

Some Instructional Strategies for Rigorous Learning

Metacognition: Pays attention to own reading process.

Glossing: Marks the text and takes notes in the margin.

Structuring: Searches for patterns that help to find a structure in what is being read.

Retelling: Summarizes understandings.

Image making: Creates images of the text's meaning.

Questioning: Raises questions for clarification to deepen understanding.

Making connections: Makes personal connections (experience and knowledge) with the text.

Each of these strategies correspond to what researcher have found to be prominent among expert readers and absent among novice readers (Keene and Zimmerman, *Mosaic of Thought*, 1997)

Each skill has been shown to improve the quality of student learning when modeled and practiced. Unfortunately, less than 15% of classroom time is spent modeling the skills students need most to make sense of challenging content. Students must either acquire these skills on their own or fail to learn rigorous material. As a result, many teachers reduce the rigor of the content taught and the texts assigned, setting off a downward spiral that is gradually driving rigor out of the curriculum.

However, these skills can be modeled, practiced and discussed regularly, across all content areas. By facilitating the development of these skills, teachers can create dynamic classrooms that motivate students to become rigorous learners.

From Strong, R. W., Silver, H. F., and Perini, M. J. (2001). *Teaching What Matters Most: Standards and Strategies for Raising Student*, pp. 13-23, ASCD.