

The Habits of Mind of Creative Engagement

INTRODUCTION AND OVERVIEW

Over the years, I have asked many education professionals the following question: If you were to place all your chips on one key idea upon which to stake American school reform, which gamble seems best to take? I have heard answers that range from reducing class size and differentiated instruction, to authentic assessment, drastic increases in teacher pay, to no-schools-but-widescale apprenticeships. What might your answer be?

My answers have changed over time as my understanding of the dysfunctions of American schools deepen, and as my own pedagogy refines and discovers new core practices. My current answer is shared in this essay, and in its simplest statement, it is: I think the single most potent school reform goal would be to place the highest priority on individual creative engagement, and to shape schooling to develop the habits of mind that constitute creative engagement. Creative engagement is to me a bull's eye of such potent centrality that its concentric circles of resonance and impact contain the kind of learning that individuals, schools, institutions, our culture and the world in general are crying to provide.

In this essay, we will explore the key processes, actions and attitudes activated when we invest ourselves in the flow of creating. We when develop these capacities, these ways of working inside, to the point that we can apply them both by intention and intuition, we have and developed them into habits of mind. These habits of creative engagement are the ways we work when we apply ourselves with artistry—into any kind of project or problem, not just those in artistic media like dance, music, drama, the visual and literary arts.

I hearken back to Plato's dictum that the single most important thing for a society to accomplish in order to succeed is to teach its young people to find pleasure in the right things. There is no righter right thing that humans know than the experience of creative engagement—making worlds we care about and exploring the worlds others have made—and there is a lifetime of pleasure to be had in that lifelong learning.

This essay explores what we do inside when creatively engaged. I have studied this internal action arena for a long time, and found many ways to describe the ways we function inside the creative experience. The articulations of those natural processes of “flow” are always incomplete and clunky compared to the live act. This essay's perspective will necessarily be partial and pedestrian too, particularly since it offers a new construct of such complex matters. I put it forward, nonetheless, in the hope that it clarifies current understandings and invites colleagues to find useful ideas and run with them.

The metaphor of “habits of mind” is growing in importance throughout education, provoking new pedagogical thinking and practice. I have tried to distill my understandings of creative engagement down to the smallest but still complete set of mental habits. This proposed irreducible core is more preliminary than final—the number and names have shifted right up to today's writing, and will continue to evolve (and reduce, I hope) with use. This current iteration names 20 habits, and the list has climbed as high as 29 and had days as low as seven. Let me

apologize in advance for the pages of verbiage before we get to the goods—since this is a first offering of its kind to the arts learning community, I feel impelled to lay a conceptual foundation and not merely cut to the bullet-point chase.

Notice that these are not the habits of brain or intellect. This is not another way of presenting Bloom's taxonomy of Higher Order Thinking Skills, although many kinds of higher order thinking appear in the application of these habits. The development of higher order thinking skills could be viewed as a huge side benefit of dedication to the habits of creative engagement—and indeed they might be a good lens through which to assess some of the learning impact of such an approach. As I use the word mind, I intend it to include the intelligence of the heart and the spirit. In these habits of mind, heart smarts are extremely valuable, and the spirit has an active, essential role in this description of how humans work at their best. So, I think of the mind as the broadest toolkit of human capacity to make sense of, and influence, the way things happen in the world—the world that is visible and also not so visible. Even the internal world is real, as in experiences and knowing, and is shaped by the play of the mind.

In this paper, I am not going to address the pedagogy of habits of mind. That whopping big topic deserves much exploration all of its own. In all the existing H.O.M. systems, the praxis lags behind the conceptual work. None of the approaches have body of pedagogical understanding to effectively teach the habits. This is not to say that the habits are not being taught, sometimes well, but that the research and action research to distill distinctively effective teaching and learning of habits of mind has not risen to the promise of the concepts. I do have some ideas to offer this process, based on three decades of teaching artist practice, but will describe those in other writing. Suffice it to say, no one has yet answered the questions: “What are the most powerful, organic, effective and engaging ways to develop habits of mind?” “How can we infuse assessment practice s into the teaching and learning of these habits, so the learner and her guides can guide the process well?” “What is the dynamic relationship between developing habits of mind and exploring/practicing them through challenges in various subject matter and media?”

TO ARTS EDUCATORS

This framework of Habits of Mind of Creative Engagement is intended for an audience of educators wider than the arts education field. Let me address my arts ed colleagues explicitly for a moment. As many of you know, I define the arts by their verbs rather than their nouns. To me the arts are a quality of experience more than a particular set of media or products. A child can have her hands on clay all day long, shape six animals and an ashtray, and not have an artistic experience; she is making things, as instructed, and this is a fine thing for her to do. She has to be able to do certain things inside her to tap the artistic opportunity, to make it an arts experience rather than just a more unusual subject matter in which to follow instruction than history is. Artists are not merely slow manufacturers or well-trained performers. This means I do not refer to arts learning only as learning how to work with within artistic disciplines, although this is a powerful kind of learning. I refer to the definition of art that uses phrases like the art of bricklaying, the art of teaching and the medical arts—any endeavor brought to its highest expression becomes an art. And any art, in any medium, is brought into being through creative engagement in various processes.

The verbs of art, which are embedded within and re-described as habits of mind here, do not only appear in big projects of school and life. We engage our creative nature, our art, in bits and pieces throughout our lives, anytime we apply ourselves fully to making things we care about—whether those things be a great conversation, a perfect stone wall, a short book report, a report at the office, or a Thanksgiving table setting. It is the quality of the creative engagement, not the medium in which we are engaged, that holds my definition of art. Indeed, I believe there is much artistry going on in good social studies and chemistry classrooms, and perhaps little artistry going on in uninspired dance studios or marching band practice.

Mihaly Csikszentmihalyi labeled the experience of creative engagement “flow,” and there are other terms for this optimal, creative application of ourselves in a task that we deem personally relevant and valuable. With my eyes on that prize, I offer these Habits of Mind of Creative Engagement. I have found application of these habits far beyond the art studio, or even school setting. These are the habits I seek to develop in organizations, in businesses, in professional development of many kinds. These are the habits that sustain me and provide the spine of my chosen life.

