

When it comes to effective instruction, remember to be like Kevin Bacon!!

Part I:
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So why am I hinging my entire opening talk on this guy?

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Assumptions of Effective Instruction

- All students can learn if we teach them carefully.
- The teacher is responsible for student success.
- Generalization or transfer of learning is the most critical stage of learning.

4

Being a teacher sometimes feels like riding a roller coaster!

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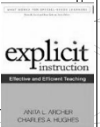
The most effective and efficient way of teaching students is through...

oExplicit Instruction

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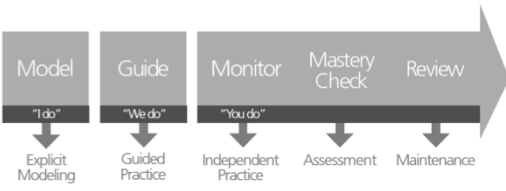
Archer & Hughes (2011) note:

As educators, we all have the same goal: to help our students make the maximum possible academic gains in a positive, respectful environment that promotes their success and nurtures their desire to learn. One of the greatest tools available to us in this pursuit is explicit instruction—instruction that is systematic, direct, engaging, and success oriented...explicit instruction is helpful not only when discovery is impossible, but when discovery may be inaccurate, inadequate, incomplete, or inefficient (p. vii).



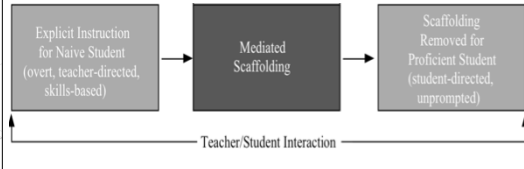
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What is explicit instruction?



Model	Guide	Monitor	Mastery Check	Review
"I do"	"We do"	"You do"		
Explicit Modeling	Guided Practice	Independent Practice	Assessment	Maintenance

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Explicit Instruction for Naive Student (overt, teacher-directed, skills-based) → Mediated Scaffolding → Scaffolding Removed for Proficient Student (student-directed, unprompted)


Teacher/Student Interaction

(Source: Adapted from Carnine, 1994)

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ASK JOHN HATTIE

Why does *"inquiry-based learning"* only have an effect size of .31 when it is an approach to learning that seems to engage students and teachers so readily in the process of learning?

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Three "Do Its"



(Source: Archer & Hughes, 2011)

