Definition of a Strategy

- Goals directed, consciously controllable process that helps facilitate performance.

Cognitive Strategy Instruction

- CSI is a tool intended to help students develop the necessary skills to be self-regulated learners
- Addresses many “common struggles” students experience in the classroom
- Teaches students how, where, and why to use a strategy

Why CSI?

- Research proves that CSI can improve the academic performance of students with and without disabilities in:
  - Reading
  - Vocabulary development
  - Writing
  - Spelling
  - Math
  - Study skills
  - Self-regulation

Types of Strategies “Expert” Learners Use

- Chunking – Grouping information into smaller units
- Relating information to known material – analogies
- Mnemonics - Organizing material in a manner that enhances recall
  - Acronyms
  - Acrostics (sentences)
  - Keywords
  - Peg words

Strategy Instruction

- Addresses other issues experienced by at-risk students and students with disabilities
  - Working memory versus short term memory
  - Attributions
  - Executive functions/Metacognition
Information Processing Model

Attributions

- Internal versus external
  - Whether students see the causes of success or failure as being inside or outside of themselves
  - Internal — ability, effort, aptitude, mood
  - External — task difficulty, actions of others

- Controllable versus uncontrollable
  - How strongly students believe that the causes for success or failure are under their direct control/influence
  - Controllable — strategy use, effort
  - Uncontrollable — luck

Metacognition

- Thinking about thinking
  - Planning — deliberate, organized approach to completing a task
  - Monitoring — checking comprehension and strategy effectiveness, testing, revising, evaluating effectiveness
  - Failure detection — "are things going okay?"
  - Failure correction — "let's fix it"

How knowledge of attributions & metacognition help strategy instruction

- Teach students:
  - Where to use a strategy and why it should be used
  - To monitor the strategy to check whether it is effective
  - To shield themselves from maladaptive thoughts that could hinder performance
  - To develop a belief that using a strategy makes them a better/stronger thinker
  - To use a strategy fluently, to the point where the strategy is automatic

Strategies are also

- Steps to complete a task
- Break down larger tasks that can seem difficult to students
  - Reading
  - Writing
  - Taking a test

A Specific Model for Strategy Instruction

- Self-Regulated Strategy Development (SRSD) model
  - More than 20 years of research on the model
  - Combines critical cognitive, metacognitive, motivational, and academic characteristics
  - Designed to be used with self-regulation strategies
    - Goal-setting, self-monitoring
  - Practical for real-world classroom use

- *At this point, we are referring to strategies as “a series of ordered steps”*
The 6 Stages of the SRSD model

Stage 1: Develop and activate background knowledge
Stage 2: Discuss the strategy
Stage 3: Model the strategy
Stage 4: Memorize the strategy
Stage 5: Support the strategy
Stage 6: Independent performance

Stage 1: Develop and Activate Background Knowledge
- Make sure student(s) possess the basic skills necessary to complete the task
  - Task Analysis
- To assess if they possess the skills teachers can:
  - Observe students while they work
  - Directly assess what they know (CBM)
  - Discuss task with students
- Collect some type of baseline data (will be used later)

Stage 2: Discuss the Strategy
- Discuss current performance so that students can see their progress
- Students need to “buy in”
- Teachers need to “sell” it
- Introduce steps in the strategy
- Have students set a goal

Stage 3: Model the Strategy
- “Think-aloud”
  - Why am I doing each step?
  - How did I know to do it?
  - What are the important actions, cues, questions?
  - What knowledge do I need?
  - Don’t be afraid to “model” mistakes!

Goal-Setting
- Specific, proximal, challenging
- For goals to affect behavior, goals must be valued!
- Attributions need to be considered
  - Students need to understand/perceive progress towards goals as being a result of their own efforts
    - NOT luck or outside help

Figure 5. Sample Goal-Setting Chart

Steps for using the RAP strategy

<table>
<thead>
<tr>
<th>思</th>
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<tbody>
<tr>
<td>First, I’ll read the paragraph</td>
<td>What am I being asked to do? Mrs. Casey said I am going to practice using the RAP strategy to read two paragraphs. I need to understand and remember what I read and Mrs. Casey said this strategy is going to help me.</td>
</tr>
<tr>
<td>Now I’ll check for understanding by asking myself “what was the main idea and 2 details”</td>
<td>Now STEP 1 of RAP says to Read a paragraph. Easy enough — I know how to read and this paragraph only has 5 sentences! OK. I did STEP 1. This strategy is easy so far!</td>
</tr>
<tr>
<td>Finally, I’ll move on to the next paragraph</td>
<td>Okay, now for STEP 2: Ask myself “what was the main idea and two details.” Uh oh, this step seems kind of difficult. I know that at this step I have to get ready to paraphrase what I just read. If I take my time and look back at the paragraph I just read I should be able to identify the main idea... here I feel like Mrs. Casey told me that the main idea is often found in the first sentence of a paragraph. Let me see... “There are two types of elephants” — OK! I think this paragraph is definitely about elephants. Now for two important details... “The two kinds of elephants are Asian and African. African elephants are much larger than Asian elephants.” OK, I’m feeling pretty good about this.</td>
</tr>
</tbody>
</table>

Stage 4: Memorize the Strategy

- NOT a separate step — incorporated along the way
- Commit to memory the strategy’s steps
- Students should be able to activate the strategy automatically
- Focus on task at hand and not on the strategy steps
- How does this relate to our information processing model?
- Students do not necessarily need to achieve automaticity before moving to the next step:
  - Provide them with a prompt card

Stage 5: Support the Strategy

- Collaborative Practice— The teacher models the strategy and works together with a student on strategy use
- Scaffolding - Teacher provides intensive support initially. Support gradually lessens.
- Student needs to move to independent use of the strategy.

Scaffolding

- Process through which a teacher adds supports for students to enhance learning and aid in the mastery of tasks.
- Systematically building on students’ experiences and knowledge as they are learning new skills.
- Supports are temporary and adjustable.
- As students master the tasks, the supports are gradually removed.

Stage 6: Independent Performance

- Students are ready to work on their own!
- Teachers need to monitor student performance.
  - Check on proper use of the strategy
  - Any deviations need to be analyzed to see if the strategy is still successful.
  - Re-teaching a strategy may be in order

References

- [http://cehs.unl.edu/secd/teaching-strategies/](http://cehs.unl.edu/secd/teaching-strategies/)