

The **Cultures of Thinking Project** is a global initiative under the direction of Dr. Ron Ritchhart, a Principal Investigator and Senior Research Associate at Project Zero, Harvard Graduate School of Education.

**GOALS.** The **CoT** initiative considers education to be a social and cultural endeavor whose goal is the development of both the individual and the group as effective learners and thinkers able to engage with and adapt to a changing world. Within this context the most important assessment question we can ask ourselves as educators is: *Who are our students becoming as thinkers and learners as a result of their time with us?*

**HISTORY.** Since 2000, the **Cultures of Thinking Project** has worked with hundreds of public, independent, and international schools and museums across North America, Australia, Europe, Asia, and Africa to help transform them into places where thinking is valued, visible and actively promoted.

**APPROACH.** The **CoT** initiative works to achieve its goals by working systemically in schools. This includes the formation of ongoing professional learning communities whose attention is focused on exploring and understanding group culture is shaped by the *Eight Cultural Forces*: Modeling, Opportunities, Routines,

Expectations, Language, Interactions, Time, and Environment. By paying attention to how these eight forces send messages about what learning is, what kind of thinking is valued, and what it means to be smart; educators can reshape schools and classrooms into powerful learning environments in which students can achieve at the highest levels. The *Documentation* of learning and the integration of *Thinking Routines*—simple structures to scaffold, support, and direct students’ thinking—are also core practices.

**INFORMATION.** The **Culture of Thinking Project** has generated many books, articles, and web resources that document the work of the project, report on our ongoing research, describe the changes occurring in schools and classrooms, and identify the impact on student learning. Visit [www.RonRitchhart.com](http://www.RonRitchhart.com), <http://www.visiblethinkingpz.org> and [www.storiesoflearning.com](http://www.storiesoflearning.com) to download resources and to learn more about the work of the project and how it is transforming schools and classrooms around the world. Key print resources included: *Intellectual Character*, *Making Thinking Visible*, and *Creating Cultures of Thinking*.

