

**understanding design
thinking and using it as a
process for teaching
innovation and creativity**

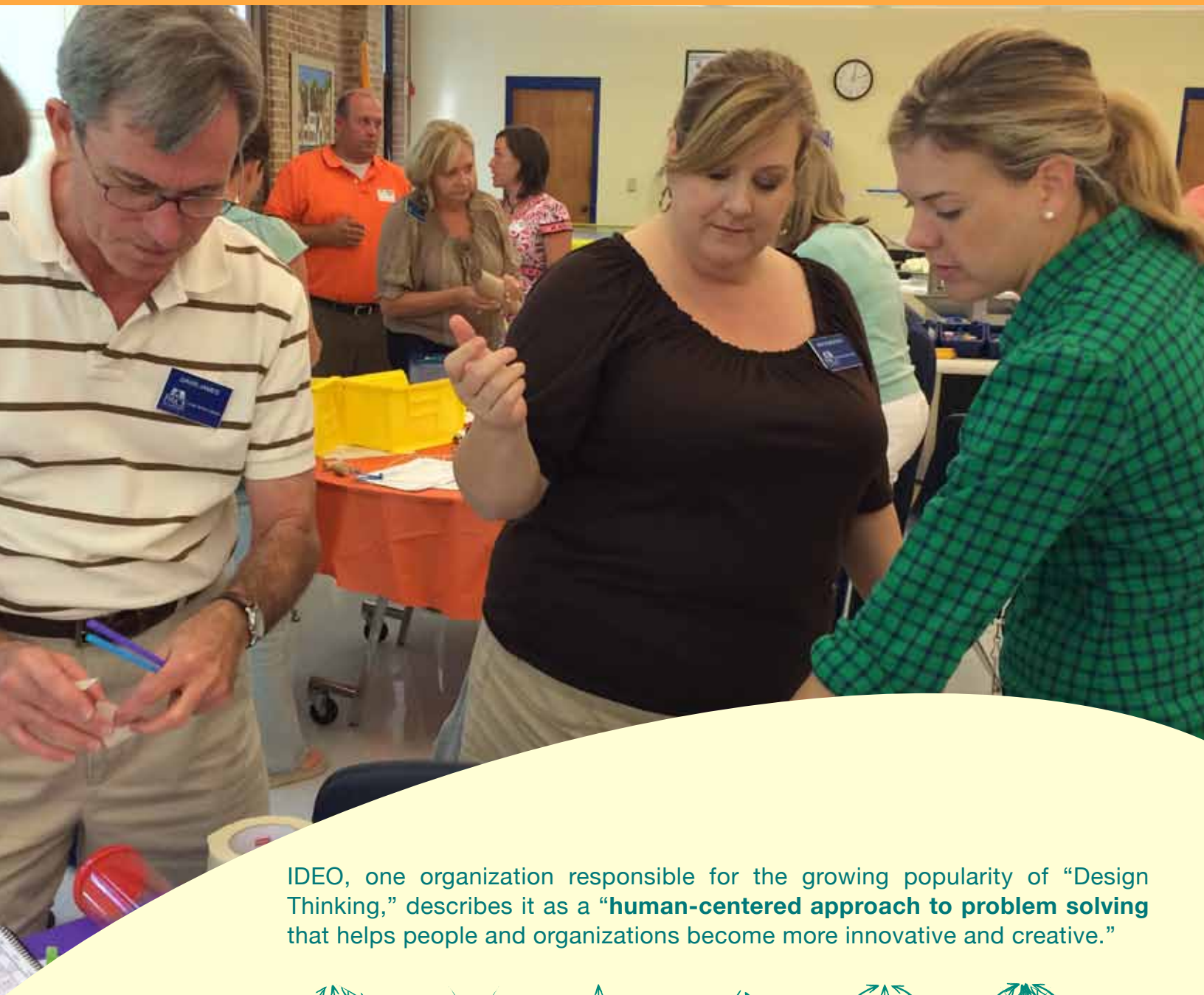


INTRO TO DESIGN THINKING FOR EDUCATORS

PACE ACADEMY
AUGUST 14-15, 2014



THE DESIGN THINKING PROCESS



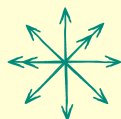
IDEO, one organization responsible for the growing popularity of “Design Thinking,” describes it as a “**human-centered approach to problem solving** that helps people and organizations become more innovative and creative.”



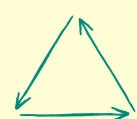
empathy



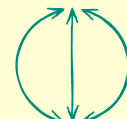
define



ideate



prototype



feedback



reflect

OVERVIEW OF GOALS

Pace Academy's school leadership has embarked on an ambitious program to incorporate Design Thinking into its core educational program for pre-first grade to 5th grade students. The lower school has identified Design Thinking as a powerful process for teaching creativity and innovation, as well as providing a meaningful focus to achieve its global learning outcomes. Pace Academy's Head of the Lower School and its Design Thinking Coordinator seek to support their teachers in learning and applying DT tools and strategies in their work with each other, their students and their larger community.

Leaders from Henry Ford Learning Institute (HFLI) worked closely with the instructional support team of Pace Academy to craft a set of workshop goals and an agenda to deliver a focused learning experience for all participants.



