



The Inference Strategy

Presented by

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The Strategic Instruction Model (SIM)

Learning Strategies Curriculum

Acquisition	Storage	Expression and Demonstration of Competence
Word Identification Visual Imagery Self-Questioning Paraphrasing <i>Interpreting Visual Aids*</i> <i>Multipass*</i>	First-Letter Mnemonic Paired Associates LINC'S Vocabulary Strategy Listening and Notetaking	The Fundamentals of Sentence Writing Proficiency in Sentence Writing Paragraph Writing Fundamentals in Theme Writing <i>Proficiency in Theme Writing*</i> Error Monitoring Assignment Completion Test Taking INSPECT: A Strategy for Finding and Correcting Spelling Errors
Inference The Fundamentals of Summarizing and Paraphrasing		

Content Enhancement Routines

Helping students see the "Big Picture"	Understanding difficult concepts	Remembering & recalling important information
The Course Organizer The Unit Organizer Lesson Organizer Survey Routine Quality Assignment	Concept Mastery Concept Comparison Concept Anchoring Clarifying	Framing Recall Enhancement Vocabulary LINCing
Motivation Self Advocacy Possible Selves		Strategic Tutoring

Cooperative Thinking Strategies

Think Strategy Score Skills Teamwork Strategy Build Strategy Learn Strategy

Community Building Series

Talking Together
 Organizing Together
 Taking Notes Together
 Following Instructions Together

The Content Literacy Continuum

Level 1 Enhanced Content Instruction

Goal:

All students will understand those areas of content critical to future success - regardless of literacy levels.

Primary tools:

The Content Enhancement Routines by all content teachers - students easily recognize the organizers and learn to quickly identify the critical content, manipulate and generalize the information.

All Students

Level 2 Embedded Strategy Instruction

Goal:

Students will learn to think strategically about tasks related to acquiring, storing and retrieving information.

Primary tools:

The use of researched based Learning Strategies taught directly, explicitly and with fidelity. The strategies are taught across all content areas.

Level 3 Intensive Strategy Instruction

Goal:

Mastery of specific learning strategies for students who need more instruction.

Primary tools:

Intensive strategy instruction for students who need additional training. Students are taught the strategies used throughout the school, as well as reading & writing strategies designed to bring them up to grade level.

Level 4 Basic Skill Instruction

Goal:

Achieve mastery of literacy skills at at least the 4th grade level.

Primary tools:

Students reading below the 4th grade level are taught research-validated programs in decoding, fluency and comprehension. As they progress past the 4th grade level, they can be moved into the intensive strategy instruction arena.

Level 5 Therapeutic Intervention

Goal:

Mastery of the language underpinnings of content classes and learning strategies.

Primary tools:

Techniques employed in levels 1 through 4 are used, with an emphasis on content relevant interventions. Students use content from current classes as a basis for therapy.

Students who need *more*

Challenge (“Raise the Bar”)

Standardized tests for adolescents

- **Require students to be proficient in...**
 - Complex thinking (inference, summarization)
 - Vocabulary
 - Background knowledge
- **Increase in**
 - Length
 - Question number and complexity

Agenda

- **Overview of the Inference Strategy**
- **Pretest and Make a Commitment**
- **Lesson 1 – Intro to the Inference Strategy**
- **Lesson 2 – Factual Questions**
- **Lesson 3 – Big Picture Questions**
- **Lesson 4 – Predicting Questions**
- **Lesson 5 – Clarifying Questions**
- **Stage 4 – Verbal Practice**
- **Stage 5 – Controlled Practice and Feedback**
- **Stage 6 – Advanced Practice and Feedback**
- **Stage 7 - Posttest**
- **Stage 8 – Generalization**
- **Scoring**

The Problem!

- **8.7 million** 4th-8th graders can't comprehend their texts
- **Only 70%** of students graduate...and **only 50%** of students of color graduate
- **23%** of 8th graders read **below** the **basic** level according to the National Assessment of Educational Progress (NAEP)

But...the problem is made even worse by these realities:

- State assessments for older students
 - include more **expository** than narrative text
 - require students to answer increasing **complex** questions
 - show a *marked* shift from literal to **inferential** questions
- Few programs prepare students to respond to these realities

Why Teach the Inference Strategy?

