A Forum for Playful Learning

Play can be fun and even frivolous, but it also involves risk-taking, creativity, collaboration, and use of imagination-essential features of learning. On October 21, 2019, Project Zero's Principal Investigator Ben Mardell moderated the Harvard Graduate School of Education-sponsored Askwith Forum, "The Power of Playful Learning." The Askwith Forum is HGSE’s signature public lecture series, featuring issues of great importance in education to foster learning and action.

The 90-minute session focused on how educators can create settings where learning can thrive by bringing "school" and "play" together. Starting with an interactive exercise and ending with audience questions, the forum explored the paradox of the nature of play in school, cultural factors, and whether learning through play is for all, or altogether necessary in these serious times. Panelists acknowledged challenges and expressed optimism. As one panelist affirmed, "These are not soft skills. Play is a hard skill. Not a 21st-century skill but a 21st-century challenge." Want to learn more? Watch the "Power of Playful Learning" forum. Learn about Pedagogy of Play's research and tools. Explore a five-week PZ online, team-based mini course "Let's Play: Teaching Strategies for Playful Learning," where educators can try out playful learning in their own settings.

Scholarships are available for eligible educators to participate in all Project Zero professional development offerings.
Inspiring Inventiveness in the Classroom

Online Courses
PZO
These 13-week, coach-facilitated, asynchronous online courses are research-based and grounded in day-to-day teaching and leadership practice — you can apply what you learn, as you learn.

Online, 13-week Courses  February 24-May 24, 2020

Let’s Play: Teaching Strategies for Playful Learning
Participants will explore ways to bring more playful learning into their contexts through hands-on activities, illustrations from classroom practice, and experimenting with playful learning and teaching tools.

Online, 5-week Mini Course  March 2-April 5, 2020

Education that Matters
This two-day conference will highlight research and practices aimed to enrich essential thinking and learning for the world of today and tomorrow.

Melbourne, Australia  May 2-3, 2020

Project Zero Classroom
Our annual, week-long institute held at HGSE. Connect with educators from around the world and discover research-based practices that promote critical thinking, curiosity, and creativity.

Cambridge, MA  July 20-24, 2020

RESOURCES & PUBLICATIONS

Inspiring Inventiveness in the Classroom
In a time of significant change locally and globally, educators need to help children prepare for the unexpected. As part of the *Inspiring Agents of Change* project, funded by the Lemelson Foundation, Project Zero researchers Mara Krechevsky and Ben Mardell worked with Opal School and the Portland Children's Museum Center for Learning in Portland, OR, to investigate the learning conditions that support inventiveness in early childhood and primary school. The research team developed **four resources** to inspire and integrate children's and teachers' inventiveness across learning experiences in school: **11 Guiding Principles** (core values and beliefs of schools that inspire inventiveness); **10 Practices** (strategies used by inventors that can also support inventiveness in the classroom); **23 Tools** that will help teachers adapt the practices for the classroom; and, **20 Windows into Practice** (brief videos or essays that describe or demonstrate the principles and practices in action in the classroom). For example, the "Cracking Open Words" tool is designed to show children that things that appear simple are actually complex when looked at from different perspectives. The "Do-Over" tool provides children a low-stakes opportunity to practice repairing relationships when they break down. All of the principles, practices, tools, and windows into practice will be available on both the [Project Zero website](http://www.projectzero.org) as well as the [Opal School website](http://www.opalschool.org). The Opal School will lead a webinar to introduce educators to the materials on Thursday, December 5, 2019 at 8 pm EST (interest form [here](mailto:here)). Educators are encouraged to share their experiences using these resources on social media at #pzopalinventiveness.

**Project Zero 2019 Annual Report**

Each year, Project Zero researchers investigate learning, thinking, and creativity in a variety of contexts in the US and around the globe. We are delighted to share PZ’s new annual report, with an overview of current research projects, a chronicle of noteworthy events, and 78 research publications.

**Teaching the Thinking Skills and Habits of Mind to Better Understand Causality**

In the past decade, there has been a growing interest in how children reason about the nature of causality, suggesting they are more capable of understanding complex causality than originally thought. This is an essential ability as the next generation tackles the world’s most challenging problems—such as coexisting on a planet with finite resources. Project Zero’s [Causal Learning in the Classroom (CLiC)](http://www.causallearning.com), led by Tina Grotzer, a PZ Principal Investigator and member of the Faculty of
Education at Harvard University, and her colleagues in the Cognition in a Complex World Lab are researching these challenges and developing pedagogies and curriculum for teachers. The CLiC project recently developed two classroom-tested curriculum modules to help students develop patterns of thinking that impact their ability to perceive, attend to, and reason about the complex causal patterns embedded in science. In other words, the units help students take what they know from the everyday world and build deeper, more reflective understanding. Each module contains four lessons with prompts to encourage further development and application, and additional resources to reinforce the concepts. The first module, "Becoming Global Thinkers: Thinking About Distant Causes and Effects," explores how causes and effects can be far apart from one another, making it harder to perceive and reason about the causal relationship. The second module, "Becoming Responsible Individuals: Understanding Distributed Causality," explores how the behaviors of individuals who are spread out across space and time can collectively result in outcomes they aren't aware of and don't intend to cause. Both modules are designed to complement existing curricula in environmental ecosystems and climate change science and can be applied to learning in upper elementary and beyond. In addition to these modules focused on understanding the environment, Emily Gonzalez, manager of EcoXPT, a related project stemming from the CLiC and EcoLEARN labs, recently published an article in Edutopia called "The Value of Digital Tools in Science Classes."