



PROJECT ZERO

July 2015 - June 2016 Annual Report

Please visit pz.harvard.edu for more up-to-date information

LETTER FROM THE DIRECTOR

It is my pleasure to share the Project Zero (PZ) Annual Report for FY2016 (July 2015 – June 2016). Its aim is to share top-level updates and information about the progress of PZ with a wide audience of researchers, educators, and funders.

Founded at the Harvard Graduate School of Education in 1967, PZ began investigating aspects of cognitive processing in the arts. Insights gained from these seminal studies led the center to expand its focus to include broader aspects of human potential such as intelligence, learning, critical thinking, and creativity. PZ continues to build on its rich tradition of work by posing fundamental questions of human potential as they relate to contemporary issues facing an array of educational settings, such as schools, families, museums, and businesses.

As PZ looks to celebrate its 50th Anniversary in 2017 – an unprecedented span at Harvard University for a research center that depends solely on grants and contracts – I hope this document gives you a glimpse into how PZ continues to be a vibrant center for research and catalyst for change in the field of education.

- QUICK FACTS 3
- ACTIVE RESEARCH PROJECTS 4
- HARVARD UNIVERSITY ACTIVITIES 10
- DIGITAL OUTREACH 12
- INSTITUTES FOR EDUCATORS 15



Dr. Daniel Gray Wilson
Director, Project Zero

QUICK FACTS

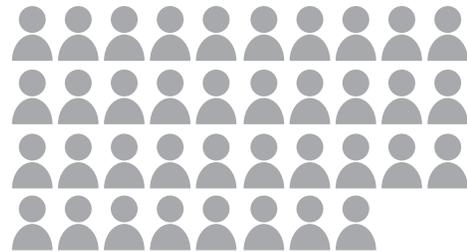
Directed **20** active and ongoing research projects.



Published **69** new books, chapters and scholarly articles



Engaged **38** HGSE Students as researchers at the doctoral (15), master's (18) and undergraduate (1), or artist-in-residence (4) level.



PZ researchers taught **13** graduate courses at the Harvard Graduate School of Education (HGSE), enrolling 414 students.



9 Usable Knowledge pieces for HGSE's main page that highlighted PZ research

Hosted **7** PPE-PZ institutes involving **1,761** participants from around the globe.

Over **14,000** Twitter followers,
66% increase from FY2015

7,000 Facebook likes,
60% increase from FY2015

170,000 website visits,
& **39,000+** resource downloads.

Enrolled **2,600** educators in **8** PZ online courses hosted by HGSE's Programs of Professional Education (PPE).

Development of a new PZ logo and website launched in Oct 2015

Development of **5** new PZ online courses offered through HGSE PPE

2 new Principal Investigators, Benjamin Mardell and Edward Clapp

ACTIVE RESEARCH PROJECTS



Agency by Design (AbD): Exploring documentation and assessment strategies for maker-centered learning.

○ Funder: Abundance Foundation

🔗 pz.harvard.edu/projects/agency-by-design

ALPS21 aims to identify exemplary programs in higher education—courses, programs, and co-curricular activities—that can bridge differences in perspectives among the major stakeholders on college campuses.

○ Funder: The Teagle Foundation

🔗 pz.harvard.edu/projects/aligned-programs-for-the-21st-century



Causal Learning in a Complex World (CLiC): Investigating how our causal assumptions influence our understanding of the world and helping learners to reason about complexity.

○ Funder: National Science Foundation

🔗 pz.harvard.edu/projects/causal-learning-in-a-complex-world



ACTIVE RESEARCH PROJECTS CONT'D

Creating Communities of Innovation: Exploring educational innovations through networked inquiry.

○ Funder: GEMS Middle East/North Africa/South Asia Network

🔗 pz.harvard.edu/projects/creating-communities-of-innovation

Cultures of Thinking: Improving learning and collaboration by honing group and individual thinking processes.

○ Funder: Bialik College

🔗 pz.harvard.edu/projects/cultures-of-thinking

EcoXPT is a new project being designed to work alongside EcoMUVE to support experiment-based inquiry in immersive virtual environments.

○ Funder: National Science Foundation

🔗 pz.harvard.edu/projects/ecolearn



The Family Dinner Project: Teaching families the value of meaningful mealtime interaction.

