



Writing in Content Areas

Understanding Content

Mike Barney
Riverside County Office of Education
Indio, CA


Video Notes

U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Video Notes Directions


- This guide supports the video presentation and provides you a copy of the PowerPoint slides used in the program. There are multiple segment breaks in the video that are included to allow time for you to process the information you have seen and heard.
- The slides that are associated with the segment breaks have reflection questions to consider during the interim period.
- It is advisable to print out all of the supplemental files for this program as resources to utilize during and after viewing.
- The follow-up activities should be completed and submitted to your professional development director for possible credit



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

What drives my instruction?


- What data do you use to determine what you are going to teach tomorrow and that guarantees you are teaching the content your students need to understand the current concept(s)?
 - Note-taking
 - Short answer
 - Summary of ideas taught



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

The data suggest that text comprehension is enhanced when readers actively relate the ideas represented in print to their own knowledge and experiences and construct mental representations in memory.


National Institute of Child Health and Human Development, 2000.
Report of the National Reading Panel (NRP). U.S. Department of Health and Human Services,
Public Health Service, National Institutes of Health,
NIH Pub. No. 00-4768. Washington, DC:
U.S. Government Printing Office.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Why?

- Only 1/3 of the students are proficient writers
 - Students need to write more
 - Students need to become fluent writers
- 90/90/90 schools require written responses
 - Use short paragraph assignments




U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Why?

- Only 1/3 of the students are proficient writers
 - Students need to write more
 - Students need to become fluent writers
- 90/90/90 schools require written responses
 - Use short paragraph assignments

And the cost need not be great: even relatively brief tasks can boost learning.

Bangerl-Drowns, R.L., M.M. Hurley, and B. Wilkinson, 2004. The effects of school-based writing-to-learn interventions on academic achievement: A meta-analysis. *Review of Educational Research*, 74(1), 29-58.
Bloom, Benjamin S. 1956. *Taxonomy of educational objectives: The classification of educational goals: handbook I: Cognitive domain*. New York: David McKay Company.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Activity

- Skim the article “Text Comprehension Instruction”
- Summarize the article

Text Comprehension Instruction

Comprehension is the reason for reading. If readers can read the words but do not understand what they are reading, they are not really reading.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Text Comprehension Instruction

Comprehension is the reason for reading. If readers can read the words but do not understand what they are reading, they are not really reading.

As they read, good readers are both purposeful and active.

Good readers are purposeful. Good readers have a purpose for reading. They may read to find out how to use a food processor, read a guidebook to gather information about national parks, read a textbook to satisfy the requirements of a course, read a magazine for entertainment, or read a classic novel to experience the pleasures of great literature.

Good readers are active. Good readers think actively as they read. To make sense of what they read, good readers engage in a complicated process. Using their experiences and knowledge of the world, their knowledge of vocabulary and language structure, and their knowledge of reading strategies (or plans), good readers make sense of the text and know how to get the most out of it. They know when they have problems with understanding and how to resolve these problems as they occur.

Research over 30 years has shown that instruction in comprehension can help students understand what they read, remember what they read, and communicate with others about what they read.

What does scientifically-based research tell us about effective text comprehension instruction?

The scientific research on text comprehension instruction reveals important information about what students should be taught about text comprehension and how it should be taught. The following key findings are of particular interest and value to classroom teachers.

Text comprehension can be improved by instruction that helps readers use specific comprehension strategies.

Comprehension strategies are conscious plans—sets of steps that good readers use to make sense of text. Comprehension strategy instruction helps students become purposeful, active readers who are in control of their own reading comprehension.

The following six strategies appear to have a firm scientific basis for improving text comprehension.

Monitoring comprehension. Students who are good at monitoring their comprehension when they read understand what they read and what they are told. They have strategies to “fix up” problems in their understanding as the problems arise. Teachers should that instructors focus on the ways students can help students become better at monitoring their comprehension.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Text Comprehension Instruction

Comprehension is the reason for reading. If readers can read the words but do not understand what they are reading, they are not really reading.

