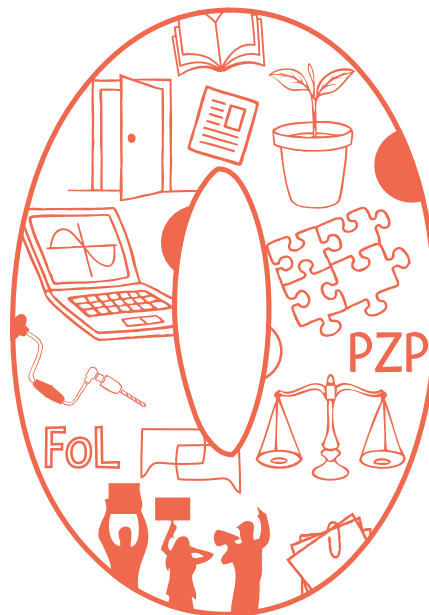


Perspectives on “Thinking” from Project Zero’s First 50 Years



PROJECT ZERO
FIFTY YEARS
HARVARD GRADUATE
SCHOOL OF EDUCATION



At the beginning, PZ’s research focused on investigating cognitive processing in the arts. This seminal work led researchers to expand to broader aspects of human potential including learning, critical thinking, creativity, and intelligence. In the recent decades, PZ research built on these rich traditions by exploring further fundamental questions of human potential as they relate to contemporary issues facing an array of educational settings—schools, families, museums, and businesses. To celebrate 50 years, PZers looked across the vast body of research and developed an organizing framework that includes nine research areas representative of many facets of the five decades of work. These nine areas include: The Arts, Assessment, Character and Ethics, Civic Agency, Creativity, Developing Understanding, Global Competencies, Intelligences, and Thinking. PZ created a brief overview of each of the 9 areas as stand-alone “booklets.” Each of the four-page booklets describes PZ’s research in the area along with a set of “PZ perspectives,” notes some big questions that are launching PZ into the future, lists key PZ projects, highlights important PZ quotes, offers a sample of notable PZ publications, and visualizes the main frameworks and ideas.

The artwork and graphic elements featured on these pages was created by our collaborators, dpict, a local graphic facilitation and design firm, along with Matt Riecken, PZ’s digital learning specialist.

THINKING

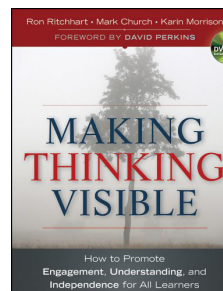
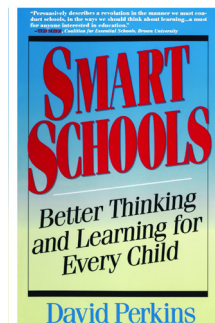
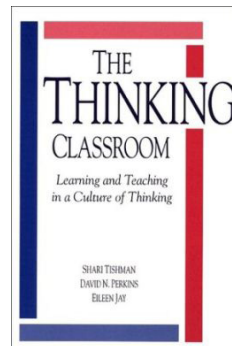
We believe that good thinking is as much a matter of disposition as it is of skill. Motivations, attitudes, values and habits of mind all play key roles in good thinking, and in large part, these elements determine whether people use their thinking skills when it counts. Learning is a consequence of thinking, and developing a culture of thinking is critical if we want to produce the feelings, energy, and even joy that can propel learning forward and motivate learners to do what at times can be hard and challenging mental work.

BIG QUESTIONS

What are the ingredients of good thinking?
Can good thinking be taught? How?
What does good thinking have to do with good learning?

PZ PERSPECTIVES

Learning as a consequence of thinking.
Thinking as visible.
Thinking as dispositional.
Thinking as distributed.



