

THE MAGIC IS IN THE INSTRUCTION

Effective and Efficient
Teaching of Facts,
Strategies, and Concepts

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Archer, A., & Hughes, C. (2011). *Explicit Instruction: Effective and Efficient Teaching*. NY: Guilford Publications.

www.explicitinstruction.org

Same Goal across
Classes, Domains, Tiers, Grade Levels,
Students

Learning

Learning

Learning

Learning

Learning

Learning

Quality Instruction

“The quality of teachers is the single most important factor in the educational system.” William, 2012

Reworded

The quality of TEACHING is the single most important factor in the educational system.

Quality Instruction

Students in 2nd grade

Student 50 th	Teacher 3 years with high performing teacher	Outcome 90 th
50 th	3 years with low-performing teacher	37 th

Sanders and Rivers, 1996

Quality Instruction

Benefits of high teacher quality greater for low performing students than higher performing students.

Slater, Davis, and Burgess, 2008

Reworded

Benefits of quality TEACHING greater for low performing students than higher performing students.

Quality Instruction

“The quality of an education system cannot exceed the quality of its teachers.”

Barber and Mourshed, 2007

Reworded

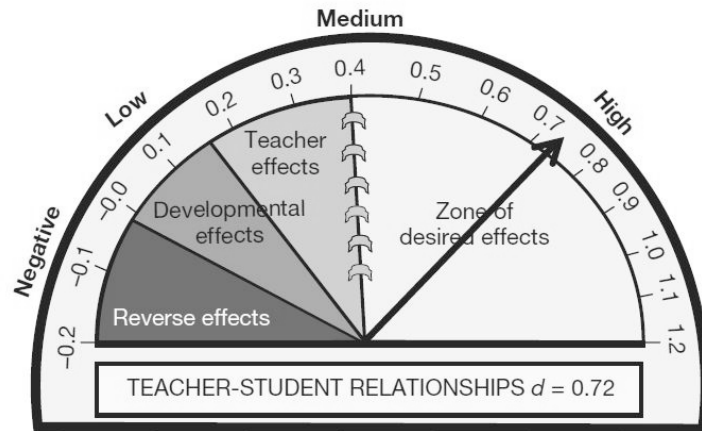
The quality of an education system cannot exceed the quality of the TEACHING.

Explicit Instruction and Discovery

Not an either or - but a when.

Explicit Instruction	Discovery
Little or no background knowledge	A great deal of background knowledge in the domain
History of difficulty or failure	History of success

John Hattie (2016)



Design and Delivery of Instruction

John Hattie, 2016

Time on Task	0.62
Quality Instruction	1.00
Quantity Instruction	0.84
Direct/Explicit Instruction	0.59
Lesson Goal/Learning Intention	0.50
Teacher Clarity	0.75
Questioning	0.48
Classroom Discussion	0.82
Feedback	0.73
Mastery Learning	0.57
Scaffolding	0.53
Retrieval Practice	0.50
Spaced vs Mass Practice	0.60

What we teach:

1. Facts and information (What we know)
2. Skills and Strategies (How to do it)
3. Vocabulary and Concepts (What it is)

FACTS AND KNOWLEDGE

Facts and Knowledge - Why

- Background knowledge of text has a major impact on whether or not a reader can comprehend text.
Anderson & Pearson, 1984; Bransford, Stein, & Shelton, 1984; Wilson & Anderson, 1986
- Across grades and reading ability, prior knowledge of subject area and key vocabulary results in higher scores on reading comprehension measures.
Langer, 1984; Long, Winograd, & Bridget, 1989; Stevens, 1980

Explicit Instruction of Facts/Information

Explicit Instruction of Facts/Information

Attend
Intend
Rehearse
Retrieve

(organize)

Land – Antarctica



- Twice the size of Australia
- South Pole in Antarctica

Land – Antarctica



- ice covers all but 2.4% of land
- 90% of ice found on the earth is in Antarctica

Climate – Antarctica



- coldest place on earth
- windiest place on earth

Climate – Antarctica



precipitation – driest place on earth

desert – Antarctica is considered a desert because it receives very little rain or snow.

Antarctica - Plants



- plants only in ice-free regions
- lichens and moss

animals – Antarctica



Seals



SKILLS AND STRATEGIES

Provide Systematic Instruction

Explicit Instruction of Skills/Strategies

Demonstration	I do it.	<i>My turn.</i>
Guided Practice	We do it.	<i>Let's do this together.</i>
Check Understanding	You do it.	<i>Your turn.</i>

I do it.



We do it.



You do it.



Comprehension Strategy

Paragraph Shrinking

1. **Name the who or what.**
(The main person, animal, or thing.)
2. **Tell the most important thing about the who or what.**
3. **Say the main idea in 10 words or less.**

(Optional: Record your main idea sentence.)

(From the PALS program by Fuchs, Mathes, and Fuchs)

Provide Systematic Instruction

Model (I do it.) *"My Turn."*

- **Show**
 - Proceed step-by-step.
 - Exaggerate the steps.
- **Tell**
 - Tell students what you are doing.
 - Tell students what you are thinking.
- **Gain Responses**
 - What they already know.
 - Repeating what you tell them.