As they read, good readers are both purposeful and active.

Good readers are purposeful. Good readers have a purpose for reading. They may read to find out how to use a food processor, read a guidebook to gather information about national parks, read a textbook to satisfy the requirements of a course, read a magazine for entertainment, or read a classic novel to experience the pleasures of great literature.

Good readers are active. Good readers think actively as they read. To make sense of what they read, good readers engage in a complicated process. Using their experiences and knowledge of the world, their knowledge of vocabulary and language structure, and their knowledge of reading strategies (or plans), good readers make sense of the text and know how to get the most out of it. They know when they have problems with understanding and how to resolve these problems as they occur.

Research over 30 years has shown that instruction in comprehension can help students understand what they read, remember what they read, and communicate with others about what they read.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Segment 1 is now finished— Importance of Writing

Please proceed with the activity.

What data about writing proficiency do you collect and monitor in your building/district? If none, how might you go about beginning to collect data in your classroom?

Continue to the next segment at the conclusion of the activity.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Three-Column Notes

Three-Column Notes		
What I Learned	Questions I Have	What I Still Don't Understand

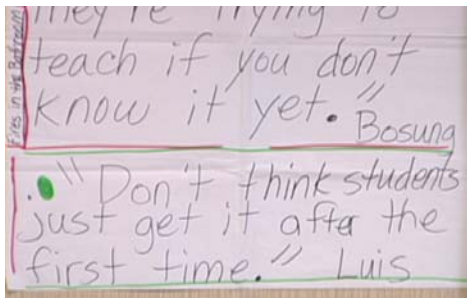


U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Especially with hard subjects, it's difficult to figure out what they're trying to teach if you don't know it yet. *Bosung*



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Text Comprehension Instruction

Comprehension is the reason for reading. If readers can read the words but do not understand what they are reading, they are not really reading.

As they read, good readers are both purposeful and active.

Good readers are purposeful. Good readers have a purpose for reading. They may read to find out how to use a food processor, read a guideline to get information about dental care, read a textbook to satisfy the requirements of a course, read a magazine for entertainment, or read a classic novel to experience the pleasure of great literature.

Good readers are active. Good readers think actively as they read. To read more or what they read, good readers engage in a thoughtful process using their experiences and knowledge of the world, their knowledge of vocabulary and language structure, and their knowledge of reading strategies (or goals). Good readers make sense of the text and know how to get the most out of it. They know when they have problems with understanding and how to resolve those problems on their own.

Research over 30 years has shown that instruction in comprehension can help students understand what they read, remember what they read, and communicate with others about what they read.

What does scientifically-based research tell us about effective text comprehension instruction?

The scientific research on text comprehension instruction reveals important information about what students should be taught about text comprehension and how it should be taught. The following key findings are of particular interest and value to classroom teachers.

Text comprehension can be improved by instruction that helps readers use specific comprehension strategies.

Comprehension strategies are conscious plans—sets of steps that good readers use to make sense of text. Comprehension strategy instruction helps students become purposeful, active readers who are in control of their own reading comprehension.

The following six strategies appear to have a firm scientific basis for improving text comprehension.

Monitoring comprehension. Students who are good at monitoring their comprehension when they read understand what they read and what they do not. They have strategies to “fix up” problems in their understanding as the problems arise. Research shows that instructors, even in the same grades, can help students become better at monitoring their comprehension.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Segment 2 is now finished— Taking Notes

Please proceed with the activity.

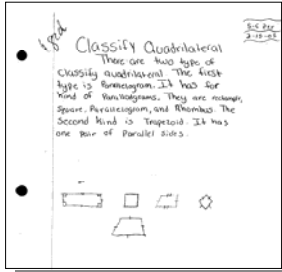
Create a note-taking sheet – perhaps based on Cornell Notes – for a piece of text. How would you model its use with your students?

Continue to the next segment at the conclusion of the activity.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Math Example II



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Session Goals

- Review scientifically based research on comprehending and writing
- Practice writing in a content area
- Practice fluent writing strategies



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Session Goals

- Review scientifically based research on comprehending and writing
- Practice writing in a content area
- Practice fluent writing strategies

Writing also leaves a "residue," a document that can serve as a tool for reflection, discussion, and revision.

