

21st century thinkers that are prepared for college and career have identifiable characteristics, "Habits of Mind", which attribute to their success. These patterns of intellectual behavior can be taught by intentionally designing environments in which learning, teaching, and assessment all focus on developing students' "Habits of Mind" capabilities, practices, and metacognition. This suggested sequence provides teachers a progressive developmental approach toward incorporating new instructional strategies to empower students in the "Habits of Mind". As strategies are incorporated and mastered, the "Habits of Mind" are attained, student achievement increases, and student learning is greatly enhanced.

***Please Note:** In working with the sequence remember that the strategies are cumulative; each prior strategy supports the next one. This then creates a shift from engagement to empowerment.

**COMMON CORE STATE STANDARDS
"HABITS OF MIND"**

English Language Arts Capacities

As students advance through the grades and master the standards in reading, writing, listening, and language, they should be able to exhibit with increasing fullness and regularity the capacities of a literate individual.

1. They demonstrate independence.
2. They build strong content knowledge.
3. They respond to the varying demands of audience, task, purpose, and discipline.
4. They comprehend as well as critique.
5. They value evidence.
6. They use technology and digital media strategically and capably.
7. They come to understand other perspectives and cultures.

Mathematical Practices

For students to succeed, they must increasingly develop varieties of expertise at all levels in the following ways:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasonings.

INTENTIONALLY SEQUENCE INSTRUCTIONAL STRATEGIES TO PROGRESSIVELY ENGAGE AND EMPOWER STUDENTS IN THE "HABITS OF MIND"

Initiating Think, Pair-Share (or, Think, Write-Pair-Share)

The teacher asks a question or assigns a problem and allows students to think and work with a partner for one to three minutes before requesting an answer to the question or problem. In think, pair-share students are given a brief period of time to think independently before working with a partner. While effective in results, this strategy is a significant first step in engaging all students in classroom instructional activities.

Showing Thinking In Classrooms

The teacher works toward higher degrees of student involvement in classroom activities. Once pair-share is incorporated into classroom routines, the teacher incorporates additional strategies that promote "every pupil response". Collaboration is used to help as students clarify their own thinking as part of the "every pupil response" strategy prior to individual share-out. "Every pupil response" strategies include such responses as "thumbs up/thumbs down," or use of individual white boards for noting answers. Students are also pressed to be more aware of their description. Students merely provide the steps they used to solve the problem, not their reasoning and thinking about how they knew which processes to use. In order to reveal student thinking, more challenging, open-ended problems are needed.

Questioning and Wait Time

As thinking is increased in the classroom, better questioning and wait time are required. Teacher provides thought provoking questions to students, and then allows the students time to think and work toward an answer.

Grouping and Engaging Problems

The strategy of "grouping and engaging problems" is a significant shift in pedagogy and materials. Students are given challenging problems/tasks/scenarios to work, and allowed to work on the problem in a group of two, three, or four. Challenging problems/tasks/scenarios take time, effort, reasoning, and thinking to solve.

-----**EMPOWERMENT STRATEGIES**-----

Using Questions and Prompts with Groups

Once students are provided with opportunities to solve challenging problems/tasks/scenarios in groups, the teacher increases the level of the guiding to encourage students to continue persevering to solve the problems/tasks/scenarios. Teacher evokes student curiosity and enthusiasm to continue by providing hints or cues without giving students the answers, and asks probing questions to better assess student thinking and current understanding.

Allowing Struggle Time

Students learn to persevere in solving challenging tasks/scenarios/problems by being allowed to have time to struggle with the challenging task/scenario/problem. Students need to understand that real-world, thus authentic school tasks/scenarios/problems do not usually have a quick, easy solution. Effective effort is a life-skill and should be learned interdependently and independently. Appropriate degree of difficulty is foremost on teachers' minds. If the problem is too easy, students do not need to struggle if the problem is far too difficult; students are not capable of solving the problem. Teachers need to balance working in groups and working independently, and be able to quickly adjust grouping strategies as the need arises.

Encouraging Reasoning

Students need to be encouraged to carefully think about the content area, and to be aware of their own level of knowledge and understanding. They also need to be able to accurately communicate their thinking to others. Reasoning requires students to pull together patterns, connections, and understanding about the content, and then apply and adapt their understanding to new learning within and across content areas and real-life situations.