THE HABITS OF MIND SYSTEMS IN EDUCATION

There are a number of habits of mind “systems” in use around the country and world. (I will give a thumbnail sketch of four just below.) The one I offer seeks to add to the resource repertoire of other brilliant colleagues, not supplant any. The Costa/Kallick Habits of Mind was my first encounter with the H.O.M. field in 2001. I encountered Sizer/Meier a few years later, about the time I encountered the work of the Root-Bernsteins, and the work of the VALUES project in 2006. I have tried to take the original questions each of these systems asked, and apply them to the arts-based learning I have explored for decades. The results certainly overlap with theirs. I offer this “system” to energize and support the excellent work of educators who believe, like me, that the arts belong at the very center of school or learning program. I believe they awaken learners’ motivation to, and sustaining interest in, engaging wholeheartedly, holistically, in all subject matters. I believe the lens of “habits of mind” brings the arts closer to that central place in schooling where they belong.

First, there are a few words to clarify about this body of work. Then, I will describe the current set of habit of mind systems that are in play in education today—including the one I offer. Etymologically, system means to cause to stand together. That is the nuance I intend, rather than our mechanistic sense of the word.

I think the various H.O.M. systems are in competition—but in the etymological meaning of the word competition, not its current win-lose usage. Etymologically, to compete is to strive with, not the current sense of strive against. (The original Olympic ideal of competition was that all the athletes performed better as a result of competing with one another.) As a developing group, all the systems must work not only on their foundations but also on their pedagogy, on the ways their system can be delivered, taught, applied and expanded in their own ways. In this perspective, I see this as one movement, more than a bunch of separate offerings vying for market share. I believe that happier, more curious and fulfilled lives of millions of children, teachers and parents will be the outcome of this learning Olympics. Yes, a better world.

I hear the word engagement used frequently in discussions of school reform, at the individual classroom level right up through the policy level. It has become a catch-all term for the crucial, ineffable element of personal interest our schooling does not have at the heart of the learning. We forget that real learning begins in the heart, not in the head; and the word engagement is a talisman, a metaphoric reminder, of the fundamental forest we have lost in so much effort and expense spent on so many trees. We have created schooling that monstrously ignores the fact that learning is an act of volition; we find ourselves with schools that bully the intrinsic motivation of learners, the sine qua non of real learning. The fumbling efforts toward school reform use the word engagement like a flashlight clutched tight but not turned on in the dark. Engagement is the term for the quality of experience we all want from our work, in education and in every field, from our involvement with all institutions, throughout our lives.

The word creativity has also risen to the lips of the world as a high priority. At the first ever UNESCO worldwide arts education conference (in Lisbon in March 2006), heads of state, and ministers of culture, one after another, laid their worst problems at the feet of arts education—environmental degradation, racial hostility, health crises, political apathy, citizenship crises, youth mental health epidemic, and more—to address by instilling creativity skills in the young. They felt that all schooling around the world should march behind the same banner of priorities across the curriculum, and prioritized them as the three essential capacities: Literacy, Numeracy, Creativity. I agree. And those in arts education need to take a hard look at our practice to take stock of the priority that the development of creative skills holds in our current work with the young—rarely is it as high as the world imagines, hopes and requires. What would be different if we focused on developing the habits of mind of creative engagement through artistic media? I think we would have found the reason for the arts to be at the center of school reform.

HUMANS AND HABITS

Elite mountain climbers stake their lives on habits. They practice the routines of mountain climbing, the use of each piece of equipment, the dressing and climbing protocols, the knot-tying and untying, over and over again—to turn them into deeply ingrained habits. They do this because they know what will happen to them under the stress of high altitude. There will come a time when anoxia will cloud their thinking, when they will make bad decisions because their brains can't work at their best. They know they will face moments when they are likely to make decisions that could cost them their lives. Under stress, habits and routines sustain; they become the most reliable certainties, better than thinking. Under the greater or lesser stress of uncertainty about how to solve any worthwhile problem, we resort to our habits of mind without even noticing. Why do people make the same kind of mistake again and again? Why did I train myself to hit save every time I pause in my writing? Because habits are efficient, effective, eloquent expressions of who we are.

Aristotle wrote, “We are what we repeatedly do. Excellence, then, is not an act, but a habit.” Habit is a good word with a bad rap. It carries negative connotations of being stuck in a rut. Habits are thought to be dull, unspontaneous, anti-expressive, and exactly-the-opposite of creative engagement. While that may be true, I'm all for habits.

We all have habits. Even the most spontaneous, unpredictable people I know have their particular mental habits (ways of looking at things), verbal habits (reliance on certain phrases

and sentence structures) and maintenance habits (daily routines). Thank heavens—who would relish a fresh exploration of tooth brushing every night on the way to bed?

I am endlessly fascinated by the odd and clever ways people work out systems of doing things. Our external habits are an eloquent self-portrait of who we are, of our creative idiosyncrasies; our internal habits, flashed during our encounters with the unfamiliar, reveal how we became and continue being who we are. I am intrigued by people’s dishwashing systems, personal dance improvisation patterns when in full boogie, problem-solving procedures, what they do just before making a speech; just as I am intrigued by what they do inside when they struggle to grasp a metaphor, want to find a new way of saying something they know, propose a series of questions for themselves when they are stumped, and create a funny comeback one-liner.

The word habit goes back to the Latin word meaning what one has, and it developed into *habitus*, which meant how one is—your personal state or condition. Etymologically, as well as practically, a habit is the recurrent outer pattern of a personal inner state. Our habits announce how we are, the ways of doing things we have put together that weave the fabric of our lives. Our habits are metaphors for who we are. Our habits of mind are who we are inside, in the brain/heart/spirit that comprises the mind.

Habits are creations in our art of living; and in turn, these creations create us. We acquire them predominantly unconsciously in reaction to events in life, and sometimes through instruction or intention. The unconscious development of habits is an inquiry for other fields of study (like psychology and neurology), but the intentional development of habits has a long and proud history in teaching and learning. Child rearing and apprenticeship are based on it. All skill development, from gymnastics to chess, from kindness to eloquence to spiritual enlightenment, requires the development of a deep foundation of habits. Accomplishment in the arts certainly requires it—the musician cannot think about every note; the dancer learns how to take in and hold complex movement information. The early years of graduate schooling in science, law, business and theology (perhaps in any subject) are said to train the way students think as much as to teach information.

