### Perspectives on "Creativity" from Project Zero's First 50 Years



# PROJECT ZERO

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 settingsschools, 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 fac ets 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, vand 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.

# CREATIVITY

Project Zero's exploration of creativity can be described in three waves. The first wave identified creativity as an individual act of human invention, delving deeply into distinct portraits of creativity embodied by creative "giants", as well as how breakthrough thinking and cognitive insight operate in the creative processes of artists. The second wave situated creativity within complex systems, exploring how knowledge and cognition are distributed across objects, individuals, artifacts, and tools in the environment. The current wave frames creativity as cultural participation, such as school cultures that value and support playful learning, or maker-centered movements that encourage learners to look closely, explore complexity, and find opportunity.

#### **BIG QUESTIONS**

What is creativity and how does it develop?

How have our conceptions of creativity changed over the past fifty years?

How do we introduce issues of access and equity into the creativity in education conversation?

What will the creativity of the future look like?

#### PZ PERSPECTIVES

Creativity and the arts are inherently linked, but the arts are not the only domain where creativity takes flight.

Creativity is a distributed and participatory process.

Creativity exists at the intersection of the individual, the domain, and the field.

Individuals are not creative, ideas are creative.

#### **KEY PROJECTS**

Studio Thinking Project (2003 – 2007) Artful Thinking (2004 – 2007) Agency by Design (2012 – current)

Creating Communities of Innovation (2016 - current)

"Creativity involves... humanly created design—that is something with a particular structure adapted to its intended purpose. The creative person asks of his or her abilities that they operate in certain directions. It is the sort of thinking that could well transfer to the classroom if students were doing those things, but in most classrooms they aren't." - David Perkins

"There's a big difference between educating for creativity and educating students for factory work. It's a serious endeavor to shift the weight of schooling's work-related legacy and reframe schools as places to

aim for the higher cognitive processes of creative and critical thinking." - Lois Hetland "Just as it makes little sense for an individual to be considered ung smart or dumb, so, too, the search for 'general creative' individuals

"Just as it makes little sense for an individual to be considered unqualifiedly smart or dumb, so, too, the search for 'general creative' individuals and the devising of tests that allegedly tap 'creativity' seemed to me to be forlorn pursuits. If intelligence is pluralistic, so, a fortiori, is creativity." - Howard Gardner



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The

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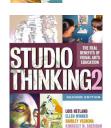
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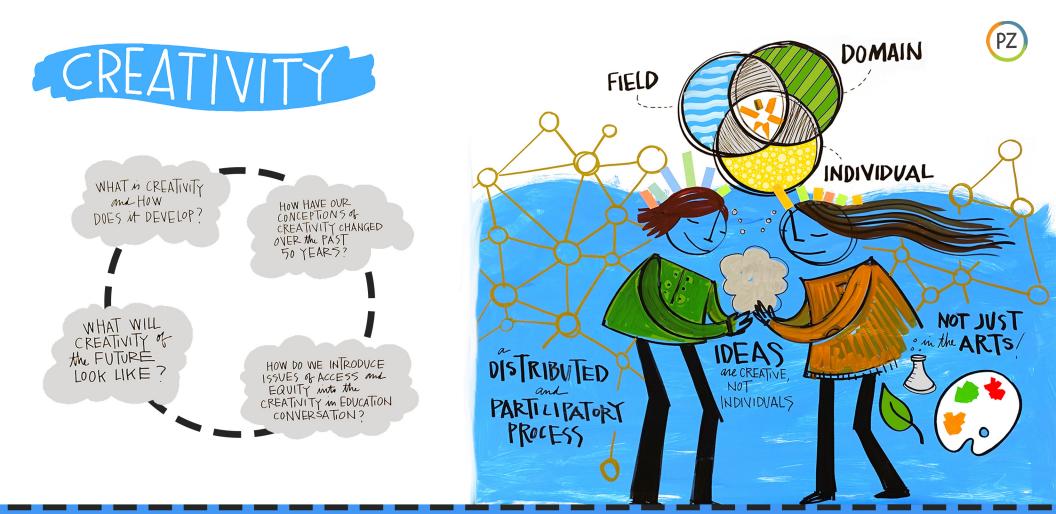
Work

D.N. Perkins

Creating

Minds





WHEN ARTS EDUCATORS TALK about DEVELOPING STUDENTS' CAPACITY to THINK CREATIVELY, THEY GENERALLY CONCEINE of CREATINITY as an EXTENDED PROCESS INVOLVING MANY STEPS, RATHER THAN a SINGLE "AHA" MOMENT of INSIGHT. CREATINITY IS FULL of STARTS and STOPS and TURNS and IMPROVISATIONS and LEAPS and BOUNDS... CREATINITY MOVES FORWARD through a PROCESS of GENERATING QUESTIONS, EXPLORING PROBLEMS, and SEEKING MULTIPLE OPTIONS, and as IT UNFOLDS, IT INCLUDES CYCLES of CRITIQUE, REVISION, and REFLECTION.

- Steve Seidel, Shari Tishman, Ellen Winner, Lois Hetland, and Patricia Palmer

### NOTABLE PZ PROJECTS

CREATING COMMUNITIES OF INNOVATION CULTURES OF THINKING VISIBLE THINKING AGENCY BY DESIGN STUDIO HABITS OF MIND ARTFUL THINKING

