Innovation in Education
Redesigning the Delivery System of Education in America

A GFE Member Briefing held on April 8th and 9th, 2010, in San Francisco
In April 2010, Grantmakers for Education (GFE) convened 50 education grantmakers from around the country for a two-day design session and seminar, *Innovation in Education: Redesigning the Delivery System of Education in America*. This convening capitalized on a 2009 GFE survey that found 66% of our member organizations are supporting education innovation or the development of new models of learning, and that 33% plan to increase these investments. Despite the growing attention paid to innovation in education, we found it to be a loosely defined concept that was in need of greater articulation and structure.

**A Learner-centered Education System—Why Now?**
We believe the sharpened focus on innovation responds to a growing consensus that learning in the 21st century must look and feel fundamentally different than it does today. Students are still educated in an industrial system designed more than a century ago—a time when society’s needs and expectations were radically different than they are today, and will be in the future. Equally problematic is that this system was designed to sort students, rather than provide equitable education opportunities regardless of race and social class, and that it fails to respond to students who learn in unique ways, or at different paces. But with geo-political barriers evaporating, global competition accelerating and a societal rate-of-change spinning at an unprecedented pace, it is increasingly clear we need to move towards a system of learning that is calibrated to meet today’s and tomorrow’s challenges and is, at its core, “learner-centered.”

This effort should not be about identifying education’s next big idea.

With this in mind, we see an opportunity for grantmakers to step outside of our current education system to consider the outlines of a new approach to learning that meets the needs of our diverse students. What special roles can funders serve in helping to fast-forward our nation’s thinking and approach to education, and what investments can we make to seed learner-centered designs and accelerate systemic transformation?
Innovation in education is not an iPhone nor is it Twitter.

Still, grantmakers have yet to fully articulate their role in transforming—or disrupting—America’s education system. In recent years, the number and variety of convenings focused on educational innovation have multiplied as we have collectively tried to make sense of the present and envision the next “Big Idea” for education philanthropy. Yet this effort should not be about identifying education’s next big idea. Innovation in education is not an iPhone nor is it Twitter. Instead, innovation in education requires us to stand in the shoes of future learners to understand their needs and the world they face, consider the essential design elements that will support their achievement, and then map backwards toward today to identify how we can take steps today that progress toward this future world.

Recognizing that there are many competing philosophies and priorities for educational improvement, we resist the idea of a universally-shared or definitive vision of the future. We believe philanthropy’s collective impact will increase dramatically by creating greater alignment and coordination among funders working to advance the next generation of learning.
Before arriving in San Francisco for the briefing, participants spent time on the briefing website learning about future learners and possible scenarios of the future of learning.
In response, GFE convened education grantmakers in San Francisco for *Innovation in Education: Redesigning the Delivery System of Education in America*. Our conversation was grounded in the following questions:

- **How can human-centered design drive innovations that meet the diverse needs of traditionally underserved learners?**
- **What innovations will have the greatest systemic impact?**
- **How might we align grantmaking towards a common vision of innovation in educational philanthropy?**
- **What new capacities must education philanthropists develop in order to effect transformative change?**

Believing form should follow function, this “member briefing” was designed to look and feel very different from our traditional gatherings. With guidance from its experiential design partners Collective Invention and the KnowledgeWorks Foundation, GFE conceived this gathering as an experiential, user-centered work session. Prior to the gathering, participants were invited to assume the identities of one of 8 learners in the year 2025, learning about their stories and the details of the world they inhabit. Grantmakers were then invited to arrive on site in character, where they worked in discussion groups with other future learners to identify from a first-hand perspective what education systems would need to look like for to enable their persona to succeed. Mapping these system needs against different scenarios that reflected a range of possible future resource constraints and sociopolitical characteristics, this user-centered approach offered a unique and powerful invitation to grantmakers to rethink their investment strategies as they consider future investments to improve achievement.

**New Ways of Thinking Anchored Our Gathering**

The convening utilized three key methodologies adapted from other disciplines:

**Systems Thinking** emphasizes our need to understand a whole system and the relationships between its parts rather than focusing on its parts in isolation. The goal is to uncover those aspects of the system that with the greatest potential to change the system as a whole.

**Design Thinking** begins by understanding both the tacit and explicit needs of stakeholders, and then carries this understanding through to problem definition, concept development, prototyping and implementation of new solutions. In this context, design thinking is the process of taking an imaginative leap into the future and working back from the desired outcome to identify what must then happen.

**Scenario Thinking** involves the identification of forces that are both critically important and highly uncertain. Taken together, they lay out a series of differing—but equally plausible—future worlds.

Beginning with the online simulation, we explored the needs of eight different learners in the context of four future scenarios for education. Each participant assumed the identity of one of eight “personas” (research-based, composite profiles) of high-school-age learners who differed in terms of race, ethnicity, personal history and learning style. We also considered socio-economic status, cultural capital, migration status, and the degree of personalization desired by each learner.

We share here the profiles of two of our future learners, Adila Tahawi and JP Taearo.
Adila Tahawi

**Age**
15

**Location**
Minneapolis, Minnesota

My mom is a first generation Arab-American, and Dad is from Egypt. They both grew up in Westernized families, but the events of the early part of the century changed them. The wars in Iraq and Afghanistan, and some of the anti-Muslim sentiments that began to be expressed in the West, made them feel split—their cultural identity and their communal identity were suddenly at odds.

**Socio-Economic and Cultural Capital**
My family doesn’t have a lot of money. My dad’s a physics teacher at one of the remaining local colleges, which isn’t very well funded. He makes extra money selling lectures. Both of my parents have always encouraged us to read widely, and we discuss film, art, music and theater as a family. We can’t afford to travel far, so we experience others through holograms. I think we have more knowledge of the rest of the world than most American families.

**Learning Styles**
I don’t really know if I have a particular learning style. My mom has really decided how my brothers and I will learn. She tries to mix it up as much as she can, but I’d say we have a pretty old-school experience—lots of reading and remembering and discussing.

**Aspirations**
I don’t know what I want to do for a career yet. After so long being at home, I’m looking forward to being around more people my own age. And I want to experience a campus. The kind where you live communally and self-organize around your interests and engage in ongoing dialogue with the professor-guides and edu-ators.

**Dilemmas**
What have I missed by being home schooled?
How do I deal with racism and ethnic hatred?

To hear from Adila and meet the other future learners, click here. You may experience a short delay after starting the audio files while they load.
Age
17

Location
Richmond California Climate Refugee Camp

My family and I are climate refugees from Kiribati. We live at this refugee camp. We’ve been here for a few years now. It’s pretty cool for what it is, but it’s crowded. It’s getting easier to get off camp now and then, and interact more with the American culture around us; it’s still a little weird, but I want to get comfortable with how things are here.

Socio-Economic and Cultural Capital
We were forced to migrate, and came from communities that weren’t very well-off to start with, and now we live largely on assistance from a variety of NGOs. Our way of life has also disappeared in reality, although there are lots of elders and scholars who are determined to keep our cultures alive.

Learning Styles and Enhancements
There’s federal program here to give students here at the camp the opportunity to try some cognitive augmentations. My friend Keola is very ambitious. He wants to be a scientist and has applied for every enhancement available. He takes stuff everyday and is able to stay up for days at a stretch working on things. He says he’s waiting to trial one of the information implants. I don’t know. Taking drugs to help you is one thing. But having stuff implanted in your body is crazy.

Overview of Current Experiences
I know my history has given me a head-start in climate science, so that’s probably what I’ll end up doing. I think I can probably get work here in the delta, helping with the climate change management program.

Aspirations
I’m sure I have some technical skills, but America is a new culture to me, and I’m not sure I can figure out how things work here. Even though I’m at a kind of makeshift school set up for the camp, and we depend on grants for any of the cutting-edge stuff, there is enough personalization that I can do advanced study in climate science.

Motivations
I know a lot of people in the camp feel angry about what has happened to Pacific Island culture, historically and through climate change, and that anger motivates them to fight, or advocate, or whatever. But I’m a roll with it kind of person. This is the way things are. I can’t change them.

Dilemmas
Am I limiting myself, and my expectations for myself, because other people see me as a poor immigrant, living on the charity of others?
Have I internalized being a second-class citizen?

To hear from Adilla and meet the other future learners, click here. You may experience a short delay after starting the audio files while they load.
Scenarios are credible projections of possible future realities that have been constructed based on research, trends and demographics about learning and education. Participants considered four scenarios that explored two different areas of future uncertainty. These four scenarios, all available via links in this document, were built around these ideas:

- A Vibrant Learning Grid
- A National System of Global Competitiveness
- Learners Forage for Resources
- Schools as Centers of Resilience

The scenarios that described America’s possible educational and geopolitical futures were based on two critical uncertainties:

**Will there be a learning oasis or a learning desert?**
Will learners find a rich geography of learning experiences to meet their needs, or will learning opportunities be constrained by a relative scarcity of resources?

**Will learning be controlled by prosumers or central providers?**
Will learners be engaged both as producers of content as well as consumers, or will learning be controlled by a centralized, narrow field of standards-driven content providers?
What Will the Future Look Like?

Learners Create Rich Opportunities

Amid a culture of flexible innovation, learners shape their own learning experiences, drawing upon a rich learning geography to identify resources that meet their needs. With personalization of learning experiences the norm, the K-12 system of 2010 no longer dominates learning. Those schools and districts that remain have become part of a complex and vibrant set of options that together form a loose learning ecosystem. Learning is available 24/7 and year-round across many learning platforms and beyond geographic limits.

Smart networks of resource providers form lightweight, modular learning grids to offer flexible learning experiences as demand dictates. Gone are the days when the adults involved in learning primarily served as teachers, administrators, and tutors. Now a whole host of learning agents support learning, with some specializing in particular content and others focusing on pedagogy or assessment design. Networked collaboration is the norm.

Everyone can keep an eye on what is happening, and social and reputation capital help people build trust and connect with resources. There is so much co-ownership of the learning system that at least some participants are thinking and acting thoughtfully about issues such as providing equitable opportunities for all learners and making sure that new innovations get designed to support people with disabilities.

A Vibrant Learning Grid

This scenario illustrates one possible way the future of learning could unfold.
Walking through alternative worlds of learning, we became clearer about the diverse needs of learners—regardless of how the future unfolds.

For example, we explored how students in the year 2025 might work with “learning agents”—a new breed of instructional professionals working with geographically-distributed cohorts of students with similar needs.

These three vignettes illustrate how learning agents might work with different groups of students in the future.
Through an accumulated understanding of the eight personas, combined with their own professional knowledge, grantmakers investigated three questions. Participants’ answers to these questions were synthesized by the facilitation team in real time and were presented back to the group as a strategic framework for conceptualizing investments in the future of learning.

### A Learner-centered Investment Framework

#### Three Questions

<table>
<thead>
<tr>
<th>As a future learner, what do I need?</th>
<th>What must be true of the future learning system?</th>
<th>What pathways for investment will be necessary to create the learning system to meet the needs of future learners?</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am the future learner and this is what I need:</td>
<td>The learning system of the future needs to be...</td>
<td>And grantmakers can support me by investing in these important pathways...</td>
</tr>
<tr>
<td>• I need to feel that I am uniquely valuable in and for the world.</td>
<td>• Personalized</td>
<td>• Resources follow the child</td>
</tr>
<tr>
<td>• I need to know how my value can be realized.</td>
<td>• Engaging</td>
<td>• Risk-taking and prototyping</td>
</tr>
<tr>
<td>• I need a map that shows me what is possible in my life and in my experience as a learner.</td>
<td>• Centered around my needs, gifts, and challenges</td>
<td>• Social and peer-based learning</td>
</tr>
<tr>
<td>• I need help navigating that map.</td>
<td>• Mediated</td>
<td>• New forms of governance</td>
</tr>
<tr>
<td>• I need my learning experience to reflect who I am.</td>
<td>• Resources with me in mind</td>
<td>• Personalized learning and community</td>
</tr>
<tr>
<td>• I need financial, technical and socio-emotional resources to follow me on my journey.</td>
<td>• Financially tenable</td>
<td>• Public will for change</td>
</tr>
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<td></td>
<td>• Reciprocally accountable</td>
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Throughout the design simulation and innovation process, GFE members reflected on the practical implications for more coherent, more learner-centered grantmaking practices. The following represent key learnings:

**Funders must learn how to work differently to support transformative innovation**

- This work requires humility, and a servant-leadership mindset
- We need to be more nimble and less bureaucratic
- We need to collaborate authentically and should consider syndicating our resources
- If we think systemically, we can see and predict (more effectively) the future
- We need to engage our trustees in these conversations and to develop effective strategies for more consistently and effectively helping them to see what we see
- We need to sharpen our observation and analysis skills—recognizing shifts and patterns are critical to our success
- We need to consciously build on the existing knowledge base—doing so by examining great examples’ DNA and figuring our what’s replicable/adaptive

**Practical Implications for Grantmakers**

- We need appropriate metrics and measures. We need to deepen our understanding of how money currently flows through the system and what changes would be necessary to better support students.
- We must produce and share case studies—and do so in a learning community committed to joint learning about what does and doesn’t work

**We need to develop a better understanding of the innovation process**

- Innovation cannot develop in silos; this work is inter-connected
- Risk-taking is essential to advance learning opportunities for students
- Grantmakers are looking for ways to experiment, and to take intelligent risks:
  - We need to develop our own understanding of the innovation process including the critical concept of “rapid prototyping” and other essential concepts and terms
  - We need the courage to fail transparently, and to “fail forward”
  - We need to invest more when we see promising solutions
  - We need a ‘GFE Innovation Lab’ and venture funds
  - We should convene business, funders, systems engineers, product managers, students and designers in... a product development cycle
  - We should explore collaborative funding models

**We need a shared learning agenda to deepen our understanding of learners’ needs and new models for learning**

- Student voices need to be incorporated into this important national conversation
- We need to hear from multiple, and less common, perspectives and, in doing so, deepen our understanding of others’ experiences
- We need shared definitions of ‘student-centered learning’
This convening was the first step in an ongoing learning series at GFE through which we will continue to examine the future of learning and deepen our shared understanding of how grantmakers’ roles and investments can align around elements of a learner-centered system of the future. Based on the work done in San Francisco, in subsequent collaborations among GFE members, and at Learning2025: Forging Pathways to the Future (a work session held in Chicago September 30 – October 1, 2010), we have further refined the investment framework articulated in this document. Our next publication provides insight into the current state of members’ investments on the path to 2025, along with observations about opportunities for greater cooperation, shared research, and deeper learning across the education sector.
Building upon our respective organizational expertise and success, Collective Invention and KnowledgeWorks have formed a strategic alliance to radically transform national thinking about learning in the 21st century.

KnowledgeWorks is bringing the future of learning to America’s high schools and is creating widespread, lasting change in the communities and states we serve. Since 2006, we have worked with forecasting experts, studied data on the trends shaping our world, and joined conversations with others thinking about where education is heading. Through our work building our 2006–2016 Map of Future Forces Affecting Education and 2020 Forecast: Creating the Future of Learning, we have come to understand how vitally important it is for our country’s outdated education system to evolve into a 21st-century world of learning that reaches every student. As part of our model of starting with high schools and moving out through communities and states, our Organizational Learning and Innovation group works with our subsidiaries and with external partners to help create a vision for what that future could look like and the tools to help make it a reality.

Collective Invention is a social innovation firm. We build tools and develop programs that enable innovation for the common good: transformative approaches to education, health, sustainability and ethical enterprise. We work at the systems-level, designing ways for policymakers, philanthropists, entrepreneurs, NGO’s and non-profits to collaborate meaningfully; we also facilitate innovation process for individual organizations such as the New Orleans Center for the Creative Arts, where we are designing a new academic curriculum based on NOCCA’s proven pedagogy for professional arts training.

Collective Invention’s practice draws on expertise in scenario planning, design, ethnography, organizational development and psychology. We have worked extensively both in the US and with the Singapore Ministry of Education as part of Prime Minister Goh Chok Tong’s “Thinking Schools, Learning Nation” vision, first within the Ministry itself and eventually with a wide range of schools, administrators, teachers and students. Our current education work revolves around Learning2025. This process, which as been developed in cooperation with KnowledgeWorks, begins with a hybrid web/face-to-face simulation designed to help stakeholders (boards, investors, administrators, educators etc.) better understand the needs of learners in a rapidly evolving environment. From there, we define opportunities for learner-centered innovation and facilitate the process of prototyping and evaluating new solutions.

Work with us to explore the future and innovate in the present! Contact us:

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