○ Funder: The Poses Family Foundation

🔗 pz.harvard.edu/projects/the-family-dinner-project



Global Competence in the Early Years: Seeking to understand the teaching and learning demands associated with setting the foundations for global competence development among children ages 3-5.

○ Funder: Poppins Corporation

ACTIVE RESEARCH PROJECTS CONT'D

Globalizing the Classroom Collaborative: Collaborating with PZ to plan and implement educational outreach around the centers' research.

- Funders: Davis Center for Russian and Eurasian Studies, through a grant from the U.S. Department of Education; the Harvard University Center for African Studies, through a grant from the U.S. Department of Education; the Harvard University Asia Center; the Center for Middle Eastern Studies at Harvard University; the Harvard Global Health Institute; and the Global Health Education and Learning Incubator at Harvard University.

 pz.harvard.edu/projects/globalizing-the-classroom

Good Project - Dean's Venture Fund: With an award from the Dean's Venture Fund, The Good Project is currently pursuing avenues to spread their messages and instruments to a larger audience of educators and students through collaborations with complementary organizations, reformatting of existing resources, and other strategies.

- Funder: The Dean's Venture Fund at HGSE

 pz.harvard.edu/projects/the-good-project-deans-venture-fund



ACTIVE RESEARCH PROJECTS CONT'D

Humanities & Liberal Arts Assessment (HULA): HULA identifies and illuminates the implicit internal logics of humanistic craft in order to develop appropriate tools to assess, evaluate, and further develop projects and pedagogy in the humanities.

○ Funder: Spencer Foundation

pz.harvard.edu/projects/humanities-liberal-arts-assessment-hula

Leading Learning That Matters: Exploring leadership practices to enhance 21st century lives.

○ Funder: Independent Schools Victoria, Australia

pz.harvard.edu/projects/leading-learning-that-matters



Learning Innovations Laboratory: Bringing together the leaders of organizational learning to develop a greater understanding of the field's current challenges.

pz.harvard.edu/projects/learning-innovations-laboratory

Learning to Think, Thinking to Learn: Helping schools create cultures of thinking and learning.

○ Funder: Melville Hankins Family Foundation

pz.harvard.edu/projects/learning-to-think-thinking-to-learn



ACTIVE RESEARCH PROJECTS CONT'D

Liberal Arts and Sciences in the 21st Century: Studying today's college landscape to inform tomorrow's higher education.

- Funders: Spencer Foundation, Lumina Foundation for Education, Mellon Foundation, Teagle Foundation, The Endeavor Foundation, Tom Lee, Jim and Paula Crown, Mike and Jackie Bezos, Saul Zaentz Charitable Foundation.

 pz.harvard.edu/projects/higher-education-in-the-21st-century



Out of Eden Learn:

Exploring our neighborhoods, exploring our world.

- Funder: The Abundance Foundation

 pz.harvard.edu/projects/out-of-eden-learn

Pedagogy of Play (PoP): Cultivating school cultures that value and support learning through play.

- Funder: The LEGO Foundation

 pz.harvard.edu/projects/pedagogy-of-play

PZ Connect PZ Connect is a collaboration between Project Zero and Independent Schools of Victoria (Australia).

- Funder: Independent Schools Victoria, Australia

 pz.harvard.edu/projects/pz-connect



ACTIVE RESEARCH PROJECTS CONT'D

Signature Pedagogic: Understanding Excellence in Global Competence

Education: Informed by careful analysis of master practices in global education, this project seeks to advance a pedagogical framework for quality teaching for global competence that can directly inform teacher preparation for our global times.