- Students who are low achieving often need instruction in **how to answer inference questions** because:
 - They **do not know how to look for key words** in the comprehension questions they need to answer
 - They **do not know how to find clues** in the reading material **associated** with the **key word in the questions** that will help them come up with **inferences**
 - They **do not know how to answer inference questions.**

What Students to Select to Teach the Inference Strategy

- Students who have **decoding skills** at the fourth grade or higher
- Students who **need to answer inference questions**

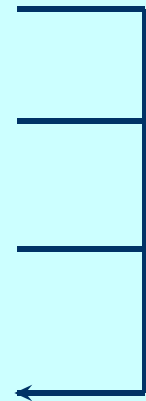
Specifically..... teaching students to
make *inferences*

- **What does ‘to infer’ mean?**
 - **To guess the best answer**
based on the information you
already know

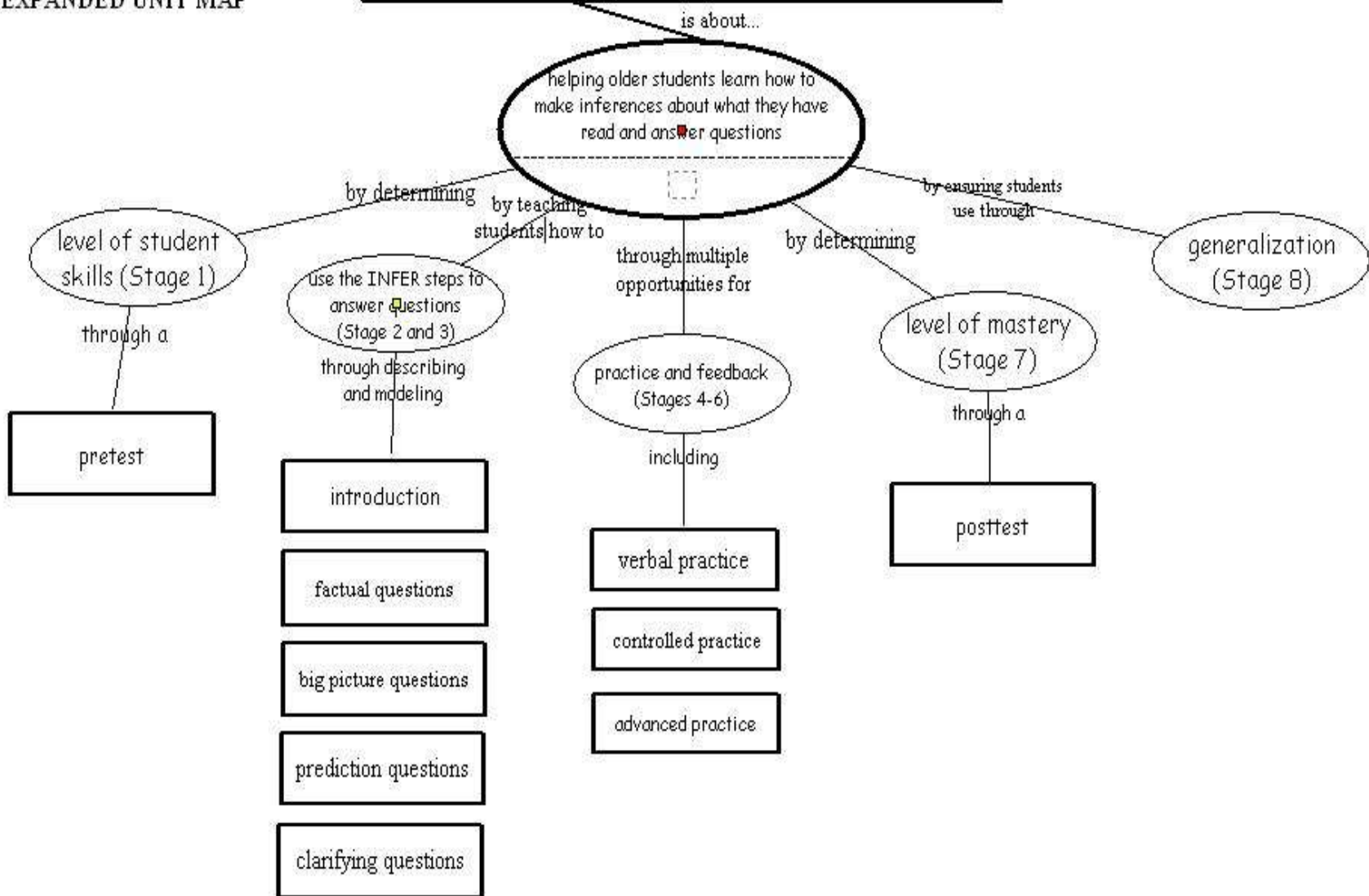
Cue Card #2, page 102

The ***Inference Strategy*** will teach students to.....

- **I**nteract with the questions and the passage
- **N**ote what you know
- **F**ind the clues
- **E**xplore any supporting details
- **R**eturn to the question



EXPANDED UNIT MAP





Inference Poems

Umbrella

Slack wings
Folded, it
Hangs by a
Claw in
The closet,

Sleeping,
Or moping.
Or quietly
Hatching
A plot

To flap out
And escape
On the furious
Sweep of
The storm.



Icicles

When they
Finally fall
And litter
The snow
With splinters
Of clear
Rock candy.

How sad
To discover
That rather
Than sugar
They only
Taste of
The roof.



Crayons

— Their paper
Torn, their
Snapped sticks

Worn down
To grubby
Stubs, they

Still shed
The colors of
The Rainbow.



Blue jeans

**Anonymous
Cloth when
They're new;**



**A homely
Familiar
Skin.**

Onion

Under its papery
Seal, shell
After gleaming
Shell to the
Inmost pearl:

World with
World, ev
While th
Shallow descri
The deep –

So simple,
After all,
As to make
One smile
Or weep.



Part 1

Determining Students' Skills

- ***Stage 1-Pretest***

Sets the stage by providing information on students' current skills:

- Discriminating types of questions
- Finding clues related to comprehension questions
