

EXECUTIVE FUNCTION AND ACADEMIC COMPETENCE

EXECUTIVE FUNCTION describes the brain's skill at accessing and coordinating all of its functions toward goal-oriented behavior, which is essential to success both in and out of school. While researchers have generated various descriptions of executive function, Dr. Thomas E. Brown's 2007 article, *A New Approach to Attention Deficit Disorder*, presents a clear and concise analogy of the brain as a symphony and executive function as its conductor:

“Regardless of their expertise, the musicians need a competent conductor who will select the piece to play, make sure they start playing at the same time and stay on tempo, fade in the strings and then bring in the brass, and manage them as they interpret the music. Without an effective conductor, the symphony will not produce good music.” (Brown, p. 23)

Brown also lists six executive functions that work together in various combinations. Effective studying requires effective, efficient coordination of all of them. (Brown, p. 24)

Activation

organizing, prioritizing, and activating for work

Focus

focusing, sustaining, and shifting attention to tasks

Effort

regulating alertness and sustaining effort and processing speed

Emotion

managing frustration and modulating emotions

Memory

using working memory and accessing recall

Action

monitoring and self-regulating action

Organizational and study strategies will not “cure” students with impairments. However, when they are mastered and combined into routines, they provide a scaffold that supports students’ efforts to manage the complex curricular demands placed on them.

(P.W. Newhall, 2007, *Study Skills: Research-Based Teaching Strategies*, p. 4)

REFERENCES:

Brown, T. E. (2007). “A New Approach to Attention Deficit Disorder,” *Educational Leadership*, 64(5), 22-27.

To read Dr. Brown’s full article, visit

www.drthomasbrown.com/research/index.html

Newhall, P. W. (2007). *Study Skills: Research-Based Teaching Strategies, A Landmark School Teaching Guide*, Landmark School, Inc., Prides Crossing, MA.

Available at:

www.landmarkoutreach.org/StudySkillsPNewhall.htm

with its companion, *Study Skills Organizers: Ready-to-Use Materials for the Classroom* with reproducible blank versions of the organizers and checklists modeled in the Teaching Guide.

One useful learning strategy that supports students who get reading assignments from text-books is SQ3R. (Please see table below.)

SQ3R is an active reading approach that lends itself well to note-taking. Developed by Francis P. Robinson and introduced in 1946, SQ3R describes a five-step process:

SQ3R

1. Survey
2. Question
3. Read
4. Recite
5. Review

Although the strategy lacks a solid research base demonstrating measurable effectiveness, it is a useful mnemonic that reminds students to preview a reading assignment and become familiar with the topic (**S**urvey), prime themselves to identify main ideas (**Q**uestion), read to gain understanding (**R**ead and **R**ecite), and work to get the new information and ideas into memory (**R**eview).

The chart below shows the steps of SQ3R. (Newhall, 2007, p.54)

SQ3R STEP	ACTIONS
S URVEY	<ul style="list-style-type: none"> • Read the title of the selection. • Skim the introduction or first few paragraphs. • Read any headings and the first sentence that follows them. • Look at the visuals and read the captions. • Notice how many pages are in the chapter. • Notice any vocabulary words and read them. • Check for end-of-chapter questions and read them. • Check for a summary and read it. • Notice any other unique things about the chapter.
Q UESTION	<ul style="list-style-type: none"> • Change the title (and headings) into questions using these cue words: who, what, when, where, why, how. <ul style="list-style-type: none"> •For example, “<i>Adoptive Mother Releases Ducklings Into the Wild</i>” might become, “<i>Why did the mother release the ducklings?</i>” •This step is easier when the reading has a heading for each section.
R EAD	<ul style="list-style-type: none"> • Read the text actively by looking for the answers to the questions crafted in the question step.
R ECITE	<ul style="list-style-type: none"> • Answer the questions from the question step, plus any questions at the end of the text. <ul style="list-style-type: none"> • Ideally, students should not quote the text to answer the questions; an accurate paraphrase indicates stronger comprehension. • Teachers should create opportunities for students to apply their newly acquired knowledge and skills to novel situations.
R EVIEW	<ul style="list-style-type: none"> • Summarize the reading assignment, making sure to include all the main ideas.