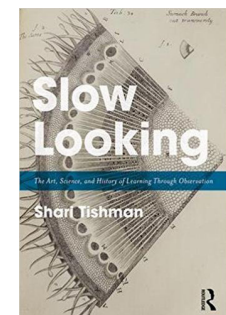
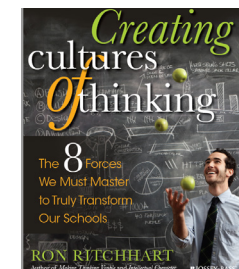
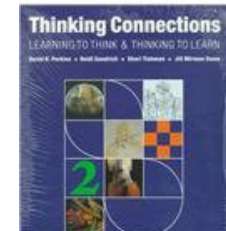
KEY PROJECTS

Patterns of Thinking (1989 – 1998)
Visible Thinking (1998 – 2005)
Artful Thinking (2004 – 2007)
Cultures of Thinking (2013 – current)

“Good thinking is as much a matter of disposition as it is of skill. Motivations, attitudes, values and habits of mind all play key roles in good thinking, and in large part it is these elements that determine whether people use their thinking skills when it counts.”
– Shari Tishman

“How intelligence really works matters in a very concrete practical way – arguably it matters much more than whether the earth circles around the sun or vice versa.”
– David Perkins

“A culture of thinking produces the feelings, energy, and even joy that can propel learning forward and motivate us to do what at times can be hard and challenging mental work.”
– Ron Ritchhart

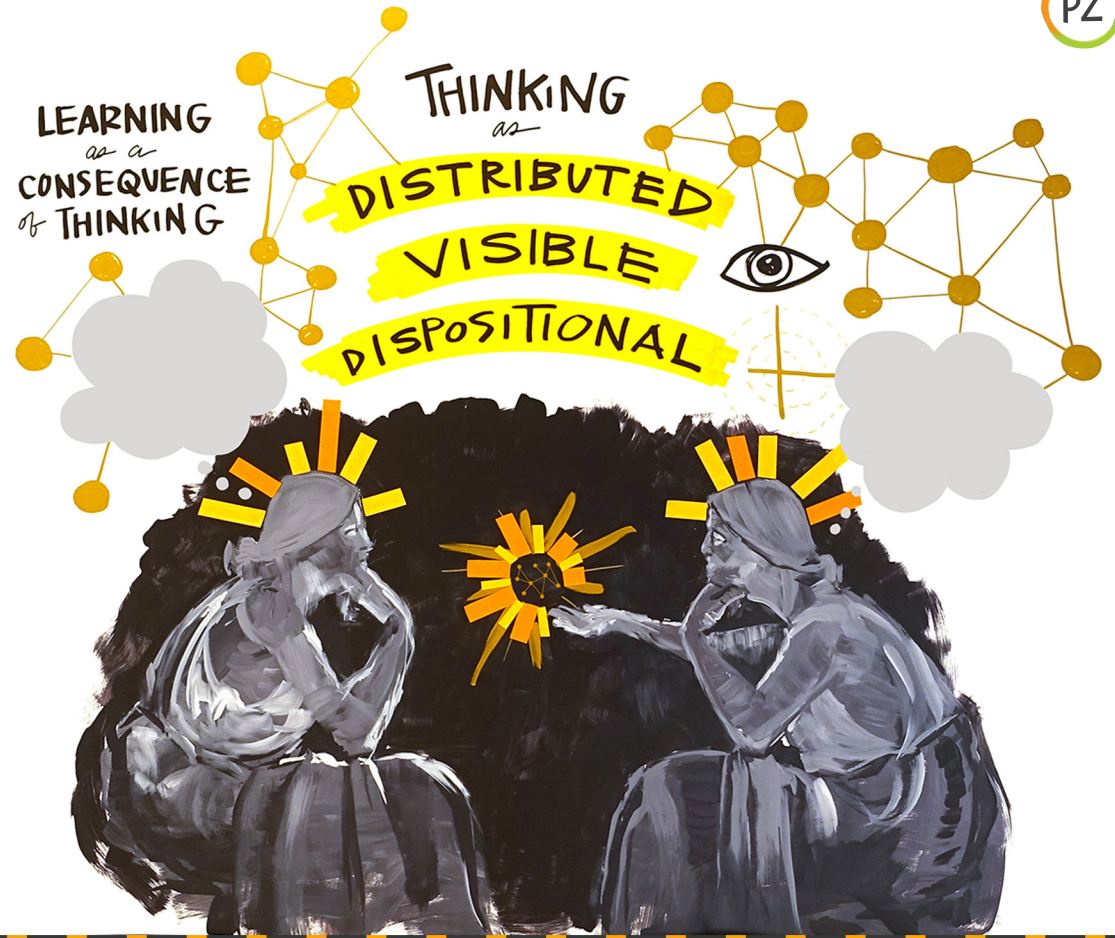


THINKING

WHAT ARE the
INGREDIENTS
of GOOD THINKING?

