A NOTE FROM EDUCATION REIMAGINED
Reflections from the Big Ideas Fest

IOWA BIG
Profile of their Learning Environment
A Conversation with Co-Creator Trace Pickering

LEARNER VOICES
Let’s hear what learners have to say about their education

FROM THE VISION
TOOLS & RESOURCES
UPCOMING EVENTS
ON OUR BOOKSHELF
WORTH YOUR TIME
Dear Pioneers,

Last week, I had the opportunity to be in attendance at the Big Ideas Fest (BIF) in San Jose, California. This gathering, now in its 7th year, brought together 175 curious practitioners and innovators in the field of education for an immersive design-thinking professional learning experience.

What struck me most about the event were the multiple opportunities to practice deep listening.

Education Reimagined arose out of a series of deep, intentional dialogues, so we are no strangers to listening, but it was interesting to remind myself just how much value there is in intentionally practicing and honing my listening muscles.

The panel on How Might We Create Educational Opportunities to Disrupt the School-to-Prison Pipeline provided the first focused opportunity to listen. The audience was asked to actively listen as the panel spoke about their life experiences. Tyson Amir-Mustafa from Five Keys Charter High and Ashanti Branch, Founder of the Ever Forward Club, each spoke about their experiences growing up as black men in America. Tyson reflected on his work with young men and women in prison classrooms. Ashanti told of his work with middle schoolers and the dire need for a safe space for young men to express their emotions. Shanley Rhodes, Deputy Director of the Southern Region of Five Keys Charter, spoke about her early experience as a teacher in a failing and violent school environment. All these experiences came from different places and with different contexts, but, listening deeply, I heard a common thread—a desire from the young people in these stories to be truly heard, known, and understood. It harkened back to the notion that it is really all about building authentic relationships and hearing someone for who they are and not who we assume them to be.

This came into play again—albeit in a less serious way—as I engaged in improv exercises throughout the Fest. These exercises were set up so that participants had to be totally focused to respond in the moment. And, because you can’t know what’s coming, you really had to listen hard to what was being said. So, whether it was during a panel presentation or in-the-moment play, this focus on actually listening surfaced again and again for me—and reminded me of the power authentic listening holds to engage us in something larger than ourselves.

Thank you to Big Ideas Fest for a wonderful experience!

Monica Snellings
Five Design Elements for Learning

To ensure development in knowledge, skills and dispositions for all learners, we envision learning experiences characterized by the following five interrelated elements. Taken together, they form our new design for learning:

- **COMPETENCY-BASED**
- **PERSONALIZED, RELEVANT & CONTEXTUALIZED**
- **LEARNER AGENCY**
- **SOCIALLY EMBEDDED**
- **OPEN-WALLED**

These five elements are not meant to serve as a blueprint for a rigid model to be implemented everywhere. Instead, they serve as a “North Star” to guide innovation. They do not create a single roadmap that can be followed the same way in every learning community. Realizing new designs will be an iterative process; much experimentation will be necessary to discover ways that these five elements can work together and reinforce one another to create excellent learning experiences for all children, regardless of their circumstances.

**COMPETENCY-BASED** learning is an alternative to age- or grade-based learning. In competency-based learning, each learner works toward competency and strives for mastery in defined domains of knowledge, skills, and dispositions. Learners’ trajectories toward mastery are guided and managed, rather than placing the emphasis on their achievement of specific benchmarks in a fixed amount of time. Competency-based learning recognizes that all learners are unique and that different learners progress at different paces. It allows the system structure to support variation of learning speeds in accordance with each learner’s specific challenges and needs. Assessments, both formative and summative, are utilized on a continuous basis to inform the learning and instructional strategy for each learner. Additional resources are provided to learners who need help to accelerate the pace of competency development.