Focus, Direction, Clarity, Vision

Purpose

Recognizing, Capturing, Celebrating

Growth

Trajectories, Patterns,

Purpose, Power

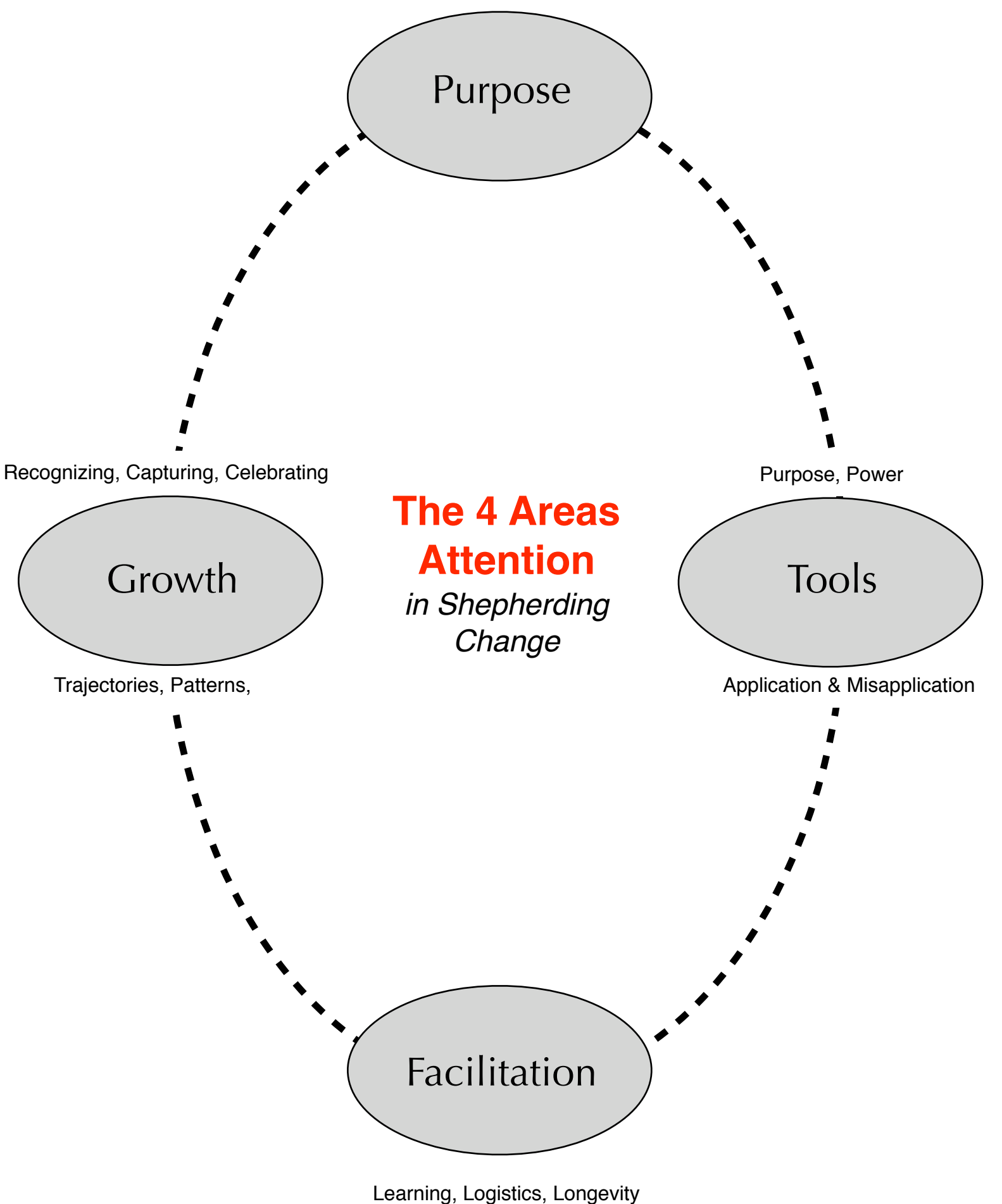
Tools

Application & Misapplication

**The 4 Areas  
Attention**  
*in Shepherding  
Change*

Facilitation

Learning, Logistics, Longevity



# cultures *of* thinking

CREATING  
PLACES WHERE  
THINKING IS  
VALUED, VISIBLE  
& ACTIVELY  
PROMOTED

## Messages in a Cultures of Thinking Classroom

- ❖ Learning is a product of thinking.
- ❖ Learning and thinking are as much a collective enterprise as they are an individual endeavor.
- ❖ Learning occurs at the point of challenge.
- ❖ Our learning is often provisional and frequently changes with time.
- ❖ Learning is an active process and involves getting personally involved.
- ❖ Questions not only drive learning but also are outcomes of learning as well.

# CULTURES OF THINKING

## 6 Key Principles of the CoT 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 and help ensure that our thinking doesn't get lost.
- 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.

# THE 8 FORCES THAT SHAPE GROUP CULTURE

## EXPECTATIONS: Recognizing How Our Beliefs Shape Our Behavior

ex•pec•ta•tions |,ɛkspek'tāSHəns| noun: A set of strong beliefs surrounding future outcomes and anticipated results. As a culture shaper, expectations operate as “belief sets” or ‘action theories’ that influence our own efforts in relation to the achievement of desired goals and outcomes with respect to our teaching. In this way, expectations not only set our course, but also act as an internal compass that keeps us moving toward our goal. It is important to note that this departs from the way teachers more typically think of “expectations”, that is, as an explicit expression of standards used to direct and inform the behavior of others.

## LANGUAGE: Appreciating Its Subtle Yet Profound Power

lan•guage |l'laNGgwɪj| noun: The system of communication used by a community to negotiate shared meaning and build group coherence and understanding around ideas, behaviors, and actions. As a culture shaper, language helps us to direct attention and action. However, the words and structures that make up language not only convey an explicit surface meaning, but also impart a set of deeper associations and connections that implicitly shape thought and influence behavior. This is the hidden power of language: Its ability to subtly convey messages that shape our thinking, sense of self, and group affinity.

## TIME: Learning to Be Its Master Rather than Its Victim

Time |tɪml| noun: The “containers,” consisting of measurable periods, that we allocate, assign or use to accomplish tasks of our choosing. As a culture shaper, all of these conceptions of time are in play. Our allocations of periods of time reflect our values. Our sequencing of events, construction of moments, and reflections on actions allows us to scaffold and draw a connecting thread through learning occasions to create a unity. Finally, our ability to generate, sustain, and capitalize on periods of total engagement allows us to create the energy needed for learning and thinking.

## MODELING: Seeing Ourselves through Our Students' Eyes

mod•el•ing |l'mādl-iNGI (Brit. modelling) | verb: To display, demonstrate, or draw attention to as an example for others to follow or imitate. As a culture shaper, modeling operates on both an explicit and an implicit level. Explicitly, we may demonstrate techniques, processes and strategies in a way that makes our own thinking visible for students to learn from and appropriate. Implicitly, our actions are constantly on display for our students. They see our passions, our interests, our caring, and our authenticity as thinkers, learners, community members, and leaders. Adult models surround students and make real a world that they may choose to enter or reject.