- Answering comprehension questions

Chart Progress, page 127

Pgs. 11-13

Part 2

Teaching Students to Use the INFER Steps to Answer Questions

Stages 2 & 3

Pgs. 14 - 22

Lesson 1 – Intro to the Inference Strategy

Lesson 2 – Factual Questions

Lesson 3 – Big Picture Questions

Lesson 4 – Predicting Questions

Lesson 5 – Clarifying Questions

Think and
Seek
Questions

Specifically..... teaching students to make *inferences*

- **What does ‘to infer’ mean?**
 - To guess the best answer based on the information you already know

THE INFERENCE STRATEGY[®]

A promotional image for the TV show CSI: Crime Scene Investigation. The background is dark with a greenish tint. It features a collage of the main cast members' faces. In the top left, a large, semi-transparent face of a man with glasses is visible. Below it, the title 'CSI:' is written in large, glowing green letters. Underneath that, 'CRIME SCENE INVESTIGATION™' is written in smaller white letters. At the bottom left, the text 'LESSON ONE:' is written in large, glowing green letters. In the bottom right corner, there is a small image of a fingerprint with the 'CSI:' logo overlaid on it. The overall aesthetic is high-tech and forensic.

CSI:

CRIME SCENE INVESTIGATION™

LESSON ONE:

CSI:

Infer means to _____ about something based on _____ that you have learned.

You can use the _____ Strategy to _____

The **first** step to the Inference Strategy is to _____

To interact with the questions means to think _____ the questions.

The **second** step of the Inference Strategy is to _____

During the N Step, you will figure out the _____ it is and write a _____ next to it.

There are two major types of questions: _____ and _____

The answer for a Factual Question is _____ in the text.

With Think & Seek Questions, you must think and look for _____ to figure out the best answer.

There are 3 types of Think & Seek Questions:

- (1) _____ Questions, that you will mark with a _____.
- (2) _____ Questions, that you will mark with a _____.
- (3) _____ Questions, that you will mark with a _____.