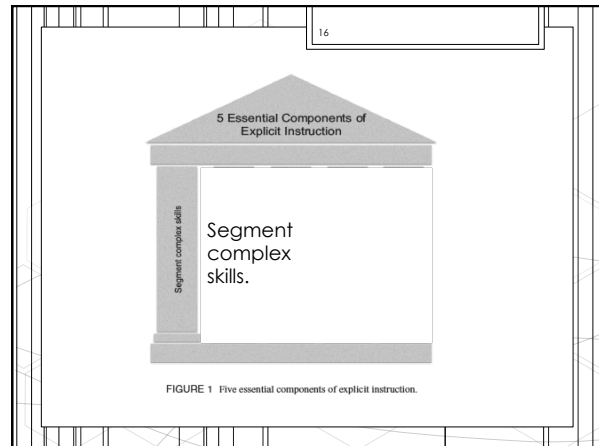
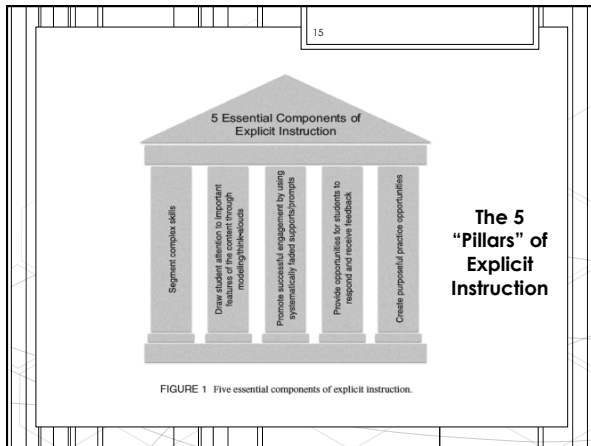
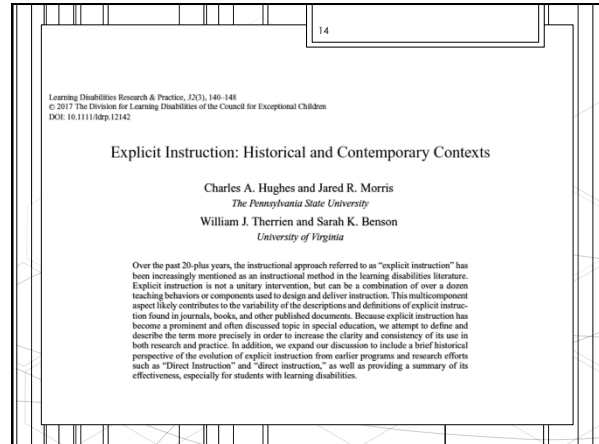
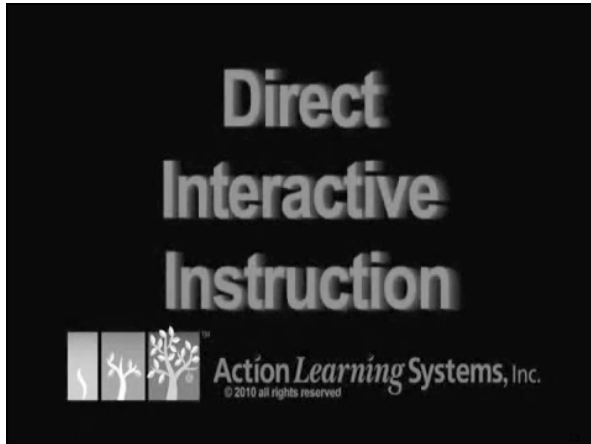
Direct Interactive Instruction

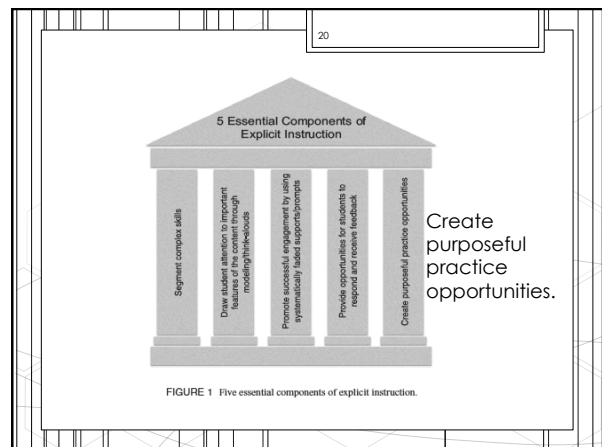
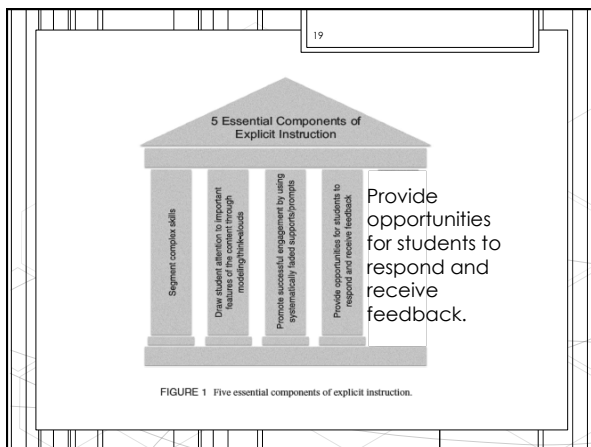
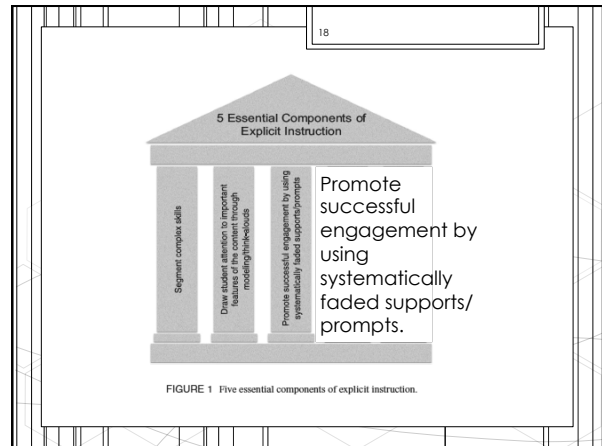
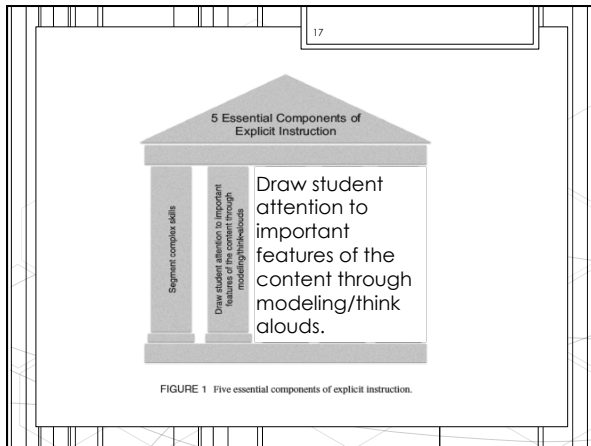