**PERSONALIZED, RELEVANT, AND CONTEXTUALIZED** learning is an approach that uses such factors as the learner’s own passions, strengths, needs, family, culture, and community as fuel for the development of knowledge, skills, and dispositions. Learning experiences are leveraged to bridge gaps and meet learning challenges; designed to expand interests, opportunities, and perspectives; and responsive to learners’ passions. At the same time, they are rooted in real-world contexts and empower the learner to demonstrate his or her learning in a variety of authentic ways and settings. Personalized, relevant, and contextualized learning also acknowledges that different learners face different challenges to learning, whether in health, safety, economic situation, emotional wellbeing, social interactions, or competency development. Those challenges are both identified and addressed so that the learner is adequately supported, thus ensuring that his or her current life situation does not constrain the breadth or depth of learning.

Learning that is characterized by **LEARNER AGENCY** recognizes learners as active participants in their own learning and engages them in the design of their experiences and
the realization of their learning outcomes in ways appropriate for their developmental level. As such, learners have choice and voice in their educational experiences as they progress through competencies. Harnessing his or her own intrinsic motivation to learn, each learner strives to ultimately take full ownership of his or her own learning.

**Socially Embedded** learning is rooted in meaningful relationships with family, peers, qualified adults, and community members and is grounded in community and social interaction. It values face-to-face contact, as well as opportunities to connect virtually, and recognizes the significance of establishing continuity in children’s lives through the development of stable relationships. Independent exploration and practice; collaborative group work; structured, intentional instruction; and structured and cooperative play, among other experiences, are integrated to develop learners’ competencies. Both peers and adults are recognized as integral partners in learning, and learners are encouraged to interact with those developing at different competency rates, from different backgrounds, and with different interests. Furthermore, socially embedded learning catalyzes and structures partnerships with families, community-based employers, civic organizations, and other entities that can foster learning.

**Open-Walled** learning acknowledges that learning happens at many times and in many places and intentionally leverages its expansive nature in the learner’s development of competencies. It creates and takes full advantage of opportunities in a variety of communities, settings, times, and formats. All learning experiences, whether highly structured or exploratory and experiential, are valued, encouraged, and integrated into the learner’s journey. These experiences may be in-person, virtual, or blended. Play, recreation, technology-enabled experiences, community-based work, and service opportunities, for instance, are all recognized as legitimate vehicles for learning. While opening learning to a myriad of settings, open-walled learning also provides learners with a physical space in which to socialize, collaborate, and learn with peers and adults. Where a particular community possesses relatively few educational resources, they are supplemented to provide learners with authentic, rich, and diverse learning opportunities.
Our mantra is: Trust your crazy ideas, build something you’re proud of, and join the family table. In other words, let your passions drive you to do something great and be open to building authentic relationships and teams.

—Dr. Trace Pickering, Co-Creator & Associate Superintendent

**IOWA BIG STARTED AS AN UNORTHODOX EXPERIMENT:** send business and community leaders back to school for a day; not as observers, not as guests, but as students. In 2012-13, 60 local business and community leaders got the “Billy Madison” treatment. After their back-to-school experience, they shared reflections and insights and emerged with a set of principles for the kind of schools they wanted for their kids. These principals became the backbone of Iowa BIG:

1. Use student passion to drive deep learning and deliver core academic credits
2. Engage students in authentic community projects, problems, and opportunities
3. Connect them deeply to the people and resources of the Cedar Rapids Tech Corridor

Iowa BIG brings these principles to life by bridging the gap between learners and their community. It turns the challenges and problems that face Cedar Rapids’ businesses, nonprofits, and community organizations into learning opportunities for high school kids. **This knocks down the traditional walls of school.**

Learners at Iowa BIG generate new innovations, solve problems for their neighbors, and think critically about the challenges of their community. Started in 2013, this program coordinates with the area’s high schools to have learners split their time between traditional classes and Iowa BIG projects. These projects originate from companies and organizations that have untapped ideas and challenges they can’t resource. So, when an Iowa BIG learner takes up the challenge—it’s a win-win.

When working on their projects, learners come to a co-located space in downtown Cedar Rapids—putting them side by side with local entrepreneurs and million dollar companies. This co-working space has a profound effect on learners. When they’re at Iowa BIG, they aren’t just students—they’re inventors, creators, designers. And they know no limits.