There are 4 types of questions altogether. They are Factual _____, Predicting, and _____.

The **third** step in the Inference Strategy is _____

During this step, you will look for _____ to help answer the questions.

The **fourth** step in the Inference Strategy is _____

This is where you look for _____ to support your answer.

The **fifth** step in the Inference Strategy is _____

That means you must remember to _____ the question!

The mnemonic device _____ represents each step of this strategy.

**Note: Appendix B contains a “Notes Sheet”
for Lessons #1-5. Answers in Appendix C, page 130**

Reading Comprehension....

.....comes from integrating prior knowledge with new information from the text. This new knowledge facilitates deeper thinking about the text and can be applied to learn new information and solve problems.

THE INFERENCE STRATEGY

Comprehension Results

- Grade level test scores;
- Before instruction (32%)
- After Instruction (83%)

F
B

Cue Card #2, page 102

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CC # 2

Pg. 103

Passage

Cell Phones

People are talking on cell phones more and more around the world. In the United States, cell phone usage grew from 340,000 subscribers in 1985 to 158 million in 2005. Today, Americans spend an average of seven hours a month talking on their cell phones. That figure is low compared to some Asian societies. One of the highest rates is in Israel, where 76% of the population has cell phones.

Cell phones have both psychological appeal and practical advantages. They are a status symbol and help people to feel special and important. Cell phones can also improve convenience and safety. In one country, people use them to switch on the heat while they are driving home. A cell phone user can call for help if her car breaks down, especially at night. Travelers and children can phone home to assure their family that they have arrived safely at their destinations.

Cell phones can also cause problems. People who use their cell phones while driving are more likely to have accidents. Ringing cell phones often interrupt movies, church services, lectures, and concerts. People speaking on their cell phones in subways can ruin the peace of mind of other passengers. A questionnaire found that 59% of people would rather visit the dentist than sit next to someone using a cell phone. Rude cell phone users have sometimes been violently attacked, for example, with pepper spray by movie goers or by being rammed with cars.

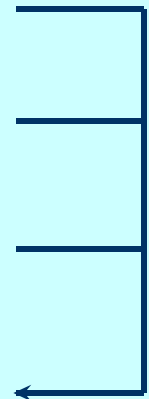
Questions:

1. What is the purpose of this passage?
2. How many hours a month do Americans talk on their cell phones?
3. How do the advantages of cell phones compare to their disadvantages?

Cue Card #2, page 102

The ***Inference Strategy*** will teach students to.....

- Interact with the questions and the passage
- **Note what you know**
- **F**ind the clues
- **E**xplore any supporting details
- **R**eturn to the question



TYPES OF QUESTIONS

- **Factual Question**

The answer is right there in the passage.

- **Think and Seek Question**

The answer is not in the passage.

TYPES OF QUESTIONS

TYPES OF QUESTIONS

- **Factual Questions**

TYPES OF QUESTIONS

- **Factual Questions**
- **Think and Seek Questions**

Di... Di... Q... H...

TYPES OF QUESTIONS

- **Factual Questions F**
- **Think and Seek Questions**
- **Big Picture QuestionsB**

TYPES OF QUESTIONS

- **Factual Questions F**
- **Think and Seek Questions**
- **Big Picture Questions B**
- **Predicting Questions P**
- **Clarifying Questions**

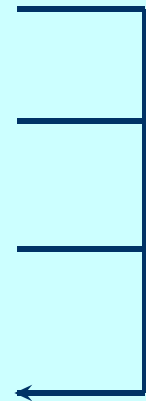
TYPES OF QUESTIONS

- **Factual QuestionsF**
- **Think and Seek Questions**
- **Big Picture QuestionsB**
- **Predicting QuestionsP**
- **Clarifying QuestionsC**

Cue Card #2, page 102

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Cue Card #2, page 102

The ***Inference Strategy*** will teach students to.....