CAN GOOD THINKING
BE TAUGHT?
HOW?

WHAT DOES
GOOD THINKING
HAVE to DO with
GOOD
LEARNING?



GOOD THINKING IS as MUCH a MATTER of
DISPOSITION as IT IS of SKILL. MOTIVATIONS,
ATTITUDES, VALUES and HABITS of MIND ALL PLAY
KEY ROLES in GOOD THINKING, and in LARGE PART IT IS THESE
ELEMENTS THAT DETERMINE WHETHER PEOPLE USE
THEIR THINKING SKILLS WHEN IT COUNTS.

-Shari Tishman

NOTABLE PZ PROJECTS

VISIBLE THINKING
ARTFUL THINKING
CULTURES OF THINKING
PATTERNS OF THINKING

KEY FRAMEWORKS

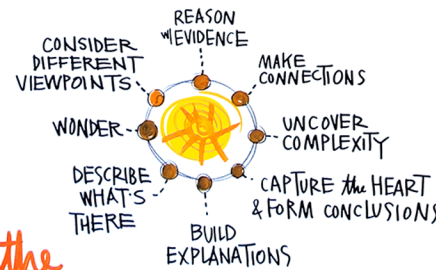
the TRIADIC NOTION of THINKING DISPOSITIONS

ABILITY

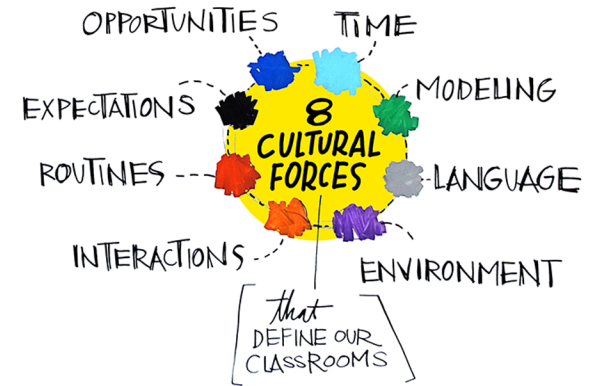


SENSITIVITY INCLINATION

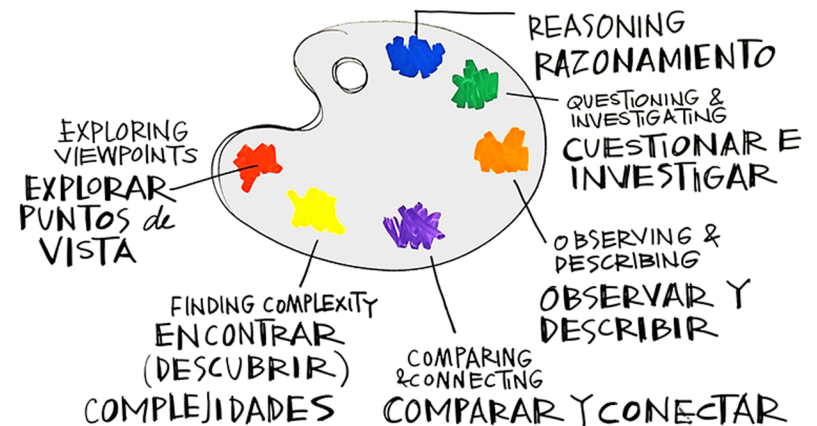
CULTURES of THINKING



the UNDERSTANDING MAP



ARTEFUL THINKING



VISIBLE THINKING

- GOAL ORIENTED
- GET USED OVER & OVER AGAIN in the CLASSROOM
- CONSIST of ONLY a FEW STEPS
- EASY to LEARN and TEACH
- EASY to SUPPORT
- USED ACROSS a VARIETY of CONTEX
- USED BY GROUPS OR INDIVIDUALS

THINKING ROUTINES

CIRCLE of VIEW-POINTS

COMPASS POINTS

WHAT MAKES YOU SAY THAT?

I USED to THINK... BUT NOW I THINK...

THINK/PUZZLE/EXPLORE

THINK PAIR SHARE

SEE/THINK/WONDER