

**HABITS OF MIND,
as outlined by Arthur Costa & Bena Kallick**

Costa, Arthur L., and Bena Kallick, eds. Discovering and Exploring Habits of Mind. Alexandria: Association for Supervision and Curriculum Development, 2000.

Habit of Mind	Description
Persisting	Learners don't give up when faced with a challenge. They have a repertoire of strategies to approach a problem.
Thinking and communicating with clarity and precision	Persons strive to avoid overgeneralizations, deletions and distortions. Instead, they support their statements with explanations, comparisons, quantification and evidence.
Managing impulsivity	Effective problem solvers think before they act. They establish a vision of a product, action plan, goal, destination before they begin.
Gathering data through all senses	Those whose pathways are open, alert and acute absorb more information from the environment than those whose pathways are withered, immune and oblivious to sensory stimuli.
Listening with understanding and empathy	The ability to gently attend to another person, demonstrating their understanding of and empathy for an idea or feeling by paraphrasing it accurately, building upon it, clarifying it, or giving an example of it.
Creating, imagining, innovating	Persons try to conceive problem situations differently, examining alternative possibilities from many angles. Creative people are often intrinsically motivated, risk takers, and open to criticism.
Thinking flexibly	Those who have the ability to shift through multiple perceptual positions, draw upon a repertoire of problem-solving strategies and can change their minds as they receive additional data.
Responding with wonderment and awe	Students feel compelled, enthusiastic, and passionate about learning, inquiring, and mastering.
Thinking about thinking (metacognition)	The ability to become increasingly aware of one's own actions and the effect of those actions on others and on the environment; forming internal questions; developing mental maps or plans of action; mentally rehearsing before a performance; monitoring plans as they are employed (being

	conscious of the need for midcourse correction if the plan is not meeting expectations); and reflecting on the completed plan for self-evaluation.
Taking responsible risks	Students are capable of accepting confusion, uncertainty, and the higher risks of failure as part of the normal process, and they learn to view setbacks as interesting, challenging, and growth producing.
Striving for accuracy	Persons working to attain the highest possible standards and pursue ongoing learning to bring a laser-like focus of energies to accomplish a task.
Finding humor	Persons who thrive on finding incongruity perceiving absurdities; ironies, satire and being able to laugh at situations and themselves. Humor has been found to liberate creativity and provoke higher-level thinking skills.
Questioning and posing problems	Effective questioners are inclined to ask a range of questions, pose questions about alternative points of view, make causal connections and relationships, and pose hypothetical problems characterized by “if” questions.
Thinking interdependently	Students exhibit listening, consensus seeking, empathy, compassion, group leadership, knowing how to support group efforts, and altruism.
Applying past knowledge to new situations	Persons call upon their store of knowledge and experience as sources of data to support, theories to explain, or processes to solve each new challenge. They are able to abstract meaning from one experience, carry it forth, and apply it in a novel situation.
Remaining open to continuous learning	Individuals that strive for improvement, growing, learning, and modifying and improving themselves.

Studio Habits of Mind

Lois Hetland, Ellen Winner, Shirley Veenema, and Kimberley Sheridan

Hetland, Lois, Ellen Winner, Shirley Veenema, and Kimberly M. Sheridan. Studio Thinking: the Real Benefits of Visual Arts Education. New York: Teachers College, Columbia University, 2007.

Habit of Mind	Description
Persistence	Students are expected to persevere through frustration.
Expression	Students move beyond technical skill to create works rich in emotion, atmosphere and their own personal voice.
Making Clear connections between schoolwork and the world outside	Students see parallels between their art and others' professional work.
Development of craft	Persons learn to use and care for tools (e.g., viewfinders, brushes), materials (e.g., charcoal, paint) and learn artistic conventions (e.g., perspective, color mixing).
Observing	Students learn to attend to visual contexts more closely than ordinary "looking" requires, and thereby learn to see things that otherwise might not be seen.
Envisioning	Students are able to picture mentally what cannot be directly observed and imagine possible next steps in making a piece.
Innovation through exploration	Those who reach beyond one's capacities, to explore playfully without a preconceived plan, and to embrace the opportunity to learn from mistakes and accidents.
Reflective self-evaluation	Students learn to talk and think with others about an aspect of their work or working process and the work of others in relation to standards of the field.

Habits of Mind of Creative Engagement

Eric Booth

Booth, Eric, comp. The Habits of Mind of Creative Engagement. Empire State Partnerships.

<<http://www.espartsed.org/resources.php>>.