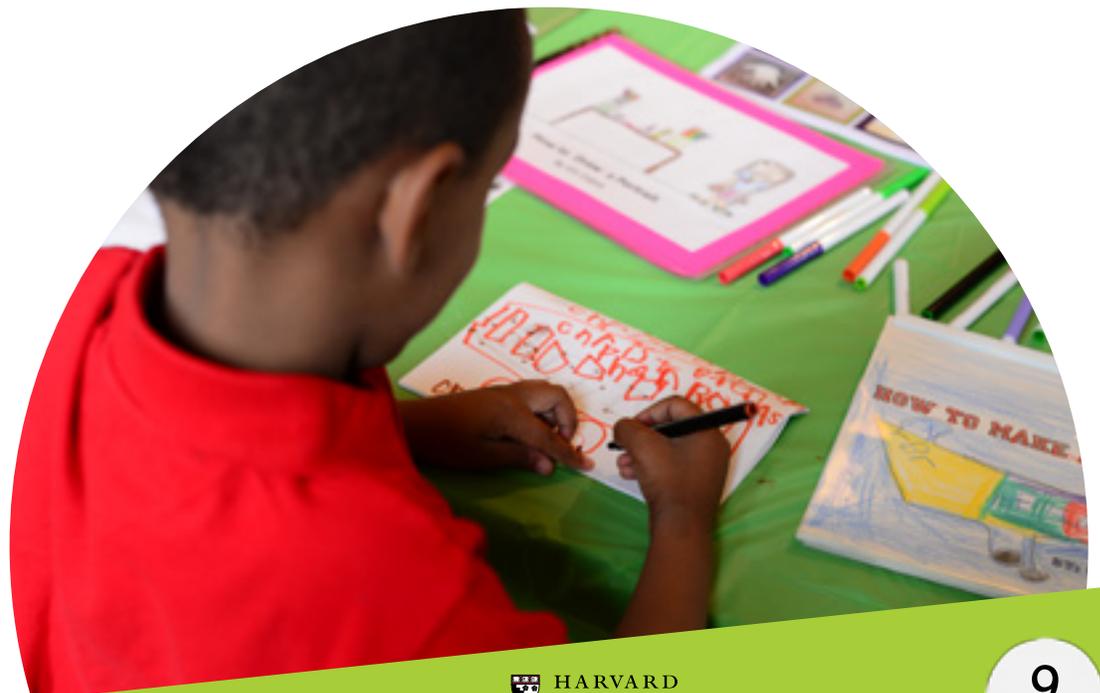
○ Funder: Longview Foundation

pz.harvard.edu/projects/interdisciplinary-global-studies

Youth and Participatory Politics: Exploring young people's use of digital media for civic participation.

○ Funder: MacArthur Foundation, through a subcontract from Mills College

pz.harvard.edu/projects/youth-and-participatory-politics



HARVARD UNIVERSITY ACTIVITIES

Project Zero and its researchers engaged in a variety of activities at Harvard Graduate School of Education (HGSE) that fed into the center’s mission, including:

OFFERING HGSE COURSES

During the past academic year PZ researchers offered ten HGSE courses that enrolled a total of 414 students. Nine of the 13 Principal Investigators at PZ offered the following courses:

- **H-175** GoodWork in Education: When Excellence, Engagement, and Ethics Meet (Howard Gardner)
- **H-610J** Truth, Beauty, and Goodness Reframed (Howard Gardner)
- **T-139** Investigating Teaching and Learning through Close, Collaborative Examination of Student Work (Tina Blythe)
- **T-211P** Interdisciplinary Education: Preparing Students for our Contemporary World (Veronica Boix Mansilla, Flossie Chua)
- **T-402** Group Learning (Daniel Wilson)
- **T-543A** Applying Cognitive Science to Learning and Teaching (Tina Grotzer)
- **T-543B** Applying Cognitive Science to Learning and Teaching (Tina Grotzer)
- **T-600** Thinking and Learning Today and Tomorrow: Project Zero Perspectives (Carrie James, Edward Clapp)
- **S-300** The Arts in Education: Learning in and through the Arts (Steve Seidel)
- **S-301** The Arts in Education: Research, Policy, Advocacy, Activism, and Practice (Steve Seidel)
- **S-305** Active Learning in Museums (Shari Tishman)
- **S-316** Art, Design, and Learning in Public (Steve Seidel)
- **S-504** Introduction to Qualitative Research (Liz Dawes Duraisingh)



ENGAGING HGSE STUDENTS

Beyond engaging students in formal classes at HGSE, PZ creates a variety of ways in which HGSE students can be active participants in our research community. This past year, 38 students engaged in PZ activities in the following ways:

PZ's Artists in Residence: The program partners HGSE students with PZ researchers to provide opportunities for students to explore connections between the arts and PZ research. In FY2016 four HGSE students were accepted and worked on four projects that culminated in a May exhibit at PZ's offices.

Master's Degree and Undergraduate Students: Each year a limited number of positions are available for HGSE master's degree students, many with work-study funds, to be involved in active PZ projects. Last year, PZ projects involved 18 master's degree students and one undergraduate student, giving them variety a professional development opportunities at our research center.

Doctoral Students: Many PZ projects create roles for HGSE doctoral students to hone their intellectual and research skills via active participation in ongoing research projects. In FY 2016 a total of 15 students were engaged as doctoral researchers at PZ.

HOSTING COMMUNITY EVENTS

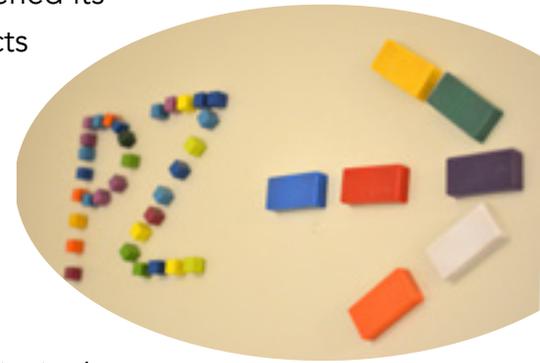
In addition to engaging students in PZ's intellectual life, the center creates opportunities to engage other faculty and staff in discussions of work and themes related to PZ's mission:

PZ Brown Bag Lunches: This past year, PZ hosted nine community-wide talks that featured HGSE and Harvard faculty speaking on PZ-related topics and research. Approximately 185 participants attended these talks in total, ranging from HGSE students, researchers, faculty, and staff to the wider local community.



PZ Open House: At the beginning of the Fall 2015 semester, PZ opened its doors to students and the wider HGSE community to share its projects and ways that students can be involved in work-study and doctoral researcher roles. Approximately 200 participants attended this 2-hour afternoon session.

HGSE Teaching and Learning Week: During Oct 5-9, 2015 Project Zero researchers were invited to host “options sessions” or to open up their classrooms to visitors interested in Project Zero ideas. PZ Principal Investigator Carrie James, and Senior Researchers Edward Clapp, Mara Krechevsky, and Jessica Ross participated in this HGSE community event, as did PZ researchers Melissa Rivard and Melissa Tonachel.



DIGITAL OUTREACH

PZ's Digital Strategy team's (DST) work in FY2016 focused on two primary areas: i) general outreach including organizational cohesion and broad information sharing, specifically through social media, and ii) engaging practitioners both domestically and internationally in digitally-facilitated, job-embedded semester-long professional development experiences. The team continued to work collaboratively with PZ researchers to explore how outreach and professional learning can best happen digitally and how the organization can best support the digital efforts of PZ research projects. The DST is co-led by Carrie James, a Principal Investigator, and Sarah Alvord, PZ's Senior Manager for Special Projects and PZ's Digital Learning Specialist, Matt Riecken. Highlights from this year included:

- Culminating two years of coordination and thoughtful design processes with PZ researchers, the DST introduced **a new PZ logo and branding effort in September 2015** and launched the **new PZ website in October 2015**. Through unified branding, research projects are now able to better connect themselves to PZ as an organization and maintain their individual identities as projects focusing on particular topics.