## OPPORTUNITIES: Crafting the Vehicles for Learning

op•por•tu•ni•ties |ləpər't(y)ōnītēs | noun: A set of conditions or circumstances that make it possible to do or achieve something. As a culture shaper, the opportunities present will serve either to constrain or enhance the activity of both individuals and the group as a whole. Although it is possible for opportunities to lie hidden, remain untapped, or to languish; in strong cultures rich opportunities for growth, advancement, and creativity are prominent. In a culture of thinking, these types of opportunities dominate the landscape, guiding and shaping the activity of the group and engaging all individuals.

## ROUTINES: Supporting and Scaffolding Learning and Thinking

rou•tine |rōō'tēnl| noun: A sequence of actions designed to achieve a specific outcome in an efficient and productive manner. As a culture shaper, routines represent a set of shared practices that constitute a group's way of doing things. They are the classroom infrastructure, guiding much of the activity that happens there. Routines—whether they are for management, participation, discourse, instruction, learning, or thinking—help to minimize confusion, reduce uncertainty, and direct activity along known paths. Ultimately, routines become patterns of behavior for both individuals and the group. Of particular importance in learning groups, is the presence of thinking and learning routines that help to direct, guide, and scaffold learning and thinking.

## INTERACTIONS: Forging Relationships that Empower Learners

in•ter•ac•tions |lɪntər'akSHəns| noun: The dynamic phenomenon that emerges when two or more objects have an effect upon one another. As a culture shaper, interactions form the basis for relationships among teachers and students, students and students, and teachers and teachers. Interactions knit together the social fabric that binds individuals together in community. The Interactions among group members help to define the emotional climate, tone, or ethos of a place. In a culture of thinking, teacher's interactions with students show a respect for and an interest in students' thinking while nurturing their development as valued, competent individuals able to contribute effectively to the group.

## ENVIRONMENT: Using Space to Support Learning and Thinking

en•vi•ron•ment |len'vīrənmənt| noun: The physical space occupied by a group or individual, including its design, aesthetic, setup, displays, artifacts, and furnishings. As a culture shaper, the physical environment is the “body language” of an organization, conveying its values and key messages even in the absence of its inhabitants. The physical environment of a school or classroom will dictate how individuals interact, their behaviors, and performance. The physical space can inhibit or inspire the work of the group and the individual. Although most educators inherit a physical environment fashioned for an old paradigm of learning, there is still much that can be done in the design of that space to facilitate and promote a culture of thinking.





Sourced from: The Cultures of Thinking project at Project Zero, Harvard Graduate School of Education.

# DEFINING THINKING ROUTINES

- Tools used over and over again in the classroom, that support specific thinking moves such as,
  - Making connections
  - Describing what's there
  - Building explanations
  - Considering different viewpoints and perspectives
  - Capturing the heart and forming conclusions
  - Reasoning with evidence
- Structures, through which students collectively as well as individually initiate, explore, discuss, document, and manage their thinking. These structures are:
  - Explicit: They have names to identify them
  - Instrumental: They are goal directed and purposeful
  - A few steps: Easy to learn, and easy to remember
  - Individual as well as group practices
  - Useful across a variety of contexts
  - Help to reveal students' thinking and make more visible
- Patterns of behavior adopted to help one use the mind to form thoughts, reason, or reflect. We see these patterns emerging as the routines:
  - Are used over and over.
  - Become engrained in us both teachers and students.
  - Flexibility emerges.



## Thinking Routines Matrix

from the upcoming book *Making Thinking Visible* by Ritchhart, Morrison & Church (Spring 2011)