In their Habits of Mind series, authors Arthur Costa and Bena Kallick (more on them follows) define habits of mind as, “dispositions displayed by intelligent people in response to problems, dilemmas, and enigmas, the resolutions of which are not immediately apparent.” By problem they mean “any stimulus, question, task, phenomenon or discrepancy, the explanation for which is not immediately known.” Habits appear in the encounter with life and determine how we learn, succeed and make meaning in life. They appear vividly when people try to detach from their habits of mind in meditation—a time when their their persistence can frustrate. Habits have some wonderful attributes, which is why they have spawned this new generation of teaching and learning systems:

Habits are efficient. Once a habit is set in place, we no longer need to negotiate that action repeatedly. (In fact, if one is still having an internal discussion about an action, it isn’t a habit yet. Until all inner discussion ceases, the activity is on probation, requiring further investigation, comparison to other choices.) If a practice passes scrutiny enough times, it earns its way to habit status. At this point the action becomes smooth, even elegant, and energy-efficient. Every artist I

know (which is to say everyone I know who is skilled in creative engagement) has developed clever habits to be a more effective creator.

Habits are authentic. When we develop a habit, the behavior is in tune with our inner condition. We may not like this fact, because we may not like some of our habits; but they are our creations; they are honest announcements of inner states. If you have a habit that you deem bad—say, eating four hot dogs every morning for breakfast—it is a perfect expression of something in your inner condition. Don't judge yourself or others too quickly; it takes time to understand any particular habit as a metaphoric creation, to uncover the underlying reality it expresses. Habits tend to grow from positive impulses.

Habits change us. We may think of habits as monuments of the status quo, but they can be a tool for revolutionary change. To a significant degree, what we do is who we become; and thus we can transform an inner condition by establishing a new outer habit. We might call it working from the outside in. I'm not saying changing through habits is easy—as anyone who has ever tried to diet can attest. The diet becomes permanent weight loss only when the whole eating style changes, when the imposed behavior is matched by a successful inner adjustment. This truth is why a focus on habits of mind can be so potent and transformative, and why we must be intentional and responsible about introducing this work to young people—if well done, it will change who they are and how they make choices for the rest of their lives.

Habits support us. Any long-term project has its ups and downs. And learning is the longest-term project humans get. Habits keep us in balance—they can ease us through the downs and keep the ups from becoming too uppity. When the going gets tough, we have a repertoire of reliable ways to proceed—we don't have to “get going,” our habits just keep on going.

Making works of art is the hardest work I know. People usually have only a vague sense of all that goes into the process of making a significant work, all the problems, all the wild forces that provoke good solutions. With a little hands-on experience, people realize the enormity of a single artistic accomplishment, the magnificence represented by a large body of works. Without effective habits of process, such accomplishments would be impossible.

The physicist Arthur Zajonc reminds us of the importance of work-of-art habits; in his book Catching the Light, he writes, “The artist and the monk both know through a disciplined practice they can internalize nature so that they can realize new capacities of mind. Personal growth is not only a matter of memorizing sacred texts or of academic artistic analysis, but it requires praxis, daily labor, to fashion fresh, hard-won, soul faculties. Every action of the hand and the eye sculpts the soul.”

OVERVIEW OF THE HABITS OF MIND “SYSTEMS”

This section summarizes four existing H.O.M. “systems” upon which the Habits of Mind of Creative Engagement builds.

1) Arthur L. Costa and Bena Kallick, Habits of Mind Developmental Series

I think of Arthur L. Costa and Bena Kallick as the prime movers of this H.O.M. movement. Their work is widely read and is coming into the same widescale adoption as Howard Gardner’s theory of multiple intelligences. They have published four books in the Habits of Mind Developmental Series, and have schools and a growing cohort of educators that center on the development of their habits of mind. Costa and Kallick have identified 16 habits that comprise their basic repertoire of effective ways to focus and function in the challenging conditions of uncertainty. These are 16 ways great learners know how to proceed intelligently toward good results when they don’t know what to do or what the answer is. Some of their statements from various writing:

A Habit of Mind means having a disposition toward behaving intelligently when confronted with problems, the answers to which are not immediately known: dichotomies, dilemmas, enigmas and uncertainties.

Our focus is on performance under challenging conditions that demand strategic reasoning, insightfulness, perseverance, creativity, and craftsmanship. The critical attribute of intelligent human beings is not only having information, but also knowing how to act on it.

Employing Habits of Mind requires drawing forth certain patterns of intellectual behavior that produce powerful results. They are a composite of many skills, attitudes and proclivities including:

Value: Choosing to employ a pattern of intellectual behaviors rather than other, less productive patterns.

Inclination: Feeling the tendency toward employing a pattern of intellectual behaviors.

Sensitivity: Perceiving opportunities for, and appropriateness of employing the pattern of behavior.

Capability: Possessing the basic skills and capacities to carry through with the behaviors.

Commitment: Constantly striving to reflect on and improve performance of the pattern of intellectual behavior.

The 16 Habits of Mind identified by Costa and Kallick:

- **Persisting**
- **Thinking and communicating with clarity and precision**
- **Managing impulsivity**
- **Gathering data through all senses**
- **Listening with understanding and empathy**
- **Creating, imagining, innovating**
- **Thinking flexibly**
- **Responding with wonderment and awe**
- **Thinking about thinking (metacognition)**

- **Taking responsible risks**
- **Striving for accuracy**
- **Finding humor**
- **Questioning and posing problems**
- **Thinking interdependently**
- **Applying past knowledge to new situations**
- **Remaining open to continuous learning**

Additional info can be found at: <http://www.habits-of-mind.net/>

I was struck by how little mention Costa and Kallick make of the arts, when their habits are so powerfully resonant with the experience of arts learning—the capacity for wonderment and awe, and creating/imagining/innovating! To my eye there is no subject matter more inviting and rewarding in which to practice these habits than the arts.

2) Ted Sizer and Debbie Meier CPESS (Central Park East Secondary School's) Habits of Mind from the Coalition of Essential Schools

In their words: “We created the CPESS habits of mind ... as we realized the need for unity across disciplines and a focus on the essential. We didn’t want an endless laundry list, so we wrote down five, based on many years of watching kids and observing our own habits, and now they are posted in most classrooms... They are at the heart of each curriculum as well as being the basis for judging student performance. We never quite write them out the exact same way, and over the years we’ve realized they are constantly evolving in their meaning.