DIGITAL OUTREACH CONT'D

- The new PZ website further supported coordination and connection across PZ's largely independent research activities to help practitioners and other broad audiences better understand the diverse strands of work at PZ. The website also facilitates access to PZ resources (books, articles, tools), PZ events (institutes, conferences, online learning), and all of the conceptual frameworks along with examples of their uses in a variety of settings. Further, the website is organized around topics (e.g., Art, Design & Making) that make it easier for people unfamiliar with PZ to access all of these resources. Over the course of its first 9 months, **the website was visited 169,590 times, averaging 20,000 visits a month.** The newly accessible, practitioner-focused resources were **downloaded 5,735 times.**
- Under the direction of Matt Riecken, PZ consolidated its social media efforts, further unifying the communication across research projects by balancing promotion of intellectual content with publicity of PZ's practitioner learning opportunities. Over the course of FY16, **PZ's Twitter presence grew 66% to 14,353 followers and Facebook likes increased 60% to 6,959.**
- For the first time since 2009, this year PZ researchers developed and launched **five new online, semester long-courses** as part of the collaboration with PPE. Three focused on long-standing PZ conceptual frameworks – *Teaching for Understanding (TfU)*, *Making Learning Visible (MLV)* and *Visible Thinking (VT)*—and two explore newer research frameworks—*Cultures of Thinking* and *Maker-Centered Thinking and Learning*. These courses were launched in partnership with PPE and TLL who supported PZ researchers to develop new instructional team-based learning modules along with several new digital assets (e.g. videos, tools, and digitally accessible audio and visual materials) and engaged more than 25 online coaches to support practitioner's learning. Utilizing the University's selected learning management system, Canvas, PZ, PPE, and TLL collaborated to bring all of the new design features onto the Canvas platform to ensure that the PZ learning experiences were accessible to practitioner teams in any part of the world. In FY16 The semester-long courses **enrolled 2,314 participants** in teams from around the globe.
- In collaboration with our PZ Connect project, the DST completed a second pilot of five online mini-courses. The mini-courses, delivered in Australia in collaboration with Independent Schools of Victoria focused on the three core PZ frameworks (*TfU*, *MLV* and *VT*) and offered access to two additional PZ research projects—*Good Work in the Classroom* and *Global Perspective Taking*. The mini-courses **enrolled 290 participants** in teams from 12 schools in Victoria, Australia.

DIGITAL OUTREACH CONT'D

Finally, in FY16 **HGSE's Usable Knowledge site featured 9 articles** on PZ's research:

- Mindfulness and Screen Time: Writing new terms of engagement for how we approach our connected lives (Jul 2015)
- Projects That Soar: An online repository of outstanding student work shows what kids (and teachers) can achieve (Aug 2015)
- How to Raise a Voracious Reader: Promoting literacy with dinnertime storytelling, family conversation, and books about food (Nov 2015)
- Learning to Learn at Work: How to make the most of on-the-job learning (Dec 2015)
- A New Year, a New Approach: The Good Work Toolkit can help you reflect on what matters to you and what you want to accomplish (Dec 2015)
- Teaching the Environment: How educators can help students understand the complexity of environmental change (Dec 2016)
- Getting Up Close: Augmented reality leads to a deeper understanding of ecosystem science and forecasts to the future of STEM learning (Dec 2015)
- Ethical Collaboration: Teaching students to work together honestly and to build a culture that stops cheating before it starts (Mar 2016)
- Old School? Giving teachers a voice in designing the learning environments of the 21st century (Apr 2016)

CONVENING INSTITUTES FOR EDUCATORS

PZ continues to offer a range of HGSE-based and off-site institutes for educators from around the world. In FY2016 PZ researchers led the following 7 institutes that involved a total of 1,761 educators:

- **Project Zero Classroom (July 2015):** HGSE's PPE and PZ hosted the 20th installment of this 5-day annual event, which enrolled 343 educators from around the globe.
- **Future of Learning (August 2015):** With PPE, PZ hosted its 7th annual conference on the themes of globalization, digital technologies, and neuroscience, which enrolled 178 educators.
- **Arts and Passion Driven Learning (August 2015):** Working with the Silk Road Project, PZ's Steve Seidel and PPE hosted its 3rd annual event to examine the role of arts in education. It involved 94 participants from around the world.
- **Project Zero Perspectives: Zeroing in on Learning (October 2015):** With the Center for the Advancement and Study of International Education (CASIE), PZ convened 384 international educators at the Amsterdam International School to explore current PZ research and practices.
- **Learning Environments for Tomorrow (April 2016):** In collaboration with the Harvard Graduate School of Design, PZ's Daniel Wilson and PPE convened this 6th annual conference with educators and architects to explore emerging trends in school design. It involved 52 participants.
- **Project Zero Perspectives: Leading Learning & Thinking (March 2016):** PZ and CASIE convened 439 educators from around the globe at the Melbourne Grammar School (Australia) to share PZ research and practices.
- **Project Zero Perspectives: Global Connections in the Digital Age (March 2016):** PZ and CASIE convened 271 educators from around the globe at the Sydney Shore School (Australia) to explore PZ research and practices.



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