Routine	Key Thinking Moves	Notes
<i>Routines for INTRODUCING &amp; EXPLORING IDEAS</i>		
See-Think-Wonder	Description, Interpretation & Wondering	Good with ambiguous or complex visual stimuli
Zoom In	Description, Inference, & Interpretation	Variation of STW involving using only portions of an image
Think-Puzzle-Explore	Activating prior knowledge, wondering, planning	Good at the beginning of a unit to direct personal or group inquiry and uncover current understandings as well as misconceptions
Chalk Talk	Uncovers prior knowledge and ideas, questioning	Open-ended discussion on paper. Ensures all voices are heard, gives thinking time.
321 Bridge	Activates prior knowledge, questioning, distilling, & connection making through metaphors	Works well when students have prior knowledge but instruction will move it in a new direction. Can be done over extended time like the course of a unit.
Compass Points	Decision making and planning, uncovers personal reactions	Solicits the group's ideas and reactions to a proposal, plan or possible decision.
Explanation Game	Observing details and building explanations	Variations of STW that focuses on identifying parts and explaining them in order to build up an understanding of the whole from its parts and their purposes
<i>Routines for SYNTHESIZING &amp; ORGANIZING IDEAS</i>		
Headlines	Summarizing, Capturing the heart	Quick summaries of the big ideas or what stands out
CSI: Color, Symbol, Image	Capturing the heart through metaphors	Non-verbal routine that forces visual connections
Generate-Sort-Connect-Elaborate: Concept Maps	Uncovering and organizing prior knowledge to identify connections	Highlights the thinking steps of making an effective concept map that both organizes and reveals one's thinking
Connect-Extend-Challenge	Connection making, identify new ideas, raising questions	Key synthesis moves for dealing with new information in whatever form it might be presented: books, lecture, movie, etc.
The 4 C's	Connection making, identifying key concept, raising questions, and considering implications	A text-based routine that helps identifies key points of complex text for discussion. Demands a rich text or book.
Micro Lab	A protocol for focused discussion	Can be combined with other routines and used to prompt reflection and discussion
I used to think	Reflection and metacognition	Used to help learners reflect on how their thinking has shifted and changed over time.
<i>Routines for DIGGING DEEPER INTO IDEAS</i>		
What makes you say that?	Reasoning with evidence	A question that teachers can weave into discussion to push students to give evidence for their assertions.
Circle Viewpoints	Perspective taking	Identification of perspectives around an issue or problem.
Step Inside	Perspective taking	Stepping into a position and talking or writing from that perspective to gain a deeper understanding of it.
Red Light, Yellow Light	Monitoring, identification of bias, raising questions	Used to identify possible errors in reasoning, over reaching by authors, or areas that need to be questioned.
Claim Support Question	Identifying generalizations and theories, reasoning with evidence, counter arguments	Can be used with text or as a basic structure for mathematical and scientific thinking.
Tug of War	Perspective taking, reasoning, identifying complexities	Identifying and building both sides of an argument or tension/dilemma
Word-Phrase-Sentence	Summarizing and distilling	Text-based protocol aimed at eliciting what a reader found important or worthwhile. Used with discussion to look at themes and implications.



# A TYPOLOGY of CLASSROOM QUESTIONS

## Generative

Exploring the topic

- Authentic questions or wonders that teacher doesn't know the answer to
- Essential questions that initiate exploration of a topic

## Facilitative

Promotes the learner's own thinking and understanding

- Requesting elaboration, reasons, evidence, justification
- Generating discussion among the class to hear different perspectives
- Clarifying and uncovering

## Constructive

Building new understanding

- Extending and interpreting
- Connecting and linking
- Orienting and focusing on big ideas, central concepts, or purpose
- Evaluating

## Procedural

Directing the work of the Class

- Going over directions and assignments
- Clarifying
- Checking for attention, agreement
- Task completion
- Organizational and management related

## Review

Recalling and reviewing of Knowledge and information

- Terminology
- Procedures
- Content
- Events & Context



## The What, Why, and How of Documentation

There is no single way to document thinking and learning. As Veia Vecchi, an atelierista in the Reggio schools states, "What we are interested in is precisely an attempt to see this process [of learning] and to understand how the construction of doing, thinking, and knowing takes place, as well as what sort of influences or modifications can occur in these processes." Observation notes, partial transcripts of conversation, audiotapes of a discussion, a list of students' responses to a prompt, photographs or videos of learning, chart paper brainstorms, or a screen capture from an interactive whiteboard are all forms of documentation.