“They are:

- The question of evidence, or “How do we know what we know?”
- The question of viewpoint in all its multiplicity, or “Who’s speaking?”
- The search for connection and patterns, or “What causes what?”
- Supposition, or “How might things have been different?”
- Why any of it matters, or “Who cares?”

The (Sizer/Meier) Habits

- **The habit of perspective:** Organizing an argument, read or heard or seen, into its various parts, and sorting out the major from the minor matter within it. Separating opinion from fact and appreciating the value of each.
- **The habit of analysis:** Pondering each of these arguments in a reflective way, using such logical, mathematical, and artistic tools as may be required to render evidence. Knowing the limits as well as the importance of such analysis.
- **The habit of imagination:** Being disposed to evolve one’s own view of a matter, searching for both new and old patterns that serve well one’s own and other’s current and future purposes.
- **The habit of empathy:** Sensing other reasonable views of a common predicament, respecting all, and honoring the most persuasive among them.
- **The habit of communication:** Accepting the duty to explain the necessary in ways that are clear and respectful both to those hearing or seeing and to the ideas being communicated. Being a good listener.
- **The habit of commitment:** Recognizing the need to act when action is called for; stepping forward in response. Persisting, patiently, as the situation may require.

- **The habit of humility:** Knowing one's right, one's debts, and one's limitations, and those of others. Knowing what one knows and what one does not know. Being disposed and able to gain the needed knowledge, and having the confidence to do so.
- **The habit of joy:** Sensing the wonder and proportion in worthy things and responding to these delights.

For more: http://www.essentialschools.org/pub/ces_docs/about/phil/habits.html

3) Studio Habits of Mind (copyright 2004 The President and Fellows of Harvard College on Behalf of Project Zero) From the VALUES Project, a network of schools and educators led by The Center for Art and Public Life, the Alameda County Office of Education, and Project Zero at the Harvard Graduate School of Education.

- **Develop Craft** Technique: Learning to use tools (e.g., viewfinders, brushes), materials (e.g., charcoal, paint), and artistic conventions (e.g., perspective, color mixing). Studio Practice: Learning to care for tools, materials, and space.
 - **Engage & Persist** Learning to embrace problems of relevance within the art world and/or of personal importance, to develop focus and other mental states conducive to working and persevering at art tasks.
 - **Envision** Learning to picture mentally what cannot be directly observed and imagine possible next steps in making a piece.
 - **Express** Learning to create works that convey an idea, a feeling, or a personal meaning.
 - **Observe** Learning to attend to visual contexts more closely than ordinary "looking" requires, and thereby to see things that otherwise might not be seen.
 - **Reflect** Question & Explain: Learning to think and talk with others about an aspect of one's work or working process.
 - **Evaluate** Learning to judge one's own work and working process and the work of others in relation to standards of the field.
 - **Stretch & Explore** Learning to reach beyond one's capacities, to explore playfully without a preconceived plan, and to embrace the opportunity to learn from mistakes and accidents.
 - **Understand Art World Domain** Learning about art history and current practice.
- Communities: Learning to interact as an artist with other artists (i.e., in classrooms, in local arts organizations, and across the art field) and within the broader society.

The VALUES project is led by Dr. Lois Hetland, Principal Investigator at Project Zero, Harvard School of Education and Associate Professor of Art Education at the Massachusetts College of Art; Louise Music, Arts Learning Coordinator and Project Director, Alliance for Arts Learning Leadership, Alameda County Office of Education; and Ann Wettrich, Associate Director of Education, California College of the Arts Center for Art and Public Life.

For more: <http://center.cca.edu/about/news/6>

4) Sparks of Genius: The 13 Thinking Tools, Robert and Michele Root-Bernstein. The shared mental processes reported by highly creative people in very different fields. (Houghton Mifflin, 1999)

Primary tools that can function somewhat independently

- **Observing.** Paying attention to what is seen, heard, touches, smelled, tasted or felt within the body. Making sense of sensation.

- **Imaging.** Recalling these feelings and sensations or creating them internally in a private personal shorthand.
- **Abstracting.** Paring down complicated sensations, images or information to simple principles.
- **Recognizing patterns.** Discovering structures in nature or man made things, even when initially not evident. Is the basis for setting and surprising expectations, making predictions, and proposing good questions.
- **Forming patterns.** Creating novel patterns, combining elements in unexpected ways.
- **Analogizing.** Finding common properties or functions of two apparently different things.
- **Body thinking.** Using the preverbal and presymbolic thinking that emerges in the feel of sensation and physical awareness.
- **Empathizing.** “Losing oneself” into the thing under study.
- **Dimensional thinking.** Taking something from a flat plane into space, interpreting images from one set of dimensions as objects in another.

Higher-order tools that use the primary tools in integrated ways

- **Modeling.** Trying out ideas in tangible forms.
- **Playing.** Enjoying the endeavor, irreverently experimenting with conventional procedures, purposes and rules.
- **Transforming.** Translating from one thinking tool to another and into languages of communication.
- **Synthesizing.** Gaining understanding through the holistic integration of data from the various senses and ways of knowing.

WHAT THE H.O.M. “SYSTEMS” SHARE

The four systems above, and mine below, all prejudice a priority on inner activities rather than content or results. This perspective places a healthy balancing emphasis on learning processes, on the experiential rather than overemphasizing the tangible. The focus on habits recognizes the learning that is valuable for humans rather than that which is convenient for institutions. The systems do not shy away from that which is mysterious to rest in the safe flatness of the literal, do not contort themselves to the ease of measurement.

They all emphasize habits rather than mere capacities. Certainly all the items are human capacities, however the metaphor of habits announces they are developed and practiced in a different way. There are hundreds of human capacities involved in learning and creative engagement; and there may be some value in producing a many-page list of them. But the metaphor of habits invites a commitment to priority; it focuses us to create movement. There are a thousand things a distance runner has to be able to do, including tying her shoes and starting after the gun; in training a runner, we don’t focus on the thousand things, we prioritize the absolutely essential clusters of capacity that will allow her to guide her learning over the long arc of her aspiration. More than being things we can do, habits become embedded ways we naturally go about working, becoming part of who we are. This invites a different pedagogical approach. It is very different to teach someone nutrition and health information, and then deem it successful based on good answers in a written test, as opposed to teaching in which an overweight person can lose weight by adjusting eating habits that will lead to sustaining a life at lower weight.