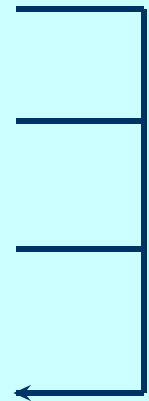
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Cue Card #2, page 102

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Stages 2 & 3

Lesson 1 - Intro

Pgs. 23-31

Lesson 2 – Factual Questions

Lesson 3 - Big Picture Questions

Lesson 4 - Predicting Questions

Lesson 5 - Clarifying Questions

Think and
Seek
Questions

Cue Card #6, page 107

Factual Questions

- Require finding a **fact in the information** that you have read.
- The **answer is right in the passage.**

Example Factual Questions

- **What** color is the boy's hair?
- **What** is the name of the girl's best friend?
- **How** many years have the people lived in their house?
- **Where** is the train going?
- **Who** is on the boat with the lady?
- **When** did the man arrive?
- **Which** dog bit the child?

Key Words for Factual Questions

Who

What

When

Where

How

Characteristics of Good Answers

- Is a complete thought
 - Has a subject
 - Has a verb
- Is related to information in the passage
- Answers the question

One Big Happy: *By Rick Detorie*



Turn to your Neighbor

- Watch clip -
- <http://www.youtube.com/watch?v=UjXi6X-moxE>
- Come up with a **Fact** question about the clip

Steps for Teaching

(pgs. 23 - 31)

- Describe it. Use Cue Cards #1, 3, 6-8.
- Model it using Lesson 2 Passage 1 (in student materials).
- Have students independently complete Lesson 2 Passages 2 - 4, as needed (in student materials).

When to move on to the next lesson

- When 90% of the regular attendees and 80% of the class earn 80% or better move to Lesson #3 (page 31)

Stages 2 & 3

Lesson 1 - Describe

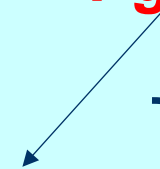
Lesson 2 - Factual Questions

Lesson 3 – Big Picture Questions

Lesson 4 - Predicting Questions

Lesson 5 - Clarifying Questions

Pgs. 32-42



Think and
Seek
Questions

Big Picture Questions

- Requires you to figure out the main idea or big message or theme of the passage.
- May ask for the purpose of the writer.
- May ask for summary information
 - Setting
 - Tone

Example Big Picture Questions

- What is the **main idea** of this passage?
- What is the author's main **message**?
- What is the **main idea** of the first paragraph?
- What is the **theme** of this passage?
- What was the author's **purpose** in writing this passage?
- What is the **setting** of this story?
- What is the **tone** of this passage?
- Which of these statements **summarizes** what this passage is about?

Cue Card #11A, page 112

Key Big Picture Question Words

Main Idea

- **DEFINITION:** **The big idea** in a paragraph or passage.
- **EXAMPLE:** This passage is about how people lived during the Renaissance.

Purpose

- **DEFINITION:** The **author's reason** for writing the passage.
- **EXAMPLE:** The author wants to convince the reader to exercise each day.

Cue Card #11A, page 112

Key Big Picture Question Words

Summary

- **DEFINITION:** A **short statement** that tells about a long passage.
- **EXAMPLE:** The passage is a story about a man who breaks his arm and learns a lesson.

Message

- **DEFINITION:** The **author's communication** in writing to the reader. What the author wants the reader to know or understand.
- **EXAMPLE:** The author wants us to understand that people should not say mean things about other people.

Key Big Picture Question Words (continued)

Theme

- **DEFINITION:** **Another word for “message”** or what the author wants the reader to know.
- **EXAMPLE:** The theme of this passage is that it’s better to be safe than sorry.

Setting

- **DEFINITION:** The **place** in which the story is located.
- **EXAMPLE:** This takes place in the African jungle.

Tone

- **DEFINITION:** The **feeling** of the passage. The emotions the author is expressing through the use of certain words like adjectives and adverbs.
- **EXAMPLE:** This passage is an angry passage. The author shows that anger through the ways Peter acts by throwing things and yelling.