Strategy – I do it.

The Coldest Continent

Antarctica is not like any other continent. It is as far south as you can go on earth. The South Pole is found there. Ice covers the whole land. In some places the ice is almost three miles thick. Beneath the ice are mountains and valleys.

Provide Systematic

- **Prompt (We do it.)** *“Let’s do ---- together.”*
- Prompt by doing behavior at the **same time**.

OR

- Prompt **verbally**.
 - Guide or lead students through the strategy.
 - Step - do - Step - do - Step - do - Step - do
 - Gradually fade your prompt.

Strategy – We do it.

The weather in Antarctica is harsh. It is the coldest place on Earth. The temperature does not get above freezing. It is also the windiest place in the world.

Provide Systematic Instruction

Check for understanding. (You do it.)

- Verify students’ understanding before independent work is given.
- Carefully monitor students’ responses.
- Continue until students are consistently accurate.

Strategy – You do it.

Not many living things are found in Antarctica. People go there to study for only a short time. Very few animals can live there. Yet many animals live on nearby islands. Seals and penguins swim in the ocean waters. They build nests on the land. Some birds spend their summers in Antarctica. But most of the continent is just ice, snow, and cold air.

VOCABULARY AND CONCEPTS

Explicit Vocabulary Instruction

Vocabulary is related to reading comprehension.

“Indeed, one of the most enduring findings in reading research is the extent to which students’ vocabulary knowledge relates to their reading comprehension.”

(Osborn & Hiebert, 2004)

Explicit Vocabulary Instruction

- “direct vocabulary instruction has an impressive track record of improving students’ background knowledge and comprehension of academic content.”

(Marzano, 2001, p. 69)

- .97 effect size for direct teaching of vocabulary related to content attainment

(Stahl & Fairbanks, 1986)

- Hattie Effect Size for Vocabulary Programs 0.67

Vocabulary Instructional Routine

Step 1: Introduce the word’s pronunciation.

Step 2: Introduce the word’s meaning.

Step 3: Illustrate the word with examples.

(and non-examples when helpful)

Step 4: Check students’ understanding.

Vocabulary Routine

Step 1. Introduce the word's pronunciation.

- a) Display the word.
- b) Read the word and have the students repeat the word.
If the word is difficult to pronounce or unfamiliar have the students repeat the word a number of times or say the parts of the word.

Introduce the word with me.

This word is protect. What word? *protect*
Tap and say the parts of the word? *pro tect*
Again. *pro tect*

Vocabulary Routine

Step 2. Introduce the word's meaning.

- a) Tell students the explanation. OR
- b) Have them read the explanation with you.

Present the definition with me.

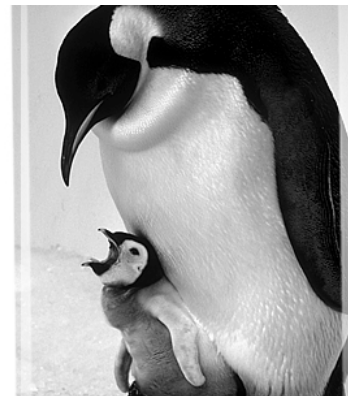
To **protect** someone or something means to prevent them from being harmed or damaged. So when we keep someone from being harmed or damaged we _____. *Protect them.*

Vocabulary Routine

Step 3. Illustrate the word with examples.

- a. Concrete examples
- b. Visual examples
- c. Verbal examples

Vocabulary Routine



This father penguin will **protect** his chick from harm.

Vocabulary Routine



This special car seat will **protect** the baby. If there is an accident, he is less likely to be hurt.

Vocabulary Routine

Step 3. Illustrate the word with examples.

- a) Concrete examples
- b) Visual examples
- c) Verbal examples

Present the verbal examples with me.

The father penguin takes care of the egg after it is laid. He **protects** the egg.

Human parents try to **protect** their children.

Vocabulary Routine

Step 4. Check students' understanding. Option #1. Ask deep processing questions.

Check students' understanding with me.

What are some ways that human parents can **protect** toddlers at a park?

Begin by saying:

At a park, parents can protect toddlers by.....

Vocabulary Routine

Step 4. Check students' understanding. Option #2. Have students discern between examples and non-examples.

Check students' understanding with me.

Tell me **protect** or **not protect**.

A parent carefully watches his toddler at the park. **protect**

A parent reads a book as his toddler plays in the park.
Looking up occasionally. **not protect**

Vocabulary Routine

Step 4. **Check students' understanding.**
 Option #3. **Have students generate their own examples.**

Check students' understanding with me.

*Make a list of ways that a human parent might **protect** a toddler.*

Before Reading - Vocabulary



protect
 protecting
 protection
 protector

This mother must **protect** her child. She is **protecting** her frightened child. Her child feels safe during the storm because of her mother's **protection**. Her mother is a great **protector**.

Vocabulary Instructional Routine

Step 1: Introduce the word's pronunciation.

Step 2: Introduce the word's meaning.

Step 3: Illustrate the word with examples.
 (and non-examples when helpful)

Step 4: Check students' understanding.

May We Remember

How well we teach = How well they learn

Teach with passion
Manage with compassion