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Let's Analyze Marky Mark's Teaching!





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Which Stairs Would You Take?

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Lesson 15

n	r	s
.	.	.
n	a	t
r	n	d
r	m	d

127 Lesson 15

23

Lesson 15

Activity 8
Sounding Out

(When you go through the list of words, distinguish between the letters n and r before sounding out each word.)
(Touch under the n in an.) What is this letter's sound? /n/

Sound it out. Slide your finger under each letter as students sound out. /aaa/n/

Read it fast. an

Repeat the process with the following words: ant, nat, sat, ram.

Note: *When you come to the word sat, stop!
The next 2 words have no dots. Sound them out the way you always do.
**Touch under the m when you come to ram. Follow the procedure!

What is this letter's sound? /m/
Sound it out. /rrr/aaa/m/

Read it fast. ram

Individual Practice
(Provide individual practice.)
Good reading. What should I do now? Put a check mark on the lesson Mastery Sheet.

an
.
ant
.
nat
.
sat
ram

24


Lesson 15

I am Nat.

I am a ram.

Sam is a rat.


Sam and Nat sat on the mat.



131 Lesson 15


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One question: Would you want your own children to go to this school?



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Classroom demonstration



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For more, go to seattletimes.com/education

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Would you want your own children to go to this school? Why or why not?

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Teachers who follow a script are no different than “trained monkeys.”

Really?

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Seattle Times

- Blog

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If it's so effective, then why is it so controversial?

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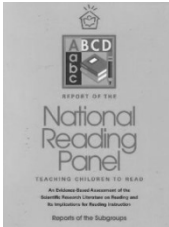
Areas of resistance

- Suitable for only some students
- Just rote learning and only suitable for learning basic skills
- Too teacher directed and encourages students to be passive learners
- Stifles creativity
- Robs students of the “aha” effect
- Is not well liked by students
- Is not the best way to teach—there are better ways

(Source: Adapted from McMullen & Madelaine, 2014)

32 Grades K-3


What about the evidence?



REPORT OF THE
National Reading Panel
TEACHING CHILDREN TO READ
AN EVIDENCE-BASED ASSESSMENT OF THE READING RESEARCH ON EFFECTIVE INSTRUCTIONAL METHODS FOR READING COMPREHENSION
Reports of the Subgroups

Explicit and systematic instruction



- Phonemic awareness
- Phonics
- Fluency
- Vocabulary
- Text comprehension




Put Reading First
TEACHING CHILDREN TO READ
AN EVIDENCE-BASED ASSESSMENT OF THE READING RESEARCH ON EFFECTIVE INSTRUCTIONAL METHODS FOR READING COMPREHENSION
Reports of the Subgroups

33 Grades 4-12



What about the evidence?