Cue Card #9, page 110

Big Picture Questions Include Purposes for Writing

- **Entertain**_{page 35}
- **Inform** _{page 36}
- **Persuade**_{page 36}



- **Persuade** page 36
- **Inform** page 36
- **Entertain** page 35

Turn to your Neighbor

- Watch clip -
- <http://www.youtube.com/watch?v=-4EDhdAHrOg>
- Come up with a **Big Picture** question about the clip

Steps for Teaching

(pgs. 32 - 42)

- Describe it. Use Cue Cards #3, 5, 8-12.
- Model it using Lesson 3 Passage 1 (in student materials).
- Have students independently complete Lesson 3 Passages 2 - 4, as needed.
(in student materials).

Stages 2 & 3

Lesson 1 - Describe

Lesson 2 - Factual Questions

Lesson 3 - Big Picture Questions

Lesson 4 – Predicting Questions

Lesson 5 - Clarifying Questions

Pgs. 43 - 50

Think and
Seek
Questions

Lesson Notes page 98 and 99

Cue Card #13, page 115

Predicting Questions

- Require you to make a guess or forecast about what will happen in the future.
- Require you to base your forecast on information you have read.

Example Predicting Questions

- What do you think **will happen next**?
- What is the most likely event to **happen next**?
- What **will the main character do next**?
- What **will happen** to the boy **in the future**?
- Where **will the boy hide**?
- Who **will help her**?
- When **will she be found**?
- Which of his friends **will stay over night**?
- If you were to finish this story, **how would it end**?

Key Words for Predicting Questions

Next

Future

Happen

Will

Down the road

End

Ending

Effect

Turn to your Neighbor

- Watch clip -
- <http://www.youtube.com/watch?v=q4880PJnO2E>
- Come up with a **Predicting** question about the clip

Steps for Teaching

(pgs. 43 - 50)

- Describe it. Use Cue Cards #1, 5, 8,13-15.
- Model it using Lesson 4 Passage 1 (in student materials).
- Have students independently complete Lesson 4 Passages 2 - 4, as needed (in student materials).

Stages 2 & 3

Pgs. 51 - 58

Lesson 1 - Describe

Lesson 2 - Factual Questions

Lesson 3 - Big Picture Questions

Lesson 4 - Predicting Questions

Lesson 5 – Clarifying Questions

Think and
Seek
Questions

Lesson Notes page 100

Cue Card #16, page 118

Clarifying Questions

Require you to make sense of something

- Explain something
- Give a cause
- Give a reason
- Explain feelings
- Compare something
- Contrast something

Example Clarifying Questions

- What do you think the author meant when she used the word “satisfied” in Paragraph 1?
- What was Jason trying to do when he hid the money?
- How do you think Paula was feeling when she went to the store?
- What caused Mrs. Jones to give away the puppy?
- What do you think the reason was for his angry behavior?
- How does Jim’s behavior compare to Pedro’s behavior?
- How does the parade contrast with previous parades?

Key Words in Clarifying Questions

- Means
- Meant
- Cause
- Reason
- Compare
- Contrast
- Same
- Different
- Feeling

Turn to your Neighbor

- Watch clip -
<http://www.youtube.com/watch?v=cPFXW58dwnw>
- Come up with a **Clarifying** question about the clip

Type of Question Worksheet

Steps for Teaching

(pgs. 51 - 58)

- Describe it. Use Cue Cards # 1, 5, 8, 16-18.
- Model it using Lesson 5 Passage 1 (in student materials).
- Have students independently complete Lesson 5 Passages 2 - 4, as needed (in student materials).

