



Micro-Unit & Structure Tasks

EXECUTIVE FUNCTION AND FOCUS

Proficient readers monitor their thinking as they read, and make adjustments to ensure they comprehend. Similarly, scientists and mathematicians assess their progress and adjust their approaches as needed throughout the process of completing an experiment or solving a problem. This self-monitoring, sometimes called metacognition, is so routine for some people that they do not even realize they are doing it.

Self-monitoring requires the use of internal language skills that many students do not have, or do not know how to use effectively. Self-questioning (e.g., “Why did that happen? It doesn’t make sense.”) and self-cuing to use strategies (e.g., “I need to know what that word means so I understand this sentence.”) are essential to guiding our strategic learning behaviors while we engage in a task such as reading or problem-solving.

Teachers can empower students’ internal language skills by requiring students to stop periodically to discuss or write down their self-monitoring strategies, and by ensuring students have a variety of strategies to access when they encounter difficulty.

MAKE INTERNAL LANGUAGE VISIBLE¹

Many students have difficulty explaining what they are thinking as they read or problem-solve. The following techniques help students maintain focus and come out with a clear understanding of their process, along with written notes or ideas that they can use in the future. For each of the following, be sure to explicitly teach and model the strategy before expecting students to successfully use it.

BUILD IN “STOP AND EXPLAIN” REQUIREMENTS AT INTERVALS:



When reading or problem-solving, ask students to stop at regular intervals (e.g., after each page, after a step/several steps of the solving process, or after each line in a proof) and explain their strategy use and thinking. This metacognitive strategy helps students maintain focus on the thinking and problem-solving process, and stay engaged—even when frustrated—by articulating different techniques to use when they encounter difficulty.



In class, students can turn and talk with a partner about the strategies they used so far to comprehend or problem-solve, and what strategies they will use next. Alternatively, students can write on a sticky note, or in the margin at each stopping point. The popular Click-Clunk Strategy is a short and simple version of this in which students say or write *click* each time they pause and understand or *clunk* and use a strategy if they are struggling to comprehend at the interval.

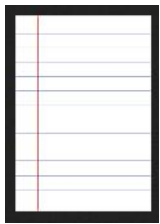
¹ Adapted from a presentation by A. Martin-Cone: Landmark High School.



Landmark Teaching Principle™ #3

REQUIRE NOTE-TAKING AND A RECAP OF INFORMATION & IDEAS:

Students can maintain better focus on a lecture, discussion, reading, etc., if they take notes during the process. Notes come in many different forms and should be structured based on the task the students are completing. As with any strategy, modeling, explicit instruction, and a lot of guided practice are necessary for students to learn the skill. In addition, ensuring that students are aware of their purpose before beginning a note-taking assignment contributes to their chances of success.



TWO-COLUMN NOTES require students to structure their thinking into main ideas and supporting information (e.g., details, examples, steps, etc.). Their notebook page is divided into two columns—1/3 on the left side of the paper to record main ideas, and 2/3 on the right side of the page for that main idea's supporting information. For more information on teaching two-column notes, see the Landmark Outreach *Spotlight*: landmarkoutreach.org/publications/spotlight/two-column-method-note-taking

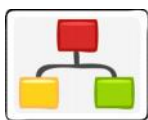
MARGIN NOTES AND HIGHLIGHTING (or sticky notes if students may not write in a book) require students to track information and stay focused on their purpose as they read (e.g., references to setting, new formulas or theorems, or characterizations of living organisms).



Coded margin notes or sticky notes are also helpful in having students trace their understanding. Students can put a check mark for main ideas they comprehend, a star with a comment for a new idea they have, and a question mark for places they need more clarification. Color coding margin notes/sticky notes (one each for checks, stars, and questions) more effectively allows students to refer quickly to what they need for questions and class discussion.



BOOKMARKS provide another way for students to track their ideas as they read. On these, students can record the amount of time they spent reading each night or important information or ideas from their readings (e.g., character names, themes, or new vocabulary). To extend this idea beyond a single bookmark, see Sarah Brown Wessling explain how to create theme folders on the Teaching Channel: "Pattern Folders: A Literary Analysis Tool" <https://www.teachingchannel.org/videos/literary-analysis-tool>



RECAPS help students consolidate information and ideas, and foster better retention in memory. Require students to practice different types of recaps and explore what helps them best make connections and remember what they have learned. They might: write a summary sentence at the bottom of each page of their notes; review their margin notes and articulate three themes, questions, or new ideas; or draw a diagram that shows what they have learned. Make sure to tell them beforehand that they will be doing this, as this will aid in their ability to focus while working.

HOW DOES THIS MICRO-UNIT & STRUCTURE TASKS?

- Determining a purpose, self-monitoring during a task, and reflecting on learning are three distinct phases of any learning task that should be taught explicitly for students to gain the skill.