Each of the systems is imperfect. The named habits are not discrete; they are neither developed apart, nor function apart, from one another. Different terms could be applied to shed light on the

same abilities. Any number of the elements within an identified “habit” could be split off into a named habit of its own. They are all working hypotheses.

They are all partial. They all aspire to provide a healthy and helpful step forward in clarifying and promoting learning. The next step is pedagogy—using this or that system of descriptors, how do we guide learners to develop these habits. The best designed education systems come to little with ineffective pedagogy; without effective pedagogy the habits of mind approaches become little more than interesting intellectual constructs.

WAYS THE H.O.M. OF CREATIVE ENGAGEMENT ARE DIFFERENT

Each “system” leads the learner toward particular thinking practices. There may not be many degrees of separation between the goals of the different systems, but those differences matter a lot. I personally would be delighted to have a child of mine in a school committed to any of the approaches. The focus on the H.O.M. as opposed to content coverage is powerful in whatever direction it is focused. However, different educators will resonate with different systems, depending on their personal philosophy, education goals, personal style and the way they are introduced to them. (I find you never really give up your first love.)

The goal of the approach I offer here is perhaps the most ambitious. (It is certainly the least refined at this point, as I offer my set as a current best idea, in essay rather than published form, in an ongoing process of development.) I wish to aim our intention partly toward mystery. I am a teaching artist, not a researcher, administrator, classroom or arts teacher. As such, my emphasis has been on creative engagement rather than learning skills in general or skill development within an art form. The VALUES Studio Habits of Mind provide an elegant example of taking the metaphor of H.O.M. through an arts teacher’s goals.

For decades, teaching artists have been a crusty lot. We resisted, sometimes fiercely, any kind of codification of our practice. We believed in the magic of creativity and the fragile potency of our impact. We felt we had such consequence with young people, disproportionate to our short amount of time with them, precisely because we came from the outside world, unfettered by the norms and expectations of schooling.

In recent years, this disorganized field of teaching artists (becoming steadily more organized) has carefully dared to work with, rather than resist, the institutional demands on our behind-closed-classroom-doors successful work. The number of visits with the same groups of kids has increased—perhaps as a result of this collaborative spirit, or perhaps schooling wanted more of the learning power we provided. In the last decade or two of collaboration with school educators, we have contributed to the establishment of new learning standards, and have found reasonable ways of connecting the learning we care about with the national, state and local learning standards schools now aspire to achieve. We have worked to build effective partnerships with classroom teachers and arts specialists to expand students’ arts learning—indeed teaching artists have been leaders in learning the skills of partnership building, since people in schools are so swamped and stretched for time, and often so unused to partnering. In the best projects in the country, teaching artists now comprise one third of a triad that delivers the best arts learning to students—the teaching artist, the committed and informed classroom teacher, and the in-school arts teacher—each bringing complementary teaching strengths and goals that maximize the

learning for students in schools. We have developed assessment practices we could live with because we found they didn't strangle the magic and helped young artists and learners in general know when they were getting better. Many TAs felt imposed upon—why are we the ones charged with designing alternative assessments that illuminate the quality of learning everyone in the room could feel, but couldn't effectively share?—but we delved into the problem anyway. We have found ourselves thrust into the challenge of the biggest arts learning experiment in the nation today—integrating the arts into other subject matters; and in this, we have fought to make sure the arts don't become a handmaiden to other subject matter that our culture takes more seriously—but that rather, creative engagement remains central in the arts component. With teacher colleagues, we are discovering ways to bring the arts and other subject content together in a way that catalytically advances them both further than they would go separately. And through all this exploration outside our traditional comfort zone of providing the magic of the arts, we have found our work with students is not so fragile; indeed, it seems to be as flexible and resilient as the arts themselves. Unintentionally, we are becoming a profession. We are learning to teach strategically, to focus our power on particular skill development, without losing the beauty of the whole.

The following approach is my offering to go a step further into the mysterious, experiential, terrain of creative engagement and draw distinctions. It has been my experience that identifying aspects of the creative experience, distinguishing facets that we can name and see, does not suffocate the marvelous power of the creative experience. I find that identifying these features takes learners further. It takes teachers further, and prompts fresh thinking, vivid teaching, and more effective use of arts-engagement activities in all subject areas. It takes learners further, highlighting capacities they use, and sense, but did not know they had, or know they applied in distinct and powerful ways. I have found ways to develop these creative engagement skills in activities that can take just two minutes a day, every school day, and not just in big arts projects that take a number of class scarce class hours. As we get more effective as a team of arts educators, we become more strategic in ways to use different strategies and tools, flexibly adapting to evolve.

I believe that creative engagement deals with spiritual matters. There are many things that cannot be named in the mystical heart of spiritual experience, and many things that should not be named when we deal with public schools. Let's leave those things unnamed, and allow individuals to create their own sense of those mysteries, as humans have done for millennia. Let's name what we can and do what we can do—which is a lot—to place creative engagement at the heart of learning.

THE HABITS OF MIND OF CREATIVE ENGAGEMENT

These are the key processes, actions and attitudes activated when we invest ourselves in the flow of creating. These can be focused on and developed as habits of mind.

- 1 • Generating multiple ideas and solutions.
- 2 • Sustaining an inner atmosphere of exploration.
- 3 • Using one's own voice.
- 4 • Trusting one's own judgments.
- 5 • Formulating good questions and problems.
- 6 • Improvising.
- 7 • Finding humor.
- 8 • Crafting.
- 9 • Making choices based on a variety of criteria.
- 10 • Inquiring skillfully.
- 11 • Persisting.
- 12 • Self-assessing.
- 13 • Reflecting metacognitively.
- 14 • Thinking analogically.
- 15 • Willingly suspending disbelief.
- 16 • Observing intentionally.
- 17 • Going back and forth between parts and wholes.
- 18 • Trying on multiple points of view.
- 19 • Working with others.
- 20 • Tapping and following intrinsic motivation.

