Landmark Teaching Principle™ #5

# **Provide Models**

## **FIX-IT STRATEGIES**

### WHAT ARE THEY?

Fix-it strategies are steps to take when material becomes confusing. If a student is having difficulty understanding a passage or a problem, fix-it strategies are there to help students think about what they should do to help the material make sense.

#### HOW ARE THEY HELPFUL?

By encouraging the students to think about what they should do to solve their problem, fix-it strategies enhance students' metacognition, or their thinking about thinking. Essentially, they allow students to do their own troubleshooting to hopefully begin the process of arriving at the correct solution.

#### **HOW ARE THEY CREATED?**

Fix-it strategies can be included in the classroom through a variety of means. By modeling his/her own metacognition, the teacher can demonstrate several different strategies and then ask the students identify them. Through this modeling and discussion, the teacher and students can develop a list of strategies that can be displayed in the classroom, made into reference sheets for students, and referred to whenever material "clunks."

#### **HOW IS THIS PROVIDING MODELS?**

Teachers demonstrate their own metacognitive processes in response to material that does not make sense to them. By modeling an internal discussion around what to do, the teacher is showing the students how to solve their own problems. Take a look at the demonstration below.

The teacher reads a sentence on the archaeological advances that allow scientists to trace the origins of dinosaurs. Teacher: "I have no idea what this is talking about. I'm not quite sure that I understand what archaeological advances are. I should look that up..."

Through their own display of confusion, teachers can model the appropriate strategies for improving comprehension, which students can then apply with increasing independence.

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## **SAMPLES**

## **LANGUAGE ARTS: High School**

When material is confusing and not making sense, consider the following fix-it strategies.

- 1. Determine Vocabulary
  - Use Context Clues
    - o Look at the words around the unfamiliar word and try to determine it's definition based on what the rest of the sentences are telling you.
  - Part of Speech
    - o Try to figure out the part of speech by deciding if the unfamiliar word is an action, a person, a description, etc.
    - o Use the part of speech to determine a possible meaning
  - · Make a list of unknown words
    - o Whenever you come across a word you do not know, write it down and look it up later. Keep a list of the words you have looked up.

## 2. Think About the Aspect

When unsure what happened in a section, think about what literary aspect was being discussed/explored

- o Characterization.
  - o Which character is being described?
  - o How are they being described?
  - o Is it direct or indirect characterization?
  - o Can I draw a picture to help make sense of the words?
- o Setting

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- o Where is the story supposed to take place?
- o Time and place
- o Do I have any knowledge of that time period or place?

## 3. Questions with Questions

Answer questions with guiding questions from Bloom's Taxonomy to form connections.

Example: A student wonders who the main character is, so s/he asks, "Who is the main character?" A response question to that question could be, "Who has most of the story been about?" This type of redirection through questioning allows the student to arrive at their own answer while being guided by the instructor.

#### 4. Discussion

When information seems confusing, engage in discussions with other students and the teacher in order to help comprehension.

Example: Bouncing ideas off of others is a great way to gather new information as well as make sense of the information that presents difficulties. Posing a question to the class, such as, "Why did he run from the pack?" will allow new viewpoints and opinions to guide understanding in a large group format.

## 5. Go back to look at it

After employing fix-it strategies, go back and look at the material again to see if it makes better sense.

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#### **MATH**

When material is confusing and not making sense, consider the following fix-it strategies.

# 1. Check Numbers and Signs

If a math problem seems wrong or difficult, the first thing you should do is check that you have your numbers and signs correct. Ask yourself:

- o Do I have the right numbers?
- o Are the numbers in the right order?
- o Did the numbers get carried in the right places?
- o Are the signs correct?
- o Did I remember any positive and negative numbers?

# 2. Visual Representation

If you have done all the work correctly and are still not getting a correct answer, use a visual to help. Visuals could include:

- o A number line
- o Tangible objects to represent the numbers (i.e. m&m's, pennies, etc.)
- o Pie charts or graphs

# 3. Graph

If you have done all the work, plug the problem into a graphing calculator and check to see if you have the same answer. (This is typically for high school level math).

Example: Graphing calculators allow you to plot points on a graph as individual points or as a set of equations. When solving certain math problems, the graphing calculator can be a valuable tool in that you can use it as a reference to check your work. When you arrive at an answer, you can plug in the points and/or equation and check to see that the graph displayed on the calculator matches the one that you determined through your work to solve the problem.

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### **GENERAL READING**

When material is confusing and not making sense, consider the following fix-it strategies.

### 1. Go back and re-read

Make sure that you are reading all words correctly- take out words you don't know and syllabicate them using the Dot and Grab method.

# 2. Look up unfamiliar words

If you come across words you are not familiar with, look them up. You also have the option of having the computer read them to you after you have typed them into dictionary.com

#### 3. Visualize

Make a movie in your mind of what the text is saying. Use pictures and graphic organizers to aid in the comprehension of character, setting, and plot development

### 4. Make connections

Using the Active Reading Strategy, "Make Connections", look for places in the text that you can connect to based on the world, other media, or your own experiences. This will help you derive meaning from what you are reading.

### 5. Ask questions

If the material is still confusing, ask specific questions that you can generate based on the material that doesn't make sense.

Adopted from Landmark School Math, Reading, and LA departments

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