

IN THE CLASSROOM

THINK: Versatile and Intentional Thinking Patterns for Problem Solving

Students need to do more than retain or apply information; they have to process and manipulate it, assemble and reassemble it, examine it, question it, look for patterns in it, organize it, and present it. They need intentional patterns of thinking to draw on as they complete work after high school.



CLASSROOMS THAT PROMOTE “THINK” SKILLS

- ...provide authentic tasks involving ill-structured data to encourage quick thinking and improvisation during learning activities.
- ...are based on freedom and flexibility, and therefore eschews prescription and rigidity. Curriculum emphasizes inquiry as the basis for learning.
- ...teach students to ask quality questions.
- ...allow students to make critical decisions throughout the process of completing an assignment i.e. students are allowed to formulate their own problems/hypotheses within a topic, instead of given a prompt/complete hypothesis.
- ...give students time to process the material or concept through exercises that allow them to manipulate information individually and/or in teams.
- ...provide opportunities for students to repeatedly practice making decisions based on evidence.
- ...allow students to formulate their own problems/hypotheses within a topic, instead of giving them a prompt/complete hypothesis.
- ...create an environment where students are encouraged to ask questions each day.
- ...regularly provide opportunities for students to “pitch” ideas, share their work, and gain feedback from peers on their work.

STUDENTS WHO DEMONSTRATE “THINK” SKILLS

- ...use various types of reasoning as appropriate to the situation in a variety of conditions.
- ...recognize and are able to manipulate parts of a system to come together to accomplish something.
- ...effectively analyze and evaluate evidence, arguments, claims, and beliefs.
- ...reflect critically on learning experiences and problem solving processes, and apply insights to future work.
- ...develop and utilize multiple techniques to engage in problem solving and can articulate the reasoning behind their decision making.
- ...evaluate the reliability of sources and the information researched, using internal and external validation.
- ...consider a full range of resources (when problem solving) and make judgements about resources considering validity, credibility and relevance.
- ...embrace learning about material from different points of view.
- ...are “able to teach” what they learn. Students can communicate to their peers and even outside audiences what they have learned and what they are still curious about, contextualizing projects and research assignments in larger conversations.
- ...are active listeners in class or small group discussions, carefully considering the viewpoints of their peers.
- ...have an understanding of when it is appropriate to speak and when it is appropriate to listen, while engaged in conversations/discussions in a variety of settings.
- ...always respect, interact, and work positively with individuals from other social and cultural groups and seek opportunities to learn from diverse perspectives.