Explicit and systematic instruction

- Word study
- Fluency
- Vocabulary
- Comprehension
- Motivation

34 2018 Meta-Analysis

Review of Educational Research
 Month 2018, Vol. 88, No. 3, pp. 1-29
 DOI: 10.1029/00465417751919
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The Effectiveness of Direct Instruction Curricula: A Meta-Analysis of a Half Century of Research

Jean Stockard and Timothy W. Wood
University of Oregon
Cristy Couglin
Safe and Civil Schools
Caitlin Rasplia Khoury
The Children's Clinic, PC

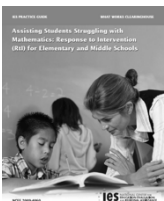
Quantitative mixed models were used to examine literature published from 1960 through 2016 on the effectiveness of Direct Instruction. Analyses were based on 228 studies involving 413 study designs and almost 4,000 effects. Results are reported for the total set and subareas regarding reading, math, language, spelling, and multiple or other academic subjects; ability measures; affective outcomes; teacher and parent views; and single-subject designs. All of the estimated effects were positive and all were statistically significant except results from meta-regressions involving affective outcomes. Characteristics of the publications, methodologies, and sample were not systematically related to effect estimates. Effects showed little decline during maintenance, and effects for academic subjects were greater when students had more exposure to the program. Estimated effects were educationally significant, moderate to large. How using the traditional psychometric benchmarks and their in magnitude to effect sizes that reflect performance gaps between more and less advantaged students.

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And don't get me started about math!

Recommendations

Recommendation	Level of Evidence
1. Review all students to identify those at risk for potential mathematics difficulties and provide interventions to students identified as at risk. <i>Source: 2012-02</i>	Moderate
Tier 2 and 3	
2. Instructional materials for students receiving interventions should focus primarily on in-depth treatment of whole numbers in long division through grade 4 and on rational numbers in general through 8. These materials should be selected by committee. <i>Source: 2012-02</i>	Minimal
3. Instruction during the intervention should be explicit and systematic. This includes providing models of problem-solving, verbalization of thought processes, guided practice, corrective feedback, and frequent opportunity to solve. <i>Source: 2012-02</i>	Strong
4. Intervention should include instruction on solving word problems that is based on common modeling structures. <i>Source: 2012-02</i>	Strong
5. Intervention materials should include opportunities for students to work with visual representations of mathematical ideas and interventions should be preferred in the use of visual representations of mathematical ideas. <i>Source: 2012-02</i>	Moderate
6. Interventions at all grade levels should devote about 10 minutes to each session to building fluency of basic arithmetic facts. <i>Source: 2012-02</i>	Moderate
7. Monitor the progress of students receiving supplemental instruction and other students who are at risk. <i>Source: 2012-02</i>	Minimal
8. Include motivational strategies in Tier 2 and Tier 3 interventions. <i>Source: 2012-02</i>	Minimal





Consistent positive effects on performance with word problems and computation using clear modeling, think alouds, practice with extensive feedback.

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or science...!

INTERNATIONAL JOURNAL OF SCIENCE EDUCATION, 2018
<https://doi.org/10.1080/09500693.2018.1428777>

