

Professional Book Review

Costa, A.L. & Kallick, B. (Eds.). (2000). *Activating and Engaging Habits of Mind*. Alexandria, VA: Association for Supervision and Curriculum Development.

INTRODUCTION

*We are what we repeatedly do.
Excellence, then, is not an act but a habit.*

Aristotle

The Greeks spoke of virtue. Eighteenth and nineteenth century European writers emphasized character. In the twentieth century attention turned to intelligence as the quality most valued in people. In their efforts to define intellectual excellence social and cognitive scientists, educational philosophers and psychologists have generated a variety of terms to identify the array of attitudes, motivations, values and skills that contribute to effective thinking. Taking their cue from John Dewey (1933) in *How We Think*, Costa and Kallick have named the patterns of intelligent thinking behaviors Habits of Mind. On their website's homepage, they explain:

Habits of Mind aid students in school and adults in everyday life as they are challenged by problems, dilemmas, paradoxes, and enigmas for which the solutions are not immediately apparent. Drawing on the Habits of Mind means knowing how to behave intelligently when you don't know the answers. It means not only having information, but also knowing how to act on it. www.habits-of-mind.net

Activating and Engaging Habits of Mind is the second book in their four-book series entitled *Habits of Mind: A Developmental Series*. The first book in the series presents Costa and Kallick's conception of thinking dispositions and the sixteen intelligent behaviors they have chosen to associate with that conception. Subsequent volumes describe instructional strategies that nurture development of their habits of mind, means of assessing growth and performance, and ways to build learning communities that support development systemically. In this second book, Costa and Kallick focus on practical aspects of classroom instruction and the school community that promote development of the sixteen thinking habits that they believe contribute to good thinking.

Arthur L. Costa is a long-standing writer and promoter of the critical thinking skills movement in education. Author of *The School is a Home for the Mind*, he has provided leadership to the movement for supporting higher-level thinking through curriculum development, public policy, and promoting learning communities that practice habits of mind. At the time of this book's printing, he maintained positions at California State University, Sacramento in the department of education and the private Institute for Intelligent Behavior in Cameron Park, California.

Bena Kallick brings wide experience in application of critical thinking research to practice through classroom teaching, teacher supervision, and community program development. She has published whole language curriculum and books about building learning communities and assessment-based instruction. Kallick has served on the teaching staff of Yale University School of Organization and Management, University of Massachusetts Center for Creative and Critical Thinking, and Union Graduate School where she obtained her PhD. in educational evaluation.

As co-editors of *Activating and Engaging Habits of Mind*, Costa and Kallick collect key teaching strategies that promote habits of mind in the school community. They author several chapters themselves and they invite teachers in a variety of disciplines to contribute examples from their own practice that illustrate effective practice for activating and engaging habits of minds in the classroom.

The editors' main purpose for this second book of the series is to translate theory into practice through example so that classroom teachers, school principals, and district administrators are offered a selection of effective strategies that they can readily connect to their own experience. The editors anticipate that by sharing the experience of others, educators will be stimulated to incorporate the habits of mind inventively into their own practice. While *Activating and Engaging Habits of Mind* succeeds in achieving its purpose of inspiring and fueling instructional innovation, it provides inadequate justification for effecting the change.

SUMMARY OF CONTENT

Habit is a cable; we weave a thread of it each day, and at last we cannot break it.

This quote from American educator Horace Mann (1796-1859) introduces the Habits of Mind website and it distills the foundational premise of Costa and Kallick's book.

In the opening forward, education philosopher and researcher David Perkins of Harvard Project Zero explains this foundational understanding. Perkins efficiently condenses 70 years of research and argument in psychology, philosophy and education into four pages of explanation for the conceptual framework of the series:

- that intelligence involves more than the accumulated effect of skill and knowledge
- that certain patterns of intellectual behavior are more and less productive
- that productive intellectual behaviors can be learned, practiced, and habituated
- that cultivating these "habits of mind" is a life-long endeavor

Costa and Kallick follow-up Perkins' preface to the series with introductory material that explains the structure of the series and the role of each book in helping educators weave the threads of good thinking into their daily instruction and school communities so that students and their teachers develop productive habits of mind.

The remaining fourteen chapters of the book can be divided into four sub-sections. Chapters 1-4 set the stage for instruction by describing specific instructional strategies that have been proven effective for supporting habits of mind in classrooms and school communities: modeling, intentional use of language, questioning, and concept mapping. These strategies are proven instructional techniques that many teachers already use. Costa and Kallick emphasize their connection to making good thinking more visible to learners so that they can learn to be better thinkers.

Chapters 5 and 6 describe two approaches for organizing explicit instruction that promote mindful habits effectively. Both approaches to explicit instruction contextualize the habits of mind within course content. Some teachers plan units and lessons that infuse content with one or more habits of mind. They do so by using essential questions that engage students to use habits of mind that support the processes and skills used to understand content. They also make the habits an explicit element of their instructional design by incorporating assessment that reflects the inclusion of mindful thinking habits along with content, processes and skills. Teachers who do this are able to evaluate their students' growth in reference to all three elements. Habits of mind can also be taught directly through building awareness of how the students use them in the classroom daily, how they are reflected through theme and characterization in children's literature, and through the life-example of significant men/women in various disciplines.

In chapters 7-13 Costa and Kallick give voice to effective teachers in a variety of disciplines who describe how they carry out instruction that effectively promotes development of mindful thinking in their students. These teachers expand the goal of their teaching beyond student acquisition of content knowledge. They exemplify the practice of using the content knowledge of their subject areas as a means of expanding their students' thinking.

In chapter 14, Costa and Kallick conclude that awareness is the first step toward developing the habits of mind. They note that such awareness grows from building one's own vocabulary for describing intelligent

behaviors, recognizing practice of those behaviors in one's own experience, and projecting how to include those behaviors in one's own life. Costa and Kallick propose that teachers who transform their own behaviors initiate change that potentially ripples out to impact students in their classrooms, other classrooms and the whole school.

ANALYSIS

*Skills of critical thinking without dispositions
 of critical thinking are empty.
 Dispositions of critical thinking without skills
 of critical thinking are blind*

Kant

The heart of Habits of Mind rests on dispositional theories of intelligence that encompass both ability and motivation. A number of prominent writers have contributed to understanding of the theory. These writers vary in regard to the terms they use, the thinking dispositions that they identify, the type and quality of research that supports their writing, and the target audience for their writing. A sampling of writers who have addressed critical thinking in academia and the popular press is offered in Figure 1 below.

Fig. 1 – Sample of Authors who Address Critical Thinking

Author	Orientation	Primary Audience	Preferred term	List
Barell	Education Practice	Academia	Thoughtfulness	General concept
Costa & Kallick	Education Practice	Educators & Policy Makers	Habits of Mind	16 elements
Ennis	Education Philosoph	Academia	Thinking Dispositions	14 elements
Facione, Facione & Giancarlo	Educational Pyschology	Educators	Critical Thinking Dispostions	8 elements
Langer	Pyschology	Academia	Mindfulness	General concept
Marzano & Pickering	Curriculum Design	Teachers	Habits of mind	11 elements in 3 categories
Paul	Education Practice & Philosophy	Academia & Educators	Fair-minded Critical Thinking	5 elements
Perkins & Tishman	Empirical Research Educational Philosophy	Academia	Thinking Dispositions	7 elements - each w/aspectual triad of <ul style="list-style-type: none"> • ability • inclination • sensitivity
Rich	Education Practice	Parents	Megaskills	10 elements
Siegel	Philosophy of Ed.	Academia	Critical Spirit	General concept

Rather than justify their model of thinking dispositions, Costa and Kallick choose a descriptive approach for both the series and this second book in the series. In their preface, the editors state, "What are the 'habits of mind'...? They are the overarching theme of *Habits of Mind: A Developmental Series*, and they are the heart of the book you now hold in your hands." (pg xii) This self-referential definition leaves argument and persuasion to other writers. In *Activating and Engaging Habits of Mind* Costa and Kallick want to help teachers "translate the habits of mind into action." (pg xvii) They emphasize that their book provides suggested examples of how to purposefully teach habits of mind directly and indirectly; they are not giving "prescriptions or recipes." (pg. xviii) Thus, the guiding question of *Activating and Engaging Habits of Mind* might be stated as, "What instructional strategies do teachers and schools use for fostering the habits of

mind in their students?" The anecdotal evidence, personal testimonies, and examples that fill the book address this descriptive question in an engaging style.

David Perkins sets the informal tone for the book in his opening by posing an extended metaphor. He suggests that good thinking involves habitual behavior that is similar to habits that contribute to good driving. Good thinking, he concludes, will most successfully lead us down the road of life. Costa and Kallick continue this informal tone of engagement by opening chapter one with a student's reflective observations on the habit of persistence. The editors then sprinkle similar reflections of students and teachers throughout the chapters they author. They also riddle their writing with sample dialogue, questions, vocabulary and graphics that offer the reader concrete examples of what teaching with the habits of mind can look like in real classrooms. Chapters 7-13 are dedicated to giving full voice to classroom teachers. Each of these chapters is written by a different subject area teacher who describes details of how s/he incorporates the habits of mind into classroom practice.

By committing relatively little text to direct explanation, the editors focus on what the habits of mind look like. They model the habits of mind through sample dialogue, testimonies and examples. This modeling scaffolds and extends the reader's mindful vocabulary and conceptions of how to teach. Graphics lend further visualization to these conceptions. Lesson plan templates and assessment checklists offer concrete tools for instruction. The end effect is a scaffolding of the reader's experience with the habits of mind and an implicit invitation to make the kinds of personal connections that lead to innovative classroom application.

While *Activating and Engaging Habits of Mind* effectively draws the reader to consider creative ways of integrating the habits of mind into his/her own teaching practice, the book does not sufficiently address the more foundational question of *why* the habits of mind should be used in this way. This oversight is exemplified in two ways. First, the editors fail to sufficiently define and validate the construct of the habits of mind. And second, they fail to provide empirical evidence to justify the efficacy of instruction.

In the forward to the series, Perkins sketches the complex philosophical and empirical origins of the foundational constructs upon which Costa and Kallick build their series. He identifies Dewey as the progenitor of the modern critical thinking movement that has been picked up more recently by philosopher Robert Ennis and psychologists Baron and Langer. Perkins also cites his own research conducted together with Tishman. However, wider exposure to the literature about critical thinking is needed for understanding the essential questions that inform Costa and Kallick's premise. Some of these questions are:

- What is the nature of intelligence?
- How is intelligent behavior defined in different cultures?
- Is it possible to establish a truly universal definition of intelligence?
- In what ways do ability and inclination interact to affect intelligence?
- What terms are used for habits of mind by different writers and why?
- Are the terms interchangeable?
- How do different lists of dispositions compare with one another?
- How did Costa and Kallick come up with their particular list of sixteen habits of mind?
- Why sixteen and not seven or twenty?
- Are some dispositions more important than others?
- How do these dispositions interact with one another?
- What is the cause/effect relationship between practice and development of thinking dispositions?
- What is the cause/effect relationship between overall achievement and the kind of instruction that Costa and Kallick propose?
- How can this be reliably measured?

To address these questions it is necessary to explore beyond *Activating and Engaging Habits of Mind*. In Costa and Kallick's website article "Describing 16 Habits of Mind" they acknowledge that the specific number and type of relevant thinking dispositions that might contribute to effective habits of mind is not finite. They have drawn on the work of other researchers combined with ten years of personal experimentation and observation to derive their habits of mind.

Figure 2 in the attached document (fig_2.doc) is a compilation and visual comparison of the elements suggested by several prominent authors in the field. It is significant to note that the authors can be grouped according to the basis of their inquiry i.e. philosophy or practice. Categorization of the various elements for each author's list in relationship to the others is an approximation based upon the definitions for each element given in the literature. It will be noted that there is significant overlap of the various elements from author to author and across disciplines. Even though the nature of argument for each discipline is different, there is a general consensus regarding the behaviors that contribute to effective thinking. The sixteen Habits of Mind are an effective bridge between the various perspectives. This consensus is a partial indicator of validity.

Further definition is likely to evade empirical determination, because of the inherently hidden nature of the mind. Ennis, a careful constructor of philosophical argument accedes this point in reference to his own list of elements:

What I have tried to do with my extended list of abilities and dispositions is to offer...a set of guidelines (that is, a conception) that I feel will help us reach reasonable decisions [about what to include in the listing]. The guidelines cannot be determined by empirical research. Furthermore they cannot be applied by empirical research. Experienced well informed human beings must use their judgment in applying them. [bracketed words inserted for clarification]

Facione *et al* (1995, 1997) approach the question of construct validity more hopefully from the perspective of psychometrics. They are the creators of the *California Critical Thinking Dispositions Inventory (CCTDI)*, an instrument that attempts to objectify and measure critical thinking dispositions using empirical methodology. In their essay "The Motivation to Think in Working and Learning" they give a succinctly thorough explanation of the historical and scientific foundations for the concept of thinking dispositions. Facione and company suggest that validity studies for the CCTDI and personality research are slowly constructing reliable ways to connect the humanistic roots of critical thinking with scientific knowledge.

In regard to efficacy of instruction, Tishman and Andrade (2007) note that determining instructional validity is contingent on two questions:

1. Is it possible to fundamentally change and improve the way people think?
2. What methods are effective?

Costa and Kallick assume an affirmative answer to the first question and rely on personal experience, anecdotal reports and testimonies for the second question. This is true for both the book and their website material. However, the approach to instruction that they promote is the one best supported by research.

The habits of mind are more than facts to be retrieved and procedures to be executed on cue. They are actually a way of living. Because of their nature, teaching the habits of mind does not lend itself to a transmission model of teaching. If there is to be any measurable effect of instruction, that instruction must infuse the habits of mind within the classroom culture and curriculum in a way that requires students to use them.

Tishman identifies three elements of instruction necessary for promoting thinking dispositions:

1. provide exemplars of the disposition
2. encourage and orchestrate student/student and teacher/student interactions involving the disposition
3. directly teach the disposition.

The instructional practices that Costa and Kallick describe in *Activating and Engaging Habits of the Mind* meet these criteria.

Ultimately, the validity of infusing the habits of the mind into instruction will be determined by an accumulation of documented experience. It will take time to for practitioners to document that experience. So for the time being, educators are left with Ennis' suggestion that informed judgment should be used to guide how much time, money, and resources they invest in applying the habits of mind to their classrooms and schools.

EVALUATION OF THE TEXT

Sow an act, reap a habit
Sow a habit, reap a character
Sow a character, reap a destiny

Thomas à Kempis

There has been intuitive agreement throughout the ages that successful people achieve greatness through the combined effect of skills and will. Thus, the idea of habit development is not a new one. Coupling the idea of habit development with the insights of learning science is new, however. Internal locus of control, a term cognitive and social scientists use to identify will is widely recognized as a key motivational element contributing to effective learning. Costa and Kallick's habits, gleaned from critical thinking research and philosophy of knowledge are the next step in analyzing the aspects of internal locus of control that contribute to effective learning. And, it is assumed, aspects that are identifiable are potential foci for instruction.

Costa and Kallick state that "Both students and adults have to engage with the habits before they can use them." Keeping with the values of constructivism, they have offered teachers a resource that invites connection with the experience of other practitioners. The written account of these experiences can broaden the reader's conception of thinking and extend instructional practice with new teaching strategies and objectives. *Activating and Engaging Habits of Mind* effectively invites readers to select from a banquet of ways to incorporate the habits of mind into curriculum design, classroom practice and school culture.

The editors do not expend significant effort justifying their model, nor do they provide the criteria they used for the sixteen dispositions they have chosen to identify as habits of the mind. Though Costa and Kallick present their habits as being objectively derived and applied, the construct remains a matter of interpretation and the efficacy of instruction is yet to be determined. *Activating and Engaging Habits of the Mind* should be considered within the context of the full series and the wider research on critical thinking. The critical reader will be aware that the authors write from a social reformist perspective of education, declaring the goal of education is to "develop thoughtful, compassionate, and cooperative human beings who can live productively in an increasingly chaotic, complex, and information-rich world." (pg xiii) Toward that end, they promote an enculturation model of instruction. The vehicle they propose for effecting the desired outcome is their sixteen habits of mind.

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Spring 2007

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