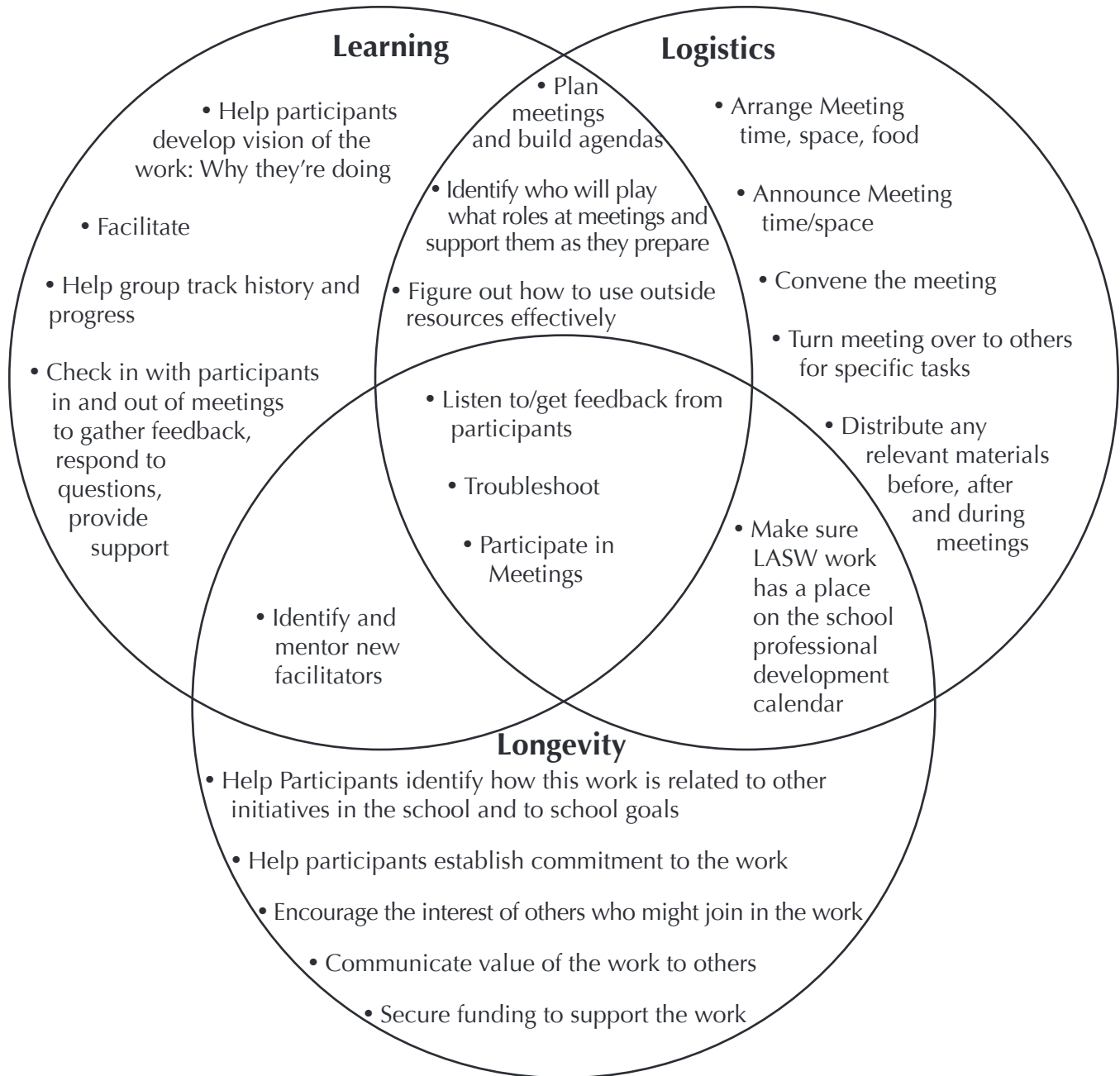
To those new to documenting student's thinking, it might be easy to confuse documentation with merely recording what the class has done, a sort of archive of activity through the collection of various forms of documents. However, to be useful to both teachers and students, documentation must extend beyond this. At its heart documentation is focused on the learning process itself by trying to capture the events, questions, conversations, and acts that provoke and advance learning over time. Some of the benefits and reasons behind documentation of learning and thinking include:

- To capture individual and group learning and thinking and make it visible.
- To be able to share a story of the learning journey happening in the class.
- To provide a resource for discussion, reflection and review of learning.
- To help students connect to prior learning and experiences and building on that to take it forward.
- To model and capture processes for later reference.
- To show students the ongoing nature of learning and how their ideas change and develop over time.
- To facilitate learning from and with others.
- To inform our next steps as a teacher.
- To validate and affirm students' contributions to the class. The documentation gives value to students' ideas.
- To provide evidence for formative assessment.
- To promote teachers and students' self evaluation of learning.
- To provide parents with a glimpse into the learning their children are doing. Documentation can serve as the basis for student lead conferences focused on learning rather than work.
- To be able to identify learning "hotspots" that helped to catapult group or individual learning to the next level.
- To see trends, patterns and growth over time
- To allow students to more easily see multiple perspectives and possibilities around a topic.