Even when they return to their traditional high schools, their work and accomplishments follow them. Iowa BIG is a fully **competency-based** environment. Learners are tracked standard-by-standard as they move through their projects, ensuring the highest level of mastery. As learners explore the possibilities of their projects, highly qualified staff record experiences and products using proprietary software to ensure progress. Rather than build a pre-fabbed curriculum, at Iowa BIG their community is their curriculum.

Iowa BIG now has nearly 100 learners on board and is collaborating with 120+ business partners. Together they’re working on 40+ different initiatives. The learners have innovated and created in the fields of marketing, computer science, public works, STEM, advanced manufacturing, environmental issues, logistics, and many more. At Iowa BIG, real life starts now.

**FACTS & FIGURES**

- Public (15-18)
- 92 learners
- 5 high schools, 3 districts
- Learners with disabilities: 5%
- Free or Reduced Lunch: 53.1% as a district
- Students reporting efficacy in STEM fields: 94%

**CONNECT**

- Website: [Iowa BIG](https://www.iowabig.org)
- Facebook Page: [Iowa BIG](https://www.facebook.com/IowaBIG)
- Twitter: [@IowaBIG](https://twitter.com/IowaBIG)

For more information contact: Dr. Trace Pickering, Co-Creator & Associate Superintendent
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**LEARN MORE**

- “The Back-to-School Project”
- Competency Based Education: Next Level Learning
- What is Real Academic Rigor?
Q. How are things at Iowa BIG going into your third year? Do you feel like you’re settling into a nice rhythm?

A. TRACE: It’s been going really well. Last year, we just threw ourselves into it, anchored in our three core beliefs of passion, community, authentic projects. We learned a lot and made a lot of mistakes. It was often a case of “fake it ‘til you make it.” Coming into this year, we feel like we had a much better grasp of what we’re doing. We now have our database converted completely over for competency-based learning and project-management. Our team spent the summer designing both the database and making key adjustments for this year. They have implemented it with integrity, and we are seeing significant improvements. We’ve also upped our enrollment a bit. We now have 92 learners, up from 70 last year, and have room for about 120. We will hold our mid-year “hack-a-thon” on December 17th, which will provide students interested in BIG a day of immersion so that they can make an informed choice about BIG.

Something else pretty exciting happened last summer. At the end of last year, we had about 25% of our learners refuse to accept that they were supposed stop working on their projects just because school was over. They were determined to continue. In fact, we had graduated seniors who kept coming back.

Q. What were they working on that made them so excited to keep going?

A. TRACE: We had a group of 3-4 learners, for example, who stayed through the summer because they wanted to get into drones. They had a vision of a drone that farmers could use to fly over parts of their fields that they couldn’t usually see to ensure that they were being properly irrigated and fertilized. The whole idea was very Iowan. As you can imagine, they had lots of obstacles and chances to “fail forward.” There was a lot to figure out—from how to configure test equipment on a drone to how to collect the test data. So, they purchased a drone, put it together, and, after getting it into many horrific crashes, realized it wasn’t the right drone for what they were doing. Luckily, right at that time, there was an organization that had been working with drones in the area closing its doors. As they left, they gave the kids theirs.

With their new drone, they started making some progress. Then, we connected them to Iowa State University, where they brought their idea to a professor who was doing agricultural work in South Africa. They worked with this professor on how to have their drone help farmers in Africa and are now figuring out what instruments and cameras they can put on it. They might even get to go to Africa to test their drone. This is the sort of experience our kids are getting. It is amazing to see what they come up with and to watch them bring it to life.
Q. That is such a brilliant idea—and very out of the box. How do you generate projects like those?

A. TRACE: This year, we are in a much better place in terms of projects. Last year, we had very few in-bound projects—those pitched by businesses from our community. About 80% of projects last year were out-bound—those that the kids came up with, like the drone one. This year, we’ve reversed that. Now, 80% are in-bound. Businesses are tripping over each other to present projects to the kids. At the beginning of the school year, we had 15-20 businesses coming in every day, pitching their projects. We told them that we don’t have enough kids for all the projects and that the kids choose their own projects, we don’t force them to do anything. So you better be on your game! It was amazing to watch—adults pitching projects to kids.