1 • Generating multiple ideas and solutions. Often called brainstorming or “ideational fluency” in psycho-jargon, this is the capacity to create many possible ideas or solutions, and the instinct to go beyond single adequate answers, or pretty-good ideas, to produce more, better and divergent ideas from which to choose the best. This “primary” creative capacity works in a mysterious part of our psyche, able to form original and potentially meaningful new ideas out of the undifferentiated mass of inner sensation. It is almost a spiritual capacity, yet it often feels playfully fun, especially when producing many ideas becomes the habit, which abundance reduces pressure on results, and inculcates an appropriate sense of play. Brainstorming thrives under supportive conditions and withers readily when such an atmosphere is not present; the atmosphere is at least as pedagogically crucial as the activities that develop the habit. Without access to this habit, we do what psychologists call “satisfice”—grab the first plausible solution that comes along. Certainly we necessarily satisfice often in our busy lives, and get good at making reasonable, quick decisions about many things. The problem is that satisficing eliminates the possibility of significant creative accomplishment, and builds an impatience, a sense of wrongness, about processes that don't produce quick results, that don't cut to the chase. Without a habit of brainstorming, we lose the pleasure in merely generating many ideas, the muscular flexibility of an imagination in good shape, and the quality of the ideas that result. Without a habit of brainstorming, we lose the artist's empowerment of being grounded in our own reasons and priorities; instead our mind is colonized by the motivation to come up with answers that fit the demands and ideas of other people or institutions. Some people distrust their “primary” capacity to generate any creative ideas, and have lost their access or belief in this

universal imaginative capacity, a birthright. It is reported that the most reliable difference between scientists who make creative breakthroughs and those who don't has nothing to do with their cognition or work processes—the former group describes themselves, thinks of themselves, as creative and the latter group describes themselves as not.

2 • 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 feel about mistakes, seeing them as opportunities, and an eager willingness to try new things when one experiment doesn't pan out. This habit holds curiosity in the highest value; and as Isaac Asimov said, "The essential creative moment is not "eureka" but "that's funny...". This habit sustains an individual's healthy curiosity about differentness which is an alignment to the world that is essential to lifelong learning as well as all social functioning, from relationship building to overcoming racial and social prejudices.

This inner worldview is largely at odds with prevailing preferences in our culture—quick results, right and wrong answers, learning reduced to information, and belligerent literalization of complex human truths. This habit seems counter to efficiency and decisiveness, highly valued traits in our culture, but actually lives in a more complex relationship with them by sustaining ongoing curiosities even as steps and stages are determined along the way. This habit is comfortable with the vulnerable and often anxious state of not-knowing, recognizing that state as both true and positive. This habit is at ease with ambiguity, and holds a commitment to learning itself as a human good. This habit leads to emotional maturity through managing the ongoing dynamic balance of knowing and not-knowing, asking and answering. This habit is essential to feed the spiritual center of learning—the experience of wonder.

3 • 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. This habit develops the inner Geiger counter that guides choices and inquiry that makes good learning. As we mature in this habit, we begin to distinguish the many voices in us, celebrating the many influences, building empathy, and owning our increasing size as people. It is a big and ongoing task to find your own voice. We develop a set of inner questions to find it, and a feel, a gut feel, for when we are on it. Many people mistake their opinions for their voice, or adopt other's views as their own, or lack the patience for the process of discovering their own voice. Some lack the self-esteem to value their own voice or believe they do or should have one. Many people speak in the voices of people they admire or were trained by, never knowing they have a distinctive voice other than the one that speaks quietly privately in their own heads. Authenticity and individual power emanate from one's own voice, and cannot be fully achieved without it.

4 • Trusting one's own judgments. Perhaps underneath the habit of finding one's voice, this develops a personal inner compass for validity. It 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. Making a judgment is an act of consequence in the individual, a decisive moment, more than having an opinion, a set of ideas, or an impulse to try out. This habit must be

distinguished from becoming judgmental, which results when an individual loses touch with the processes of validity and attaches to the power of the result. This habit includes knowing when not to judge because the input is incomplete or confusing as well as knowing that one's former views seem to have changed inside, and knowing when a new judgment has arisen. Eliot Eisner terms this as the capacity to make good judgments in the absence of rules.

Without this trust, we adopt the views of others, often instinctively, and lose the sense of where we truly stand in undefined situations. Such individuals can become prey for recruitment into belief systems, often becoming rigid adherents. Without this habit, personal satisfaction gets measured by the benchmarks of others, or the individual becomes insecure in making choices, making it difficult to fully invest in creative or inquiry processes.

5 • Formulating good questions and problems. Because the better question leads to more engaged answering and better answers, 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 ourselves to find the ones that ring out as relevant, interesting and having an emotional hook. This habit requires a capacity to recognize patterns, evident and less overt, which allow for questions that penetrate and identify deeper problems. A study of Nobel Prize winning scientists found they were no better at solving problems than average scientists, but that they were better at posing and identifying the best problems. Offering high quality questions contributes enormously to group work, boosting cooperative learning.

Since we guide our problem-solving processes with internal questions, we do not get better at problem solving unless we attend to our questions and inquiry processes; we have to have a taste for expanding our repertoire. Without this habit, we get stuck in ruts because we keep asking the same questions, and come out with similar results whatever the problem. We also get bored more readily and so invest less of ourselves. People without this habit become intolerant of its appearance in others, and come to constrict the learning and quality of inquiry of those around them.

6 • 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. Skilled improvisers guide themselves into and out of such play, finding appropriate times and methods; they function happily within improvisation, and distill the valuable material that arises. This habit develops a boldness of spirit, a feel for and trust of intuitive impulses, and the capacity to stay focused in the present moment.

Without this habit, caution assumes a larger place than it should in learning— anxiety about results, about making mistakes, about doing things right, about how one is perceived, chip away at the capacity to engage fully. Those who shy away from improvising tend not to trust their own voice or impulses, looking to others for guidance and know processes to follow, finding comfort in established procedures, and clinging to them; they also tend to overly rely on other people's measures of success. If overdone, this habit can undermine necessary discipline and the capacity to make choices and follow their potential and consequence; fear of this extreme often undermines the development of a healthy dose of this habit.

7 • 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. This habit recognizes established patterns and expectations and values disruption of norms, surprise, cleverness and play for their own joyful sake, not for the results they produce. As a habit of mind, the sense of humor serves as a Geiger counter to identify places where we wish to shed light, sparking imaginative analogies to do so. This habit of mind is essential to sustain strong partnerships and collaborative efforts over time.