Bangerl-Downs, Hurley, & Wilkinson, 2004



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Five Pillars of Reading

- Phonemic awareness
- Phonics
- Fluency
- Vocabulary
- Comprehension

*Describes efforts to improve student writing in high school; claims **significant improvement** across the board was likely **caused by integration of writing** in several classes; suggests possible **correlation** between improved performance in **biology class** and integration of **writing** assignments in the class.*

House, K. 1983. Improving Student Writing in Biology. *American Biology Teacher*, 45(5), 267-270.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Segment 3 is now finished— Purposeful Reading

Please proceed with the activity.

How can teaching students the structure of a textbook and text features support student understanding of the content? How often do you think this technique might be useful in your classroom?

Continue to the next segment at the conclusion of the activity.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Answer This Question as a Student

- What is a paragraph?
- Most students struggle with writing
- At high school, 66% of the students struggle

U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2003. *The Nation's Report Card: Reading Highlights, 2002*. National Assessment of Educational Progress, Washington, DC: U.S. Government Printing Office.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Answer This Question as a Student

- What is a paragraph?

- Most students struggle with writing
- At high school, 66% of the students struggle

U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, 2003.
The Nation's Report Card: Reading Highlights, 2002.
National Assessment of Educational Progress,
Washington, DC: U.S. Government Printing Office.

- Topic sentence
- Details
 - Examples and explanations
- Concluding sentence



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

(Topic)

- (Detail)
 - (Explanation)
 - (Explanation)
- (Detail)
 - (Explanation)
 - (Explanation)
- (Detail)
 - (Explanation)
 - (Explanation)

A Paragraph

(Conclusion)



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Segment 4 is now finished— What is a Paragraph

Please proceed with the activity.

What data do you use to determine what you are going to teach tomorrow and that guarantees you are teaching the content students need to understand the current concepts?

Continue to the next segment at the conclusion of the activity.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Elements of a Paragraph

- Topic sentence
 - Power
 - Focused
- Main ideas
 - Transitions
 - Supporting details
- Concluding sentence
 - Keyword

Author trying to show, explain, compare, convince
How, Why, What, Who
In the article, the author explains what readers do

First, Next, Then, Finally
First, people read for a reason

In conclusion
In conclusion, reading is an intensely personal act



Auman, Maureen. 2003. *Teachers' in tools* (Workshop). 123 N. College Avenue #218, Fort Collins, CO 80524 (970) 224-1401.

U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Power Paragraph

The systematic application of holistic accountability helps teachers and school leaders in *two important ways*. *First*, it provides a research gold mine in which these hypotheses can be tested. ...*Second*, it provides teachers with the opportunity to tell their professional story comprehensively and persuasively, even if their individual students are not among those who confirmed the hypothesis....



Accountability for Learning by Reeves, 2004

U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Classroom Instruction that Works

... There are a few important things to note about Figure 5.5. First, notice how much practice it takes for students to reach a fair level of competence in a skill. It's not until students have practiced upwards of about 24 times that they reach 80-percent competency. Second, notice how the increase in competence is less and less after each practice...



by Marzano Pickering, and Pollock, 2001

U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Segment 5 is now finished— Topic Sentences

Please proceed with the activity.

Pick one unit of study in the content area you teach. Write three different topic sentences that use strong verbs related to the unit.

Continue to the next segment at the conclusion of the activity.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Elements of a Paragraph

- Topic sentence
 - Power
 - Focused
- Main ideas
 - Transitions
 - Supporting details
- Concluding sentence
 - Keyword

Author trying to show, explain, compare, convince

How, Why, What, Who

In the article, the author explains what readers do

First, Next, Then, Finally

First, people read for a reason

In conclusion

In conclusion, reading is an intensely personal act



Adams, Mauritan. 2003. Teachers in Isolation (Workshop). 123 N. College Avenue #218, Fort Collins, CO 80524 (970) 224-1451.

