

Student Problems of Learning: A Sample List

- Reading with comprehension: Fluency; factual recall; background knowledge; inference; analysis
- **Reading,** writing and speaking with evidence from texts
- **Problem-solving:** Using generic, transferable methods, in an orderly manner, for finding solutions to problems
- **Critical thinking:** A way of deciding whether a claim is always true, sometimes true, partly true, or false
- **Metacognition:** Knowledge about when and how to use particular strategies for learning or for problem solving; aware of one's own thinking; refining one's own thinking
- Participating in dialogue or discussion and using academic language in student talk: Student talk reflects discipline-specific habits of thinking and ways of communicating
- **Conceptual understanding,** fluency, and application of mathematical principles
- **Listening:** Focus attention on the subject; review mentally what already know about the subject; avoid distractions; set aside prejudices and opinions
- **Using discipline-specific processes:** scientific method, mathematical problem solving approaches
- **Posing questions**: High-level questions, open-ended questions, paying attention to who answers and who is called on,
- **Engaging in inquiry:** Any process that has the aim of augmenting knowledge, resolving doubt, or solving a problem.
- **Sharing own thinking, building on others' ideas:** Active listening; talk embodies substantive and intellectual thinking
- **Assessing their own work:** Students assess own learning in relation to the target
- **Engaging in small group work, partner talk:** All students have access to participation in the work of the group.
- **Engaging meaningfully with content-rich non-fiction:** Using text features; vocabulary development; organization of non-fiction text
- **Engaging with content** that is complex, ambiguous, emotionally challenging, and provocative (one definition of rigor)