

Evidence-based Interventions that Markedly Impact Academic Performance in Struggling Adolescent Learners

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The Challenge

As adolescents move into middle school and high school, they encounter an array of very significant changes in the demands placed on them in their various classes. Unlike what they experienced in elementary school, they now must deal with reading and work assignments that tend to be more complex, more abstract, and more conceptually challenging.

When these new realities intersect with students who have difficulties in such areas as concentrating, organizing tasks, focusing, sticking to tasks, and are easily distracted frustration -- discouragement, and ultimately failure may be what students experience.

Toward a Solution

During the past several decades a broad array of evidence-based learning strategies and teaching routines have become available that can dramatically reverse academic and social trajectories of adolescents with ADHD that are moving in negative directions to positive ones – at an accelerated pace.

If adolescents with ADHD are, indeed, not succeeding academically and socially, making two significant changes in what happens in their schooling experience can result in very positive outcomes. The two changes are:

- (1) Change how *students* look at, think about, and tackle academic (or social) challenges – we do this by teaching them an array of powerful **learning strategies**. These strategies are designed to help student go about learning in markedly different ways.
- (2) Change how *teachers* look at, think about, organize, and teach critical content in ways that *all* students in academically diverse classes will learn the targeted content. They accomplish this by using different **content enhancement routine** that remove barriers to learning and incorporate powerful supports for students.

Learning Strategies Examples

➔ REMEMBER: The main purpose for teaching learning strategies is to teach students “*how to*” learn and perform – hence, becoming independent learners.

- **A Reading Strategy (Paraphrasing):** To help students understand and remember what they read it is important for them to translate what they read into their own words (or paraphrase). The three steps in this strategy are: *Read a paragraph; Ask yourself: “What were the main ideas & details in this paragraph?” and Put the main idea and details into your own words.*

- **A Remembering Strategy (FIRST-Letter Mnemonic):** “Mnemonic devices” are memory tools that help students remember things. Because students often need to remember lists or groups of information in a certain order, this strategy gives them a systematic way to think about and manipulate what needs to be remembered as well as an efficient way to do so. The steps of this strategy are: *Form a word; Insert a letter(s); Rearrange the letters; Shape a sentence; Try combinations.*

• **A Writing Strategy (Test-Taking):** By learning the Test-Taking Strategy, student have a clear set of steps to follow when taking a test. This strategy helps them quickly survey the entire test, decides which sections/questions they know best, and then how to answer questions. The Steps are: **P**repare to succeed; **I**nspect the instructions; **R**ead, remember, reduce; **A**nswer or abandon; **T**urn back; **E**stimate (or guess); **S**urvey.

➔ **TAKE AWAY:** For a learning strategy to be a “good” one for students it must be: (1) Powerful; (2) Relatively easy to use; and (3) Helpful across many tasks.

How to Best Teach Learning Strategies

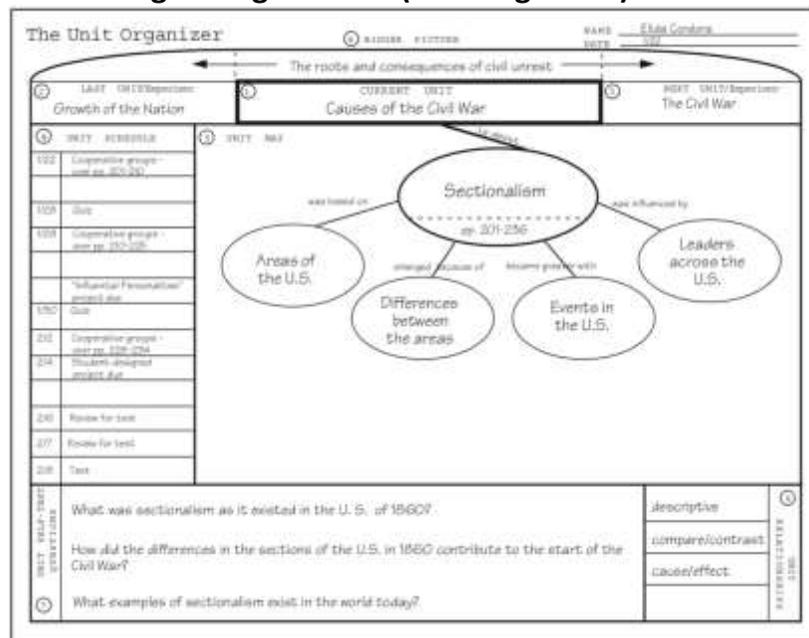
In order for a learning strategy to “pay dividends” for students, it must be taught them **explicitly** and **systematically**. This involves the following teaching elements: (1) Give rationales; (2) Name the strategy; (3) Show them how to use it (model it for them); (4) Have them do it; and (5) Place value on it.