U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Lecture Notes

Three-Column Notes

Topic: China Geography

Main Ideas <small>(Occasional Topic, Main Idea)</small>	Generate Questions	Subtopics <small>(Examples, Elaboration, Explanation, Connection, Insights, Comments)</small>
Mountain Ranges		<ul style="list-style-type: none"> - Himalayas - Difficult to travel - Hard to communicate - World's highest mountain - 24,000 ft - Other mountain ranges - Kunlun Shan - Tian Shan - Altai - Da Hinggan Ling
Desert		<ul style="list-style-type: none"> - North and northwest - Gobi desert - Largest one
Rivers		<ul style="list-style-type: none"> - Huanghe He - Begins at the Plateau of Tibet to the Northwest - Called the Yellow River - Floods that bring disasters - Chang Jiang - Sometimes call the Yangtze river - Central and southern China - Send goods to Pacific ports



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Student Sample

2/3/00
Per. 6/7

China has 2 interesting geographical features. The first feature is the Gobi Desert. It is the largest desert in the Chinese region and is located in the north and northeastern part of China. The second feature is China's mountain ranges. The Himalayas is the world's highest mountain range. It reach 29,000 ft and is difficult to climb. Also, it's hard to communicate with other towns. All in all, China has 2 interesting geographical features.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Other notes

My Notes

Q = Explain the characteristics of the Himalayas

Mountain Ranges

- Himalayas
- Difficult to travel
- Hard to communicate
- World's highest mountain
- 29,000 ft

Q = Describe a desert

Desert

- North and northwest
- Gobi Desert
- Largest one

Q = List other mountain ranges

Other Mountain Ranges

- Kunlun Shan
- Tian Shan
- Alps
- Da Wanggan Ling



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Segment 6 is now finished— Adding Detail

Please proceed with the activity.

Select a unit of study or topic from your curriculum. How will you begin day two of instruction? What is the topic for the day? What details do you want students to know about the topic?

Continue to the next segment at the conclusion of the activity.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

How Can Comprehension Be Enhanced?

- Comprehension monitoring—Text structure
- Cooperative learning
- Use of graphic and semantic organizers—notetaking
- Question answering
- Question generation
- Summarization

NRP, 2000



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Other Ideas:

Focusing Students

- Find one idea per paragraph
- Read a paragraph and ask...
 - “What word or phrase can you use to tell about the big idea in the paragraph?”
- Read the next paragraph

A New Jigsaw

- Read a paragraph
- Find the topic sentence of the paragraph and one explanation/ example sentence

Summarize a Textbook

- Read the title
- Read the first paragraph
- Read section titles
- Read emphasized print
- Read picture captions
- Read bulleted items
- Read the last paragraph
- Read the first sentence of each paragraph

Kinsella, L. 2002. *Strategies to promote academic writing and study skills across the subject areas* (Workshop). 844 14th Ave., Menlo Park, CA 94025 (650)-462-1814.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Writing Benefits

- Students process information
- Write to think
 - Clarify thought processes
- Teachers gain information
 - Vocabulary
 - Reasoning errors
 - Obstacles

...observed that effective teachers considered it particularly important "to look for ways to confirm or disconfirm that their presentations had been comprehended by students.

Good, T.L., D.A. Grouws, and H. Ebmeier. 1983. *Active mathematics teaching*. New York: Longman.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Reeves, 2000

How Can I Support My ELL Students?

- Preread text
- Give the big ideas
- Vocabulary
- Grammar
- Repeated exposures

"Repeated presentations: the repeated presentation of to-be-learned information to students enhances their learning of the information."

Friedman, M.I. 2000. *Ensuring student success: A handbook of evidence-based strategies*. Columbia, SC: The Institute for Evidence-Based Decision-Making in Education, Inc.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success

Segment 7 is now finished— Writing and Comprehension

Please proceed with the activity.

Write a summary of this session that provides several details supported by examples, explanations and evidence.



U.S. Department of Education • Teacher to Teacher Initiative • Supporting Success