Q. That must be eye opening for the businesses and community too. How have you seen your role in the community?

A. TRACE: Strong community outreach has been one of our objectives all along. We keep reminding the community that Iowa BIG is a design that they created, and the projects we work on are generated by the community’s own needs and wants. Our initial hunch was correct—we have more opportunities and needs here than are being met. Our kids are able to tap into that and make a real difference.

So, while we still have people asking, “Isn’t AP the best way?,” we now have business people who can tell our story. They can say, “Here is the work these kids did, and here’s the power of watching them learn in real-life contexts.” We see Iowa BIG as a way to bring to life possibilities for the community that they want but don’t yet see. We want to change mindsets. What I really want is for this to become a norm for a high-school experience—every learner should have the opportunity and time to explore their passions and get better connected to their community.

Q. What are you finding about the students who have graduated and gone off to college? Is participation in Iowa BIG helping them?

A. TRACE: We are attempting to get some data on that right now. We are in our 3rd year, so we have some kids two years into college. So far, they’re doing very, very well and telling us things like, “I’m much more prepared for the way college works.” College is a different environment than high school. It is more about 1-2 big assessments, knowing how to talk to adults, speaking up in class, and knowing how advocate for and gain important experiences. Iowa BIG kids already know how to do all that. They also have a leg up in knowing how to create networks at their colleges—knowing how to build relationships with the professors. It’s about giving yourself opportunities. On the downside, some report that returning to the old lecture system is driving them a bit insane.

Earlier this year, we published a paper on outcomes stemming from innovations in our district. Our results across the board are pretty amazing. For example, our kids reported an increased sense of self-efficacy and higher engagement in their schoolwork. One of our programs was with high school freshmen that would meet in the afternoon with three of our teachers. Remember, these are freshman, so they hadn’t had much experience and time with us yet. But, these kids outscored other freshman in math, science, and English by 22, 24, 26 percent, respectively. As much as my team lashes out at standardized tests, that’s what the numbers look like. We got it done through relationships and developing efficacy.
Q. With anything new and different, there will be inevitable challenges. Can you talk a little bit about the challenges Iowa BIG has faced along the way?

A. TRACE: One of our biggest challenges has been and continues to be getting people to understand that the kids know the Common Core standards as well or better than they would in a traditional system. We have to do that without throwing the teachers and schools under the bus. Our education issues are systemic issues, not people issues. It is not an easy task.

We’ve faced some scheduling nightmares as well. In the traditional system, our kids are getting their credits one at a time—making it really hard to carve out the time for BIG. We really want to get to the point where Iowa BIG can be for a block of time every day. But, right now, we have 5 high schools with 5 different schedules, and all of them have required courses only offered at one time.

There have been exceptions. With subjects like history the transition has been easier. Most of the projects that the city pitches to our kids involve getting something through the city council. This means that our learners don’t read about government—they get to do government. Our history teachers have loved that.

Q. Have you had much external resistance to your work?

A. TRACE: We’ve actually had more internal resistance than external, but we’re seeing that wane a bit. A lot of it comes down to the limitations on people’s ability to imagine what could be. It is hard when you’ve grown up and worked in the system for so long. But, this year, we’ve had two school counselors who’ve come to us and said that they’ve never seen kids more engaged, excited, and passionate about what they are doing. It is great to see the momentum of support growing. External resistance has been almost zero because our community imagined and built BIG, not a group of administrators in the central office. As a result, the community has strong ownership of their creation.

Q. Have you thought about expanding Iowa BIG’s model to other places? What might your role in that expansion look like?

A. TRACE: We are spreading the model across Iowa. There are a number of schools submitting state grants based on our model—and they are coming to us for support. Mount Vernon, a small, local district located nearby, is one of them. We’ll be having one of their students joining us this year. One medium-sized city in the middle of the state sent three teachers to BIG to immerse themselves in the model for an entire week. They received a STEM grant from the state to begin to implement an Iowa BIG model appropriate to their context. We have also been going down to Southern Iowa a lot to help a district down there get started. They had two students apply to BIG, but they were 100 miles away! Thankfully, their district said, “We’ll just have to create it here.”