Participants model Lesson 5, passage 1

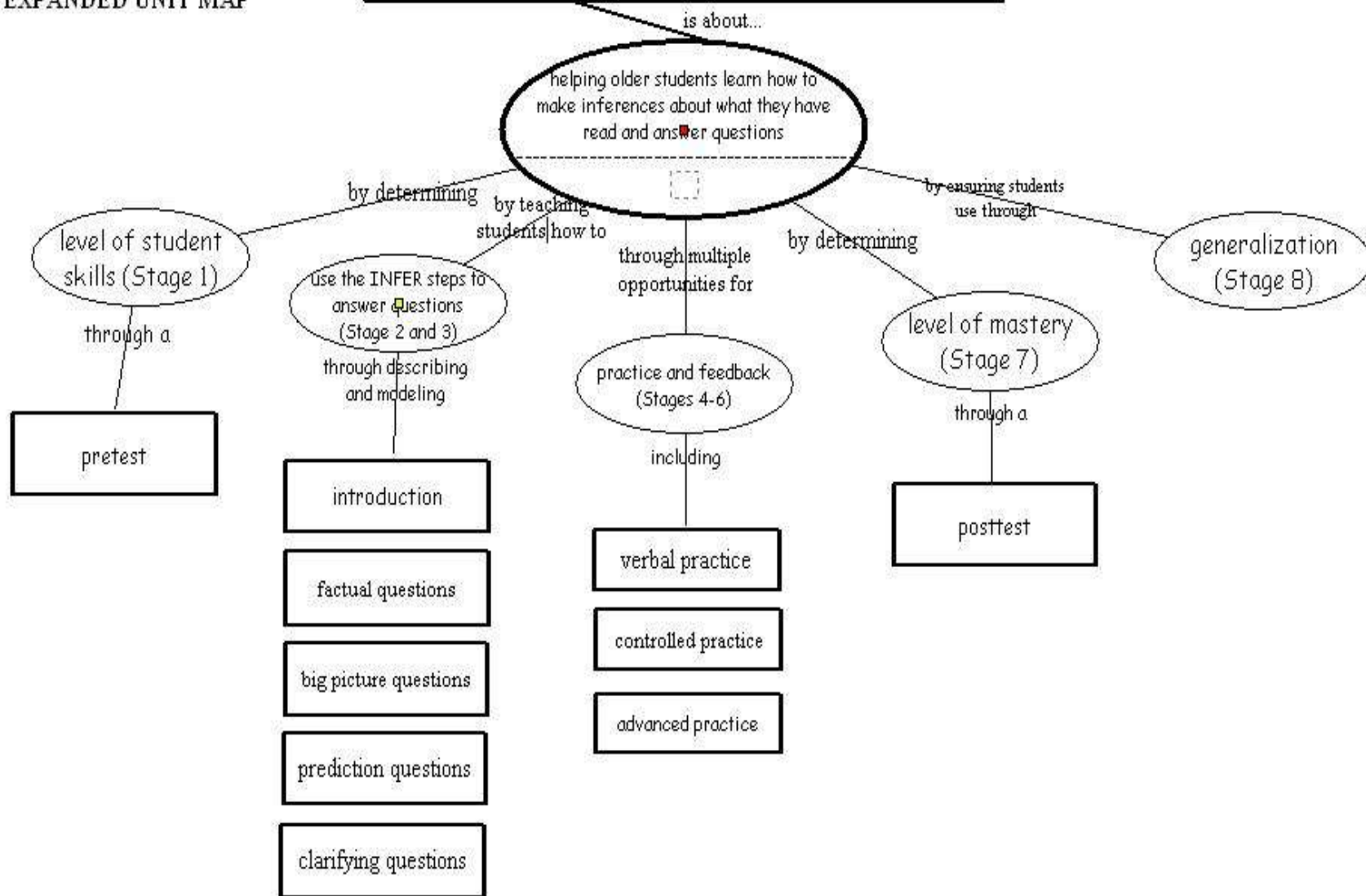
The Unit Organizer

The Inference Strategy

NAME _____
DATE _____

R

EXPANDED UNIT MAP



Practicing Stages 4-6

- ***Stage 4 – Verbal Practice***
- Stage 5 – Controlled Practice and Feedback
- Stage 6 – Advanced Practice and Feedback

Pages 59 - 64

Activity

Pages 60-63

With a partner take turns asking each other questions on pages 60-63

Student's Name: _____

**INFERENCE STRATEGY
VERBAL PRACTICE QUIZ**

**Verbal Practice
Pg. 121**

**Verbal Practice
Checklist page
122**

1. List the steps of the INFER Strategy.

I _____
N _____
F _____
E _____
R _____

2. The two main types of questions are:

a. _____
b. _____

3. The three types of Think & Seek Questions and their code letters are:

QUESTION NAME CODE LETTER

4. To "infer" means that you:

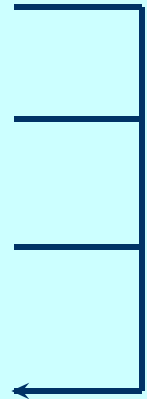
5. Predicting questions require you to:

a. _____
b. _____

**Answer Key
Pg. 138**

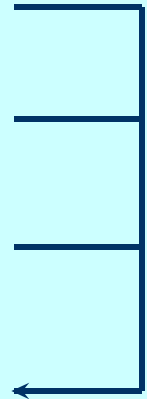
Verbal Practice

- **I**nteract with the questions and the passage
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- **R**eturn to the question