Weakness in this habit of mind leads to literalism, over-reliance on logical sequencing and on getting results. Processes become less enjoyable, and norms and expectations become more deeply entrenched. Certainly the habit of humor can become problematic, when used for destructive (or defensive) purposes or when overly relied upon it can foster avoidance of delving into inquiries, and can reduce the courage to take a personal risk.

8 • Crafting. This delight in completing things as well as they can be done seeks to achieve higher quality, honors the wisdom within each discipline and genre, and wishes to learn from others to make things continually better. This habit seeks to refine, gain mastery of processes, honor tradition, apply precision with ever-increasing quality. It applies consistent criteria of excellence, and holds high standards to aspire to. This habit applies to all construction, large and small, from a high-stakes project, to the formulation of an important sentence. It provides satisfaction, essential to sustaining creative engagement, in the many steps along the way, and in the larger arcs of accomplishment that develop depth of ability.

Creative engagement without a feel for craft begins to dabble, enjoying processes but not committing to high quality. Creating without craft can not only lead to sloppy, second-rate work but also to attitudes that do not honor the greatness within every field, the power of high accomplishment, and the personal investment and discipline that greatness requires. Too great a habit of craft can squeeze the creative component out of the experience and result, becoming technical or brilliant-without-aliveness. Without the habit of gaining pleasure from craft, creative processes can become an ordeal or overly completion-focused.

9 • Making choices based on a variety of criteria. In addition to finding one's own voice and making choices based on it, this capacity enables us to make good, effective, personally-true choices based on a wider palette of perspectives. For example, being able to write in a particular style for a particular audience or to paint the landscape that will work in the corporation's atrium. 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. This middle ground enables one to discover personally authentic and relevant investment within the frameworks and requirements of others'. This is the habit that enables us to find intrinsic motivation within many "have to" tasks and responsibilities in learning and life.

Without the habit that enables us to find joyful and satisfying ways to create within other people's projects and requirements, we tend to go dead during our required participation or get angry at the suppression of our preferences, which feels like squelching the spirit. Such people are resistant to and critical of other ways of inquiring and projects other than the kind they instinctively enjoy. Such people struggle to find a sustainable inner balance in their work. This habit is in a volatile state of development in many teenagers; as they seek to establish their own criteria of choice and excellence, they gain strength in this process by discriminating and rejecting the criteria of others.

10 • 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), taking advantage of mistakes, among others. This habit includes the skill of not knowing (Keats' Negative Capability: "when a man is capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason"), the uncertainty of which is uncomfortable for many people—we must be able to not know well to come to new knowledge. The inquiry habit becomes a life of ongoing, curious questioning into things, of flexibility to adapt to changing circumstances, and of experiencing "flow" and satisfaction regularly. It is often said that the ultimate goal of schooling is "learning how to learn," yet the development of these habits of mind are incidental or secondary in schools.

Blockages in these habits appear in inability to follow through on projects, bogging down, feeling consistently dissatisfied with results, lacking the innate spark of curiosity about what to do next, jumping to conclusions or endings. Without inquiry skills, one never develops a love of learning. This habit is prized highly in all professional arenas.

11. 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. As a child develops healthily, her attention span grows; similarly, a learner's capacity to persist grows as she learns how to engage in processes without the quick gratification of completion, but rather with other kinds of satisfaction and interest along the way. We must develop a sense of holding to a goal even as we adjust strategies, make mistakes, encounter deadends, take side-trips, and encounter failures on the journey. We need the emotional, intellectual, and spiritual grit to keep going when the fun and flash wane, willing to tough it out sometimes when that is necessary. We need a balanced sense of self-managing our habit of determination so that it contributes to, rather than depletes, sustainability, and we need to know when to lighten up, take breaks, and give up at the right time. Persistence develops a dynamic relationship with time frames, with a sense of inner pacing that provides the right energy and mental frame for some processes that are quick and others that take application over longer periods. Persistence is the essential balance in finding a positive relationship with mistakes and failure, so we learn how to hold them without anxiety or over-reaction, but in their appropriate position as modest facts of creative life that turn to advantage.

Without a healthy habit of persistence, we give up too easily, get tentative in our commitments, grow stubborn to the point of willfulness in the face of evidence, or become inflexible in process. Persistence requires emotional intelligence because it readily encounters frustration, anger, despair or a squelching of such emotions, which must be handled appropriately to develop this habit in a healthy way.

12 • 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—from sensing when one part is "good enough," to the need for more revision in another, from ongoing reflective awareness of the quality of the process and result, to dynamic knowing of one's strengths and weaknesses. Well-established grounding in self-assessment allows for the good use of feedback from others, and exploration of the standards others apply to work of this kind.

Those who lack this habit become dependent on the standard tools of evaluation which reduce intrinsic motivation, and foster dependence (even addiction) on extrinsic affirmation and reward.

They become judgmental (of themselves and others), reduce the personal ownership of, and pleasure in, learning processes. Those who cannot or do not self-assess in a balanced ongoing way remain insecure in a fundamental way, and they constrict their own flow experiences with caution.

13 • 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. As opposed to self-absorption and narcissism, this holds distance between the observer and the data within oneself being observed. In a healthy individual, this habit feeds a kind and supportive inner learning place, within which sparks of interest get noticed and valued; those with harsher internal climates can have volatile experiences of this habit. Metacognition also enables the learner to come to deeper understanding of the material and project at hand and the relationship between it and the world. When this habit is well developed, it becomes more embedded in the action of engagement, making less of a distinct gap between action and reflection, but intertwining them.

This healthy habit can lose its way into narcissistic self-absorption or inflated self-importance (both of which reduce active engagement). I notice that dogmatic and highly opinionated people are weak in this skill and often deride it or see it as a waste of time.

14 • Thinking analogically. As opposed to logical thinking, this equally important 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. This cognitive work happens in a different part of the brain and body than does logical processing; it feels different, even awkward to those who are out of the habit. Creative work requires analogical thinking in an ongoing dynamic tension with logical thinking, both actively engaged. This habit often springs from “immediate” or “gut” knowing that bypasses sequential thinking, and it embraces the richer-than-literal “truths” held in metaphor.