In terms of helping with the transition, in some ways, the only way to do it is to just do it. But, we have been brainstorming about how we could assist with professional development. We have requests for our curriculum, but our community is our curriculum. That is very hard for a traditional educator to wrap their head around. So, with some of these districts that are transitioning toward Iowa Big models, we are finding that the full, week-long immersion type of PD is the only way to go. The model and the work of the teacher is so dramatically different, we don’t know how else to provide meaningful PD other than to throw them into the pool with us.
Check out the articles and videos below. They might just challenge your assumptions of what kids are capable of creating and doing if we let go of the current Industrial-era paradigm and move towards learner-centered education.

FROM EDUTOPIA
A Student Maker and the Birth of a Startup
The challenge: Create a project related to something you love, incorporate some type of technology, and possibly start a business around it. For middle schooler Nick Anglin, this challenge was the spark that lit his entrepreneurial spirit on fire. See what he created! Read here

SEEN AT BIG IDEAS FEST
Kylee Majkowski, CEO of Tomorrow’s Lemonade Stand
Mini-preneur Kylee Majkowski believes in thinking outside of the box, and, in this video, she presents her manifesto declaring that kids need to have fun while they are learning. The organization she started when she was just seven, Tomorrow’s Lemonade Stand (TLS), helps other kids embrace “mini-preneurship” to change the world. Watch here

FROM THE BUSINESS INNOVATION FACTORY
Student Designs for Education
In order to move the conversation from “where we’ve been” to “where we’re going,” Student Designs for Education (SD4E) is enlisting learners to design two new learner-centered high schools in Providence, RI. Hear about the impact that SD4E has had on these learners and why they think the project is so important. Watch here

FROM THE HUFFINGTON POST
If Students Designed Their Own Schools... Read here

FROM DOSOMETHING.ORG
This Teenager’s App is Reducing Cyberbullying by 93 Percent Read here

“"I never did anything like this in school before. It was open-ended, and I could do it my own way.”

Nick Anglin
KnowledgeWorks

**KnowledgeWorks** [link] “activates and develops the capacity of communities and educators to imagine, build and sustain vibrant learning ecosystems that allow each student to thrive.” They fulfill on this mission by acting as both a social enterprise and a tool and resource provider. As a social enterprise, KnowledgeWorks supports the work of their two subsidiaries, **EDWorks** and **StriveTogether**. Through their early college high school models and their increasing focus on competency-based education, EDWorks develops and helps administrators and educators to implement innovative and effective learning environments. StriveTogether, on the other hand, focuses on the community piece. They assist in the creation of a shared community vision and empower community stakeholders to organize together to bring that vision to life.

In addition to their subsidiary work, KnowledgeWorks has a resource and tools library that is bursting at the seams with rich reports and intriguing blog posts. Their annual Future Forecasts are particularly noteworthy. Produced by their strategic foresight team, these forecasts look out five years—delving into critical education issues and creating recommendations for how to translate insights about the future into action today. Forecast 4.0—Partners in Code was just launched at the beginning of December!

**Future Forecast 4.0—The Future of Learning—Education in the Era of Partners in Code** [link]

**Exploring the Future Education Workforce: New Roles for an Expanding Learning Ecosystem** [link]

**ISKME**

The **Institute for the Study of Knowledge Management in Education (ISKME)** [link] is dedicated to improving the practice of continuous learning, collaboration, and change in the education sector. Operating as an independent education non-profit, ISKME’s research efforts produce new frameworks, models, and theories, which draw upon data use, open education, and knowledge collaboration. Their research and tools are then made broadly available through their open knowledge networks. Most notable is ISKME’s award-winning **OER Commons** initiative, which houses over 50,000 open educational resources and serves a growing community of over 25,000 educators and learners. They further utilize this research to provide trainings and professional development workshops that focus on equipping educators and others with data and information.

In addition to their day-to-day work, ISKME hosts a major, annual conference—**Big Ideas Fest**—to celebrate the work of innovators from across the country and invite more and more educators to innovