

Six Key Principles of the Cultures of Thinking Project

1. **Skills are not sufficient; we must also have the disposition to use them.** Possessing thinking skills and abilities alone is insufficient for good thinking. One must also have the disposition to use those abilities. This means schools must develop students' inclination to think and awareness of occasions for thinking as well as their thinking skills and abilities. Having a disposition toward thinking enhances the likelihood that one can effectively use one's abilities in new situations.
2. **The development of thinking and understanding is fundamentally a social endeavor,** taking place in a cultural context and occurring within the constant interplay between the group and the individual. Social situations that provide experience in communicating one's own thinking as well as opportunities to understand others' thinking enhance individual thinking.
3. **The culture of the classroom teaches.** It not only sets a tone for learning, but also determines what gets learned. The messages sent through the culture of the classroom communicate to students what it means to think and learn well. These messages are a curriculum in themselves, teaching students how to learn and ways of thinking.
4. **As educators, we must strive to make students thinking visible.** It is only by making thinking visible that we can begin to understand both what and how our students are learning. Under normal conditions, a student's thinking is invisible to other students, the teacher, and even to him/herself, because people often think with little awareness of how they think. By using structures, routines, probing questions, and documentation we can make students' thinking more visible toward fostering better thinking and learning.
5. **Good thinking utilizes a variety of resources and is facilitated by the use of external tools to “download” or “distribute” one's thinking.** Papers, logs, computers, conversation, and various means of recording and keeping track of ideas and thoughts free the mind up to engage in new and deeper thinking.
6. **For classrooms to be cultures of thinking for students, schools must be cultures of thinking for teachers.** The development of a professional community in which deep and rich discussions of teaching, learning, and thinking are a fundamental part of teachers' ongoing experience provides the foundation for nurturing students' thinking and learning.

Additional Resources for Developing a Culture of Thinking

Selected Articles on Thinking Dispositions

- Perkins, D. N. *Making Thinking Visible* New Horizons for Learning, 2003 [cited 2004]. Available from <http://www.newhorizons.org/strategies/thinking/perkins.htm>.
- Perkins, David N., Eileen Jay, and Shari Tishman. "Beyond Abilities: A Dispositional Theory of Thinking." *Merrill-Palmer Quarterly* 39, no. 1 (1993): 1-21.
- Perkins, David N., and Ron Ritchhart. "When Is Good Thinking." In *Motivation, Emotion, and Cognition: Integrative Perspectives on Intellectual Functioning and Development*, edited by David Yun Dai and Robert J. Sternberg. Mahwah, NJ: Erlbaum, 2004.
- Perkins, David N., Shari Tishman, Ron Ritchhart, Kiki Donis, and Al Andrade. "Intelligence in the Wild: A Dispositional View of Intellectual Traits." *Educational Psychology Review* 12, no. 3 (2000): 269-93.
- Ritchhart, Ron. "From IQ to IC: A Dispositional View of Intelligence." *Roeper Review* 23, no. 3 (2001): 143-50.
- Ritchhart, Ron, Patricia Palmer, Mark Church, and Shari Tishman. "Thinking Routines: Establishing Patterns of Thinking in the Classroom." Paper presented at the AERA, San Francisco 2006.
- Ritchhart, Ron, and David N. Perkins. "Learning to Think: The Challenges of Teaching Thinking." In *Cambridge Handbook of Thinking and Reasoning*, edited by Keith Holyoak and Robert G. Morrison. Cambridge: Cambridge University Press, 2005.
- Ritchhart, Ron, and David N. Perkins. "Life in the Mindful Classroom: Nurturing the Disposition of Mindfulness." *Journal of Social Issues* 56, no. 1 (2000): 27-47.
- Tishman, S. "Added Value: A Dispositional Perspective on Thinking." In *Developing Minds: A Resource Book for Teaching Thinking*, edited by A. Costa, 72-75. Alexandria, VA: ASCD, 2001.

Available Books

- Intellectual Character*, by Ron Ritchhart, 2002, Jossey-Bass
- The Thinking Classroom*, by Tishman, Perkins, and Jay, 1995, Allyn & Bacon
- The Intelligent Eye*, by David Perkins, 1994, The Getty Center for Education in the Arts)

Web Links

- Visible Thinking: <http://www.pz.harvard.edu/vt>
- Project Zero: <http://pz.harvard.edu>
- Artful Thinking: <http://www.pz.harvard.edu/at>