At the conclusion of the **2-day workshop**, participants were able to:

- **Describe** how design thinkers think, act and use content knowledge.
- Identify **key phases** in the Design Thinking Process, and discuss the purpose for each phase.
- Outline **teacher behaviors** that help students become better design thinkers.
- Plan opportunities to integrate the Design Thinking Process and/or strategies **into their daily instructional practice** and/or project-based content units.
- Locate **HFLI curriculum materials** to facilitate Design Thinking Challenges and embed Design Thinking activities and skill building into their core daily instruction.

“ I now see through a

Design Thinking eye

and it leaves me in awe.”

- Lori Beth, past workshop participant

ACTIVITIES



Activities incorporated a balance of process introduction, active experience, planning for and reflection on embedded application. At each stage of the workshop, we included a strong focus on Design Thinking as **a unique way to engage students in innovative thinking and creative problem solving.**

In summary, participants:

- Joined in **warm-up activities** to create a readiness for critical thinking and creative problem solving and learning.
- Completed a **rapid-cycle** Design Thinking Challenge: Redesign your Partner's Morning Experience.
- Engaged in a **deeper dive** Design Thinking Challenge, "Design a Way for Atlanta Citizens to be Better Stewards of Their Water Resources." Participants reviewed their prior knowledge, listened to remarks from a Riverkeepers organization guest expert and conducted research on particular aspects of water challenges in the Chattahoochee River watershed.
- **Explored tools and strategies** for embedding Design Thinking into their daily work with students, colleagues and families for student learning and community problem solving.

OVERVIEW OF AGENDA



Agenda

DAY 1

- 11:00 Getting Started with Design Thinking
 - HFLI Introduction and Overview
 - Rapid Cycle DT Challenge
- 12:10 Introduction to Deep Dive Challenge
 - Initiate Deep Dive Challenge
 - Empathy Activity I
- 12:15 Lunch
- 12:45 Deep Dive Challenge
 - Empathy Activity 2 - *Tapped Out* Speaker
 - Empathy Review, Activity 3
- 4:00 Closure on Day 1

DAY 2

- 8:00 Welcome/Warm-up
- 8:15 Deep Dive Challenge
 - Ideate
 - Prototype
 - Feedback/Iterate
- Break
 - Sharing/Storytelling
 - Reflection
- 12:15 Lunch
- 1:00 Introduction to Pace Academy Unit Planning Template
 - Initial Capture of Existing Unit/Project
- 1:45 Introduction to HFLI Resources
 - Exploration and Planning for Implementation
 - Sharing
 -
- 3:00 Closure on Day 2

Participant Pre-Workshop Resources

1. Case Study: IDEO Shopping Cart video, an example of a professional design firm engaging in Design Thinking to develop an innovative update on a common product.

2. Expert Source: Ch. 1 of the book “The Art of Innovation,” written by co-founder of IDEO which introduces the approach to Design Thinking HFLI incorporates into its work.

3. Aligned Reading: “Creating Innovators; Why America’s Education System is Obsolete.” By Tony Wagner, who argues that creativity and innovation can and should be taught in our schools, are critical for America’s economic future, and require a different approach to education.

NEXT STEPS

HFLI recommends the following as **possible next steps** for Pace Academy school leaders, Design Thinking Coordinator and teachers:

- Provide **immediate support** for Pace participants to implement Design Thinking strategies in their personal areas of work and/or classrooms:
 - Create and monitor **peer accountability agreements** for implementing an initial Design Thinking activity or strategy within the first three weeks of school.
 - Share **stories of successful implementation** at instructional team and/or whole school staff meetings. Allow for follow-up learning lunches to “go deeper.”
 - Develop an **online archive** of lesson plans, unit or project plans, photos and/or examples of student work of teachers’ efforts to incorporate Design Thinking.
- Provide **clear expectations and learning outcomes** for students and teachers who collaborate with the Design Thinking Teacher Coordinator, Ms. Patel, for “pull-out” and “push-in” innovation sessions. Create structure to align with Ms. Patel’s lessons/activities and teachers’ embedded daily instruction. Review the plan with all teachers and engage in regular assessment of program achievements.
- Develop a **process by which prototype materials are acquired, managed and replaced** so that the full complement is consistently available to all teachers.
- Utilize the HFLI provided **Design Thinking Teacher Guides** for Grades K-5 in grade-level Design Thinking sessions during Ms. Patel’s classes.
- Build comfort with and capacity to develop **embedded Design Thinking Challenges within core grade-level classes** or projects with HFLI-provided curriculum planning materials.





A different way of teaching.

A different way of learning.

HFLI's hands-on learning programs are focused on preparing students for college, careers and innovation – programs that can be adapted for use by any like-minded learning community.

Creativity and innovation can and should become **an integral part of the K-12 learning experience** – the growing complexity of our world requires it.

HFLI's Foundations of Innovation (FOI) is a one-semester course developed in partnership with the Hasso Plattner Institute of Design (d.school) at Stanford University.

FOI provides **experiences that help students see value in how their creative ideas can bring about change**. It lays the groundwork for transformative innovation by building a foundation of innovative Design Thinking skills.

HFLI's Teacher Guides lay out detailed planning and implementation instructions with associated materials that **enable teachers to facilitate a Design Thinking challenge** with their students.

In grades K-8, the guides introduce and develop students' skills and comfort with Design Thinking. At the secondary level, the guides build on the skills and mindsets students learned and practiced in FOI.

How might HFLI support high-quality educational programs for your learning community?

Contact us at info@hfli.org or (313) 982-6027 to learn more.

HFLI (hfli.org) is a non-profit organization.