## Facilitating Learning, Logistics and Longevity

*Adapted from The Evidence Process: A Collaborative Approach to Understanding and Improving Teaching and Learning by the Evidence Project Staff (Cambridge, MA: Harvard Project Zero, 2001).*



## LOOKING AT STUDENTS' THINKING PROTOCOL

Roles:

- **Presenting Teacher:** Brings work to share, listens to the discussion, responds at the end.
- **Facilitator:** Keeps track of time, Asks the lead questions for each phase, Redirects as needed
- **Documenter:** Records the group's discussion

- 1. Presenting the work (5 minutes)**

Presenting teacher provides the context, goals, and requirements of the task.

  - Ask questions of clarification that will help you to understand and read the work.
- 2. Reading the Work (5 – 10 Minutes)**

Read the work silently

  - Take notes for later comment.
  - Categorize your notes to fit in with the stages of the protocol.
- 3. Describing the Work (5 Minutes)**

What do you see?

  - Raise one another's awareness of all the features of the work
  - Avoid interpretation and just point out what things can be seen
- 4. Speculating about Student's Thinking (10 minutes)**

Where in the work do you see thinking? What aspects of the work provide insights in students' thinking?

  - Interpret the features of the work
  - Make connections to different types and ways of thinking
- 5. Asking Questions about the work (10 minutes)**

What questions does this work raise for you?

  - Frame questions to get at broad issues as well as specifics.
  - Ask the question behind the question. Rather than, "How long did this take?" ask, "This raises questions for me about the time needed to do this kind of work."

NOTE: Presenting teacher does not respond to the questions at this point
- 6. Discuss implications for teaching and learning (10 minutes)**

Where might this work go next to further extend and build on students' thinking?

  - Suggest practical possibilities and alternatives for the presenting teacher
  - Raise general implications the work suggests for promoting students' thinking.
- 7. Presenting teacher responds to the discussion (5 minutes)**

What have you as presenting teacher gained from listening to the discussion?

  - Highlight for the group what you found interesting in the discussion
  - Respond to those questions that you feel need addressing by you.
  - Explain briefly where you think you might now go with the work.
- 8. Reflecting on the Protocol (5 minutes)**

How did the process go and feel?

  - Reflect general observations.
  - Notice improvements and changes since the last time the group used the protocol.
  - Make suggestions for next time.
- 9. Thanking the Presenting Teacher, the Documenter, and the Facilitator**

The group to acknowledge everyone's contribution

  - Decide how the documentation will be shared, used, and archived for the group.
  - Establish roles for the next meeting.

# THINKING ASSESSMENT LADDER FOR STUDENT QUESTIONING/WONDERING

## Levels of Questioning

## What teacher need to do to move students up the ladder

Fully Independent Habit	Understanding value of good questioning. Willing to reveal uncertainties. Rarely accepts things uncritically. Leads others in these skills	Students progress to the highest levels through repeated practice and modeling in order to deepen the habit in themselves, and to help and support others to acquire and develop similar skills and habits	Encourage Self-Coaching
Increasingly Independent Habit	Curious about all manner of things. Unafraid of not knowing. Relish getting below surface of complex high order questions.	Provide opportunities to broader own areas of interest, investigate problems at a deep level	
Increasingly reflective, self-aware, few prompts necessary	Display curiosity about a range of things. Speculate about possibilities. Get below the surface. Willing to play around with things to see what happens	Provide opportunities for open-ended tasks, practicing their own questioning techniques, setting their own challenges, experiencing teamwork.	Coaching
Developing skill that needs prompting and reminding	More willing to ask questions on unfamiliar areas/subjects. Beginning to seek/develop information. Seeking skills. Can use open and closed questions with prompting. Less inclined to accept things at face value.	Provide opportunities to practice uncovering facts and evidence, develop basic research skills. Use various questioning routines.	
Only with teacher support	Beginning to ask higher order questions. May draw simple conclusions. Prefers to work at surface level.	Provide opportunities to use closed and open questions. Needs topics of personal interest. Support experience of certainty and doubts.	Directing
Only with teacher direction	Rarely seem curious. Stick with the familiar. Low level closed questions. Accepts things uncritically.		