Habit of Mind	Description
Generating multiple ideas and solutions	Also known as brainstorming, this is the capacity to create many possible ideas or solutions, and the instinct to go beyond single adequate answers to produce more, better and divergent ideas from which to choose the best.
Sustaining inner atmosphere of exploration	This inner alignment finds delight in problems with multiple solutions and enjoys the process of figuring things out and not just the completed product with reward. It requires a tolerance of the anxiety around ambivalence and uncertainty, a willingness to keep going and not find quick (or not so quick closure) and brings with it positive feeling about mistakes, seeing them as opportunities, and an eager willingness to try new things when one experiment doesn't pan out.
Using one's own voice	This capacity distinguishes one's own understanding of things, apart from the many other influences, and responds in one's own individual way. It includes many capacities, such as a constant checking in with oneself to discover experiences and responses anew, following impulses about one's own understanding until they come clearer, making choices based on that personal sense, through to completing one's expressions to their fullest possible realization.
Trusting one's own judgments	This faculty involves use of all senses to gather data, and a confidence to rely on holistic wisdom, derived from body knowledge, intuition and impulse as well as data and logic.
Formulating good questions and problems	This habit develops not only the good questions we pose aloud, but more importantly the taste for and the quality of the thousands of unstated internal questions we pose to guide our solving processes large and small. This habit develops an aesthetic sense about the quality of questions, pushing for the ones that ring out as relevant,

	interesting and having an emotional hook.
Improvising	This instinct to make-it-up-as-you-go generates new material through play and exploration. Its suspension of normative rules and expectations celebrates risk-taking, experimentation, innovation, discovery and imagination.
Finding humor	Required for good collaboration and for a healthily sustainable inner working atmosphere, this fun habit of mind enables us to play with the reality we perceive. Humor is a fundamentally creative, imaginative act, both in the perspective that identifies aspects of the world to make fun of, and in the original and iconoclastic expressions that challenge expectations, poke fun at our established points of view, opinions, and ways of doing things, and remind us to lighten up.
Crafting	This habit seeks to refine, gain mastery of processes, honor tradition, and apply precision with ever-increasing quality. It applies consistent criteria of excellence, and holds high standards to aspire to.
Making choices based on a variety of criteria	This capacity enables us to make good, effective, personally-true choices based on a wider palette of perspectives. Practicing this habit of mind opens up a vast middle ground of possibility for creative engagement between the usual two options of investing oneself according to one's own preferences and purposes, or giving over to some other person's or institutions preferences and purposes.
Inquiring skillfully	This habit of mind is so enormous, it is almost a basket of skills of creating and guiding a learning process; it includes: experimenting, analyzing, reflecting, evaluating, flexible purposing, using serendipity, applying trial-and-error, risk-taking (appropriately), and taking advantage of mistakes, among others. This habit includes the skill of not knowing.
Persisting	Creative engagement may start with a burst of energy, may have exciting "aha" experiences along the way, but it requires persistence to achieve consistent and worthwhile results. The learner must develop a sense of holding to a goal even as we adjust strategies, make mistakes,

	encounter dead-ends, take side-trips, and encounter failures on the journey.
Self-assessing	This capacity to accurately, consistently, interestedly look at the quality of one's work guides the ongoing involvement in any project; it grounds the learning during the process and after. It non-judgmentally applies high personal standards, and informs choices throughout every process.
Reflecting metacognitively	This awareness and interest in our internal processes enables us to develop more effective internal guidance, to identify our own style (creative, learning, artistic styles), our patterns, strengths, preconceptions, prejudices and preferences, in order to choose them or experiment with others.
Thinking analogically	This cognitive capacity lifts us out of literalism, enabling us to form metaphors and symbols, to create original ideas by connecting usually-disconnected categories of things, to create new conceptual frameworks, new understandings and to communicate powerfully.
Willingly suspending disbelief	Often cited as a crucial "audience" skill, this capacity sets aside preconceptions, critical judgment, and experiential caution, enabling us to enter and explore an invented world as if it were in some ways real to find its personal connections, value and relevance. This is an essential capacity of imagination, and is an act of courage and trust.
Observing intentionally	This capacity seeks to apply intentional observational strategies to produce relevant, valuable and rewarding information amid the chaotic overload. Some specific practices include separating observation from interpretation, recognizing patterns, attending to novelty and making associative connections.
Going back and forth between parts and wholes	We naturally switch perspective in learning processes, from micro to macro. This habit of mind develops not only greater wisdom from the broad perspective, but a sensitive ability to hold both at the same time, and eventually into the capacity to hold seeming contradictions without the need to choose one or the other.
Trying on multiple points of view	This is the basis of empathy, the capacity to be

	able enter into a world and see – to not only “recognize and appreciate” different ways of seeing things, but actually experience and explore from that perspective.
Working with others	The commitment to collaboration can be called teamwork skills, and includes clear communication, awareness of expectations and their ongoing realization, the capacity for interdependence, trust of others, and distributed learning.
Tapping and following intrinsic motivation	The capacity to find and follow one’s own personal yearnings is essential to creative work. When well developed, this habit enables us to take extrinsically-motivated situations and find an aspect of them that taps our intrinsic-motivations, so we can transform extrinsically driven tasks into intrinsically driven opportunities. It includes the heart-intelligent capacity for joy and wonder, a feel for, and a self-guiding by, the pleasure in creating, inquiring and reflecting.