Verbal Practice

- **I**nteract
- **N**ote
- **F**ind
- **E**xplore
- **R**eturn



Verbal Practice

- I
- N
- F
- E
- R

Verbal Practice

- I
- N
- F
- E
- R

Verbal Practice

- I
- N
- F
- E
- R

Practicing Stages 4-6

- **Stage 4 – Verbal Practice**
- **Stage 5 – Controlled Practice and Feedback**
- Stage 6 – Advanced Practice and Feedback

Pages 66-72

Practicing Stage 4-6

Stage 5 – Controlled Practice and Feedback

Guided Practice

Cooperative Practice



Optional

Independent Practice

Pages 66 - 72

Practicing

Stages 4-6

- ***FEEDBACK – checklist page 124***

Group

Individual

Positive

Corrective

See pgs. 70-71

Next page

Appendix A - Scoring

Pgs. 87 - 90

- Guidelines
- Example Charts

Let's practice!!!!

Practicing

Stages 4-6

- Stage 4 - Verbal Practice
- Stage 5 - Controlled Practice and Feedback
- ***Stage 6 – Advanced Practice and Feedback***

Pages 73 - 76

Part III

Determining Students' Progress

Stage 7 - Posttest

Pgs. 77-79

Passage of about 400 words at the student's grade level
with 5-6 corresponding inferential questions

If score is $<$ 80% do additional Advanced Practice activities.

If score is $>$ 80% proceed to Stage 8: Generalization.

Part IV

Ensuring Students Use the Strategy

Stage 8-Generalization

Pgs. 80 - 85

Discuss and prepare for application of the strategy in natural settings

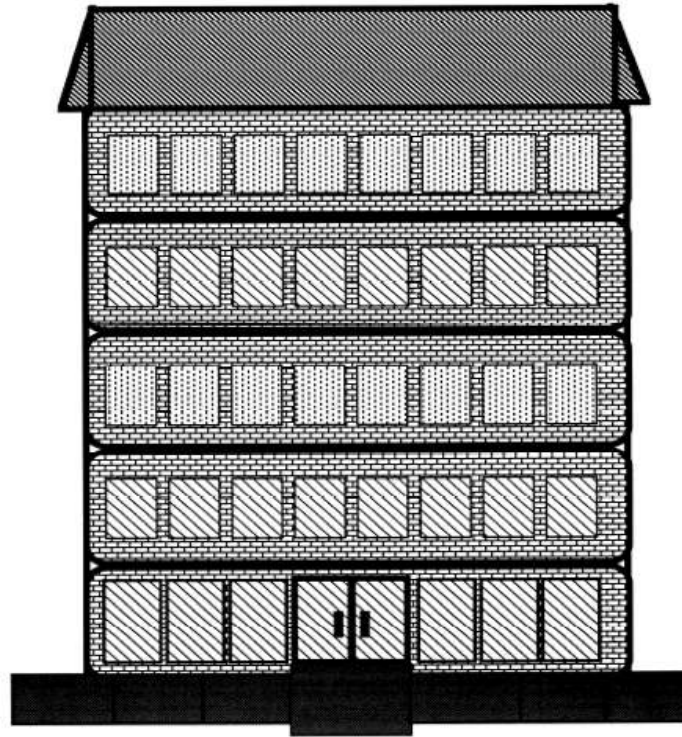
- Novels
- Textbooks
- Magazines
- Newspapers

Integration and Generalization

INFERENCE STRATEGY

CUE CARD #19

BUILDING A KNOWLEDGE BASE



55