## Tips for Creating a Ladder for Assessing Students' Thinking

- ◆ Identify a type of thinking you want to try and promote. This might come from one of the 8 thinking moves from the understanding map or from a thinking disposition you are wanting to promote.
- ◆ Start at “the top” of the ladder and identify aspects of a well formed habit. Consider what your chosen type of thinking looks like when students are exhibiting it independently at a high level.
- ◆ Move to “the bottom” of the ladder. Describe what students actually do—not merely what they are lacking. What kinds of behaviors are you seeing when students are struggling with this kind of thinking?
- ◆ Add detail (additional rungs on the ladder) in between the top and the bottom but do not create too many as it may make it harder to differentiate between them.
- ◆ On the teaching side, think of the gradual release of teacher support as students become more independent. This typically moves from directing students efforts, to supporting them, to coaching, to commenting and offering some feedback, to encouraging students' self-coaching.
- ◆ Try out the ladder for a few weeks by focusing on observing a few students during this period to collect evidence and anecdotes.
- ◆ Make modifications to your ladder based on your experience of applying it to practice.
- ◆ Share the Assessment Ladder with students, communicating that development of this type of thinking is one of your instructional goals. Ask students to self-assess and provide evidence for their assessment. Discuss with individual students.

## 10 Ideas to Start Building a Culture of Thinking at Your School

- ✓ **Have a conversation using the Chalk Talk routine.** There are lots of possible topics, but one option is to label 4 sheets of chart paper with: Engagement, Independence, Understanding, and Thinking. Have teachers engage in conversation about these topics silently in writing. They can define the terms, say why they think they are important, share what they have learned is effective practice, and most importantly raise questions and issues about how to move these ideas forward in students' lives. After the silent period identify key ideas worth returning to and thinking more about. Some other good topics for Chalk Talk discussions are: What is *good* thinking and how do we promote it? How can we know our students are becoming 21<sup>st</sup> century learners and thinkers? What do we want the students we teach to be like as adults? If we couldn't rely on tests, how could we know our students are learning?
- ✓ **Do a ghost walk at your school.** Ask teachers to generate a list of what they would expect to see at a school that had thinking as its centerpiece and called itself a culture of thinking. After you have generated the list, send teams off to look for signs of a culture of thinking within the school. Where does it show up? Where is it missing that you might have expected? Are there any mixed messages? What might we do collectively and independently to show parents and students that this school really values thinking?
- ✓ **Engage in an article or book study.** There are several options for books or articles related to cultures of thinking: *Making Thinking Visible*, *Intellectual Character*, *Smart Schools*, *Intellectual Character*, *Making Learning Whole*, and *The Global Achievement Gap* are some. Teacher written articles from the [www.StoriesOfLearning.com](http://www.StoriesOfLearning.com) website can be downloaded. Research articles can be downloaded from [www.RonRitchhart.com](http://www.RonRitchhart.com). You might want to use a different protocol to structure the discussion for each session. These can be found at <http://www.nsrffharmony.org/protocol>.
- ✓ **Identify, "What thinking lives in my classroom?"** Ask each teacher to identify the kind of thinking he/she is trying to promote in his/her classroom (this can be taken from the understanding map or from the Deluge of Dispositions sheet). Ask each teacher to come to the next faculty meeting with some evidence (anecdote, story, student work, narrative) that demonstrates how that thinking lives in his/her classroom and has a prominent place there. Extend this by surveying students about what thinking they think lives in that class.
- ✓ **Discuss a video.** There is a DVD included with *Making Thinking Visible* and a DVD on thinking routines is also available. There are lots of videos to be found on the web as well and from various organizations such as Edutopia. In watching and discussing videos it is important to have a purpose/focus and a protocol/structure for the discussion so that the session doesn't become about the teacher or the activity. You can focus viewing by looking for the types of thinking on display, the level of engagement and independence exhibited by students, the way the cultural forces are shaping the learning, the underlying messages about what learning is, the kinds of questions the teacher is asking, and so on. As one gets better at looking for learning and thinking, it raises your awareness of it and helps you notice it more in your own classroom.



