. A solved problem is also referred to as a "worked example."

Sample solved problem:

Solve for x in this equation: $3^{4x+3} = 81$	$3^{4x+3} = 81$ $3^{4x+3} = 3^4$ $4x + 3 = 4$ $4x = 1$ $x = \frac{1}{4}$
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IES Practice Guide
Organizing Instruction and Study to Improve Student Learning

- **Recommendation 1:** Space learning over time. (Spaced/Distributed practice)
- **Recommendation 2:** Interleave worked example solutions and problem-solving exercises. (Varied Practice)
- **Recommendation 5:** Use quizzing to promote learning. (Retrieval Practice)

Have a Wonderful Summer.

Check out the IES Practice Guides.

http://ies.ed.gov/ncee/wwc/publications_reviews.aspx