Even within the few decades of my professional observation, I have noticed this habit becoming less evident in many learners and more difficult for post-pubescent young people and adults to tap—a serious problem since it is a fundamental capacity of creativity in a nation that purports to value creativity. The veracity of metaphor is harder for many to grasp, and their discomfort in the process of creating analogies is visible and often vocal. The College Board has eliminated the analogy challenges in their SAT test.

15 • 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. In a time when we are taught caution, feel many threats are actively ready to prey on us (with national media, our cultural commons, pounding the themes of threat and fear), this capacity becomes more important to develop so that we do not succumb to the aggressive literalism of our culture, and lose the richness of fully exploration of other worlds that have been created to share truth. This is an almost spiritual capacity to trust, to say “yes” to the unfamiliar, and to sustain an active and regular participation in the experience of wonder, which is one of the most overlooked essentials for learning and a rich quality of life.

Those who have diminished capacity and use of the skills of this habit live in a much diminished, cautious, often fearful, world. Their lack of imaginative flexibility limits the intake of

information and sensation, narrows the range of thinking, reduces the empathetic capacity, and makes life less fun. We have been far more successful in teaching young people to be careful about credulity than teaching them how to suspend disbelief, and engage the imagination wholeheartedly, where appropriate.

16 • Observing intentionally. We can take in information from our world actively, through all the senses, seeking particular kinds of input, drawing particular discriminations, and staying awake to the environments we inhabit. This overload of data is usually processed by intuitive selection, most commonly by the unseen structures of our upbringing, our animal nature, enculturation and personal preferences. We can also 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.

Those without a habit of intentional attending are ready targets for manipulation by media, institutions, and individuals and organizations that promote doctrinaire interpretations. Such individuals can get easily lost in new information, relying on standard ways of thinking and interpreting. Such people get bored easily and miss very obvious things because their expectations determine their experience. In a Harvard study in which people were asked to watch a videotape of a basketball game, a majority of those asked to count the passes completely did not register a man in a gorilla suit who walked into the center of the frame for five seconds, while those asked to notice what they see all saw the anomalous figure.

17 • Going back and forth between parts and wholes. We naturally switch perspective in learning processes, from micro to macro, from detail to big picture, back and forth between the forest and the trees. Practice develops not only greater wisdom from the broad perspective, but a sensitive ability to know which perspective is the most fruitful at any given moment and 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.

Those without a balanced and dynamic access to both perspectives struggle on one side or the other. They get lost in detail, or lose their way often, or they can't get down to brass tacks. They often lose the why as they delve into the how. Or they resist experimenting with hows because they don't feel quite right about the why.

18 • 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. The habit applies to connections to ideas as well as other people—Einstein's thought experiments took him inside the perspectives of phenomena in physics to learn from their POV. It develops into an inclination toward entering other viewpoints to learn from them, and using that knowledge to further one's process and work more deeply and effectively with others. It enriches the exploratory process by broadening the input and providing access to the way other people understand things. It is essential to breaking down prejudices.

We are familiar with the many symptoms of people who lack empathetic capacity, who do not feel for or with other people, who are not curious about other people's experience. The inability to imaginatively enter into thought experiments, or to grasp and have a feel for the way other people know things, makes for limited learning and insecurity (often marked by rigidity) in learning and in life.

19 • Working with others. Given a capacity for empathy, this commitment to collaboration can be called teamwork skills, and they include, clear communication, awareness of expectations and

their ongoing realization, the capacity for interdependence, trust of others, and distributed learning. A huge percentage of learning in life is done with other people, rather than alone, and these skills enable us to contribute to the group's energy, process and success, as well as find our own learning amid a group's engagement. The habits of collaboration are deeper than mere cooperation, and they include a flexibility with the roles one assumes, sometimes giving up personal preferences to delve in ways that others suggest and need, even taking on unfamiliar or uncomfortable roles during exploration.

Loners may be an extreme example of the lack of these skills, but more common weaknesses appears in those who struggle in groups, who try, but make the group less successful—there are often ego and psychological issues involved. Some psychologists worry that because young people spend less time in socializing play than they used to, these skills may not be less well developed, making it harder for youngsters to have these habits at the ready to apply to group learning opportunities. The atmosphere for creative collaboration can be as important as the skills of the individuals; even people with good interpersonal learning skills will flail in an unsupportive environment.

20 • Tapping and following intrinsic motivation. Amid the many, and very real, extrinsic motivators that work on us, the capacity to find and follow one's own personal yearnings is essential to creative work. 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. This yearning takes us beyond what we know, striving to capture and communicate that which we know that lies beyond words. When well developed, this habit enables us to take extrinsically-motivated situations, the many things we have to do in life, and find an aspect of them that taps our intrinsic-motivations, so we can transform extrinsically driven tasks into intrinsically driven opportunities.

Those who cannot tap their personal motivation may get a lot done, even become very successful, but they do not get the same pleasure, satisfaction, aliveness from their work. While we may be productive and pleasing, we cannot engage creatively without intrinsic motivation. This habit takes us to what is important in life, to what is most important for each of us as individuals, which can only be attained by consistent access to and guidance of our intrinsic passions.

CONCLUSION

Twenty Habits are too many for a handy working system with students. As I continue to refine this cumbersome list toward my version of a workable set, I encourage colleagues who are interested in these ideas to do the same. Pick the set of habits that seem the most central, or most teachable, or most relevant to your area of focus, and work with that subset. I would very much appreciate your keeping me informed of your learning about the use of these Habits—I hope we can become an informal network of experimenters. We have a lot of experimenting ahead in order to refine these rough ideas into efficient tools, and I look forward to the ongoing learning. As mentioned earlier, this document does not address the pedagogical issues of the Habits of Mind of Creative Engagement. I will be doing further experimenting and writing along those lines, and I invite you to experiment with your teaching instincts to discover ways to focus on the development of habits of mind in young learners, rather than teaching in our usual ways and noting the appearance of these habits. Imagine the difference between noticing the appearance of multiple intelligences in students you teach, and actually teaching to develop multiple intelligences in young learners. Similarly, I hope we can begin to explore ways of developing these habits that are as engaging and creative as the habits themselves.

Thanks to readers for working through this dense formative document with me. These ideas in practice are going to be far more dynamic and fun than working through this launching essay.