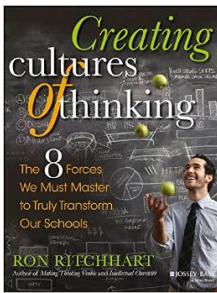
- ✓ **Collect some data.** Find out what kind of thinking is going on in your school currently. Survey students on the type of thinking they feel they are doing in their classes. Collect assignments from all classes on a given day and analyze them using the Understanding Map and the Slice protocol. Observe in classroom and pay attention to what students are actually doing. Where and when do you see them thinking? What kind of mental activity are they actually engaged in? After you have a snap shot of where the school is at, identify the areas you want to work on going forward.
- ✓ **Try a Thinking Routine school wide.** As a school, pick one thinking routine to try out. Collect samples of student work from the routine and look across grade levels and subject areas to see what it can tell you about the development of students' thinking. Did older students produce more thoughtful work or did the younger students surprise you? What do you notice about the role the content/stimulus plays in producing deeper, richer thinking?
- ✓ **Convene a group to use the Looking At Student Thinking (LAST) Protocol.** A great way to get teachers more attuned to student thinking is to examine student work and actually look for evidence of thinking. Convene a group of interested teachers (6-8 is good) to engage in this process on a regular basis (note, it generally takes about 3 times through before people really get good at using a protocol). As a facilitator, remember that this isn't a protocol to assess performance, nor is it about helping a teacher plan, the heart of the protocol is about looking for thinking and raising questions and implications for us all
- ✓ **Institute a "What if...Week:"** Sometimes teachers are reluctant to take on new ideas for fear trying something new will harm students' preparation for important tests. Other times there is just a reluctance to try something new because it will feel uncomfortable. You can send a message to teachers about the importance of experimentation in teaching and learning about the effects on students by designating a "What if... Week" in which everyone agrees to try something new, not just for day, but for a whole week that they feel *has the potential to foster students' engagement, independence, understanding, or thinking.* This point is important. It isn't just trying something new, it is having a hunch that this new thing might have a specific benefit and then actually testing it out. For example, letting students come up with their own homework assignments to nurture independence and engagement or trying to ask more facilitative questions to uncover students' thinking. Everyone then tries their ideas out on the same assigned week: At the end of the week everyone reports back on what they learned. Some schools have extended this idea by instituting a "Risky June" at the end of the year.
- ✓ **Celebrate thinking.** Start each faculty meeting by sharing examples from classrooms of students engaged in good thinking. The kind of thinking behavior that makes a teacher stand up and take notice because of its depth, richness, or insightful nature. Identify the type of thinking. Hold a gallery walk of student work that displays the documentation of student thinking and learning. Invite students, parents, and teachers from other schools to view and comment on the work.

# Additional Resources for Developing a Culture of Thinking

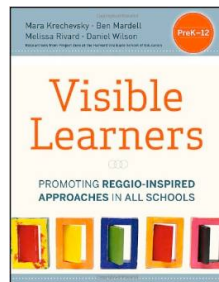
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- Ritchhart, R. & Perkins, D. N. (2008). [Making thinking visible](#). *Educational Leadership*, 65 (5), 57–61.
- Ritchhart, R. (2007). [Cultivating a culture of thinking in museums](#). *Journal of Museum Education*, 32 (2), 137–154.
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- Ritchhart, Ron, and David N. Perkins. (2000). "[Life in the Mindful Classroom: Nurturing the Disposition of Mindfulness](#)." *Journal of Social Issues* 56, no. 1 27–47.

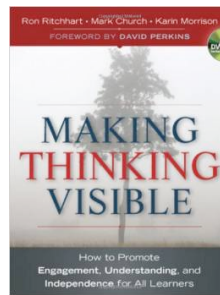
## Available Books



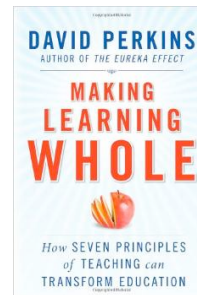
*Creating Cultures of Thinking*  
Ron Ritchhart  
(2015)  
Jossey-Bass



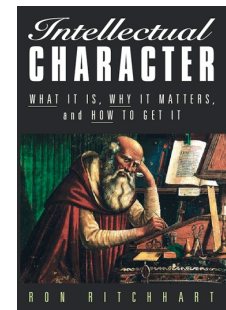
*Visible Learners*  
Mara Krechevsky,  
Ben Mardell,  
Melissa Rivard,  
Daniel Wilson  
(2013)  
Jossey-Bass



*Making Thinking Visible*  
Ron Ritchhart,  
Mark Church,  
Karin Morrison  
(2011)  
Jossey-Bass



*Making Learning Whole*  
David Perkins  
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*Intellectual Character*  
Ron Ritchhart  
(2002)  
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## Web Links

- Making Thinking Visible Facebook page: <https://www.facebook.com/MakingThinkingVisible>
- Original Visible Thinking website (not updated): <http://www.visiblethinkingpz.org/>
- Project Zero: <http://pz.harvard.edu>
- Ron Ritchhart's personal website: [www.RonRitchhart.com](http://www.RonRitchhart.com)
- Stories of Learning website: <http://storiesoflearning.com/Welcome.html>