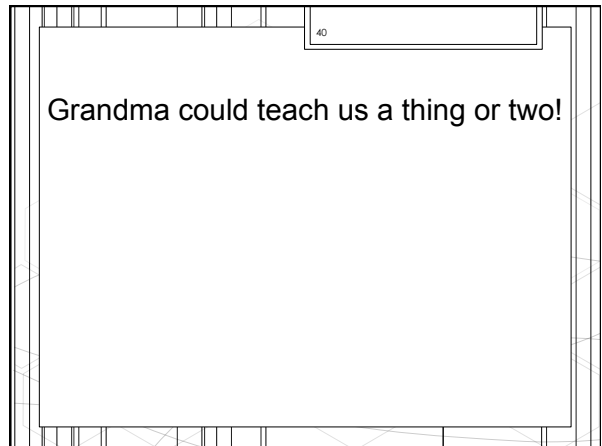
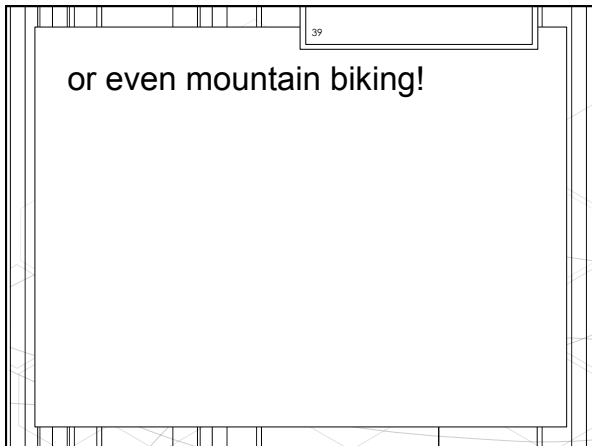
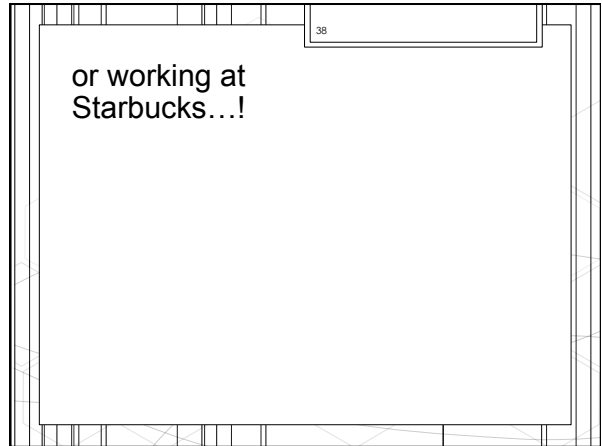
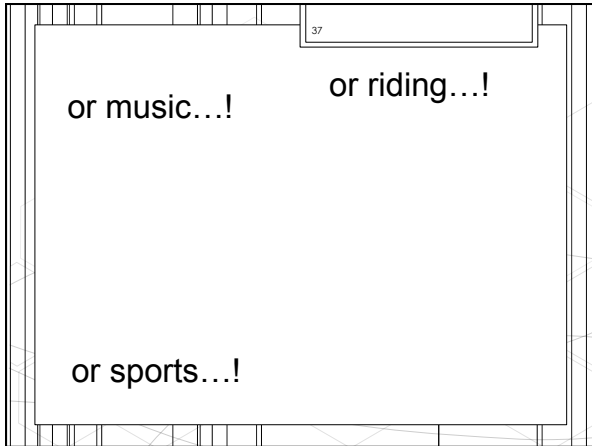

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 Check for updates

Effects of explicit instruction on the acquisition of students' science inquiry skills in grades 5 and 6 of primary education

P. M. Kruit ^a, R. J. Oostdam ^{a,b}, E. van den Berg ^a and J. A. Schuitema ^b

^aCentre for Applied Research in Education, Amsterdam University of Applied Sciences, Amsterdam, Netherlands; ^bResearch Institute of Child Development and Education, University of Amsterdam, Amsterdam, Netherlands



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Let's Review Before Visiting with Kevin Bacon

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Assumptions of Effective Instruction

- All students can learn if we teach them carefully.
- The teacher is responsible for student success.
- Generalization or transfer of learning is the most critical stage of learning.

43

1. Segment complex skills.
2. Draw student attention to important features of the content through modeling/think alouds.
3. Promote successful engagement by using systematically faded supports/prompts.
4. Provide opportunities for students to respond and receive feedback.
5. Create purposeful practice opportunities.




FIGURE 1 The essential components of effective instruction


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Did Kevin...

1. Segment complex skills?
2. Draw student attention to important features of the content through modeling/think alouds?
3. Promote successful engagement by using systematically faded supports/prompts?
4. Provide opportunities for students to respond and receive feedback?
5. Create purposeful practice opportunities?



FOCUS 1: COLLABORATION & COMMUNICATION

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We tend to get “hammered” on the apparent lack of generalization, transfer of learning, and creativity when explicit instruction is used.

See what you think!

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Footloose

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Points to Ponder