• If we want students to become strategic learners, we must differentiate between an “activity” (short-lived) and a “strategy” (long lasting)

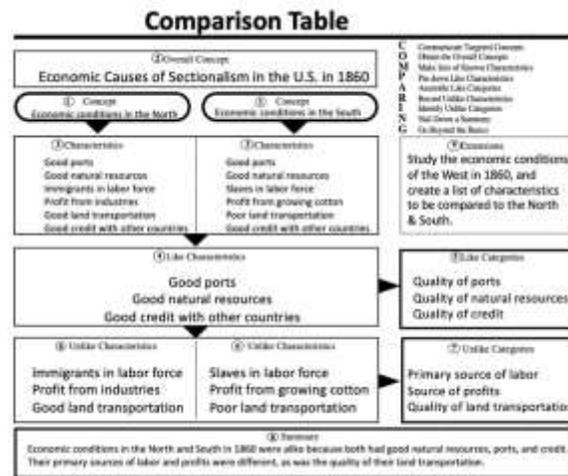
Content Enhancement Examples

➔ **REMEMBER:** The main purpose of Content Enhancement Routines is to *remove barriers* that make learning critical content difficult. This kind of instruction is based on these principles: (1) the integrity of the content is maintained; (2) critical features of the content are selected and transformed in a way that promotes student learning; and (3) instruction is carried out in a partnership with students.

• **A Routine for Organizing Content (Unit Organizer)**



• **A Routine for Comparing Information (Comparison Routine)**



How to Best Teach Content Enhancement Routines

➔ **IMPORTANT:** As in teaching Learning Strategies, students must be explicitly and systematically introduced to and guided in completing the organizer (graphic device) that accompanies each Content Enhancement Routine. These routines are to be built and studied *in a partnership between the teacher and students*. **Never should an organizer be completed outside of class and merely passed out to students. This will not help students learn the importance of the various features of the organizer and how they facilitate learning. As with Learning Strategies, our overriding goal is to help students become independent learners and performers.**

The teaching protocol to be followed is the following:

- **“Cue” the Organizer:** Name the routine (e.g., Comparison Routine) each time it is used; give a rationale as to why it is important to use and how it will facilitate learning; explain your expectations for the students to engage with you in a partnership in completing the organizer (graphic device).
- **“Do” the Organizer:** In partnership with the students, complete the graphic organizer. They should be asked questions that will link information being put into this organizer with information previously studied so they can see relationships. Additionally, explicitly explain various features of the graphic device and *why* it’s important in helping them learn and remember critical information.
- **“Review” the Organizer:** After the organizer has been completed, ask students questions to check their understanding of *both* the organizer itself (this is a learning support/tool for them) and the content in the organizer. A variety of methods can be used in conducting the review including cooperative groups, using a blank or partially completed organizer and have students fill in the blank areas from memory. Finally, a short “debriefing” should be held in which students are asked to comment on the organizer...how it helped, why it facilitated their learning, and what they will do differently the next time it is used.

Resources

- **University of Kansas Center for Research on Learning** (Information on the Strategic Instruction Model (SIM) and available professional development) <https://kucrl.ku.edu>
- **Makes Sense Strategies** (Differentiated Visual Tools (Technology-based applications of several Content Enhancement Routines) <https://makesensestrategies.com>
- **Edge Enterprises** (Access to SIM materials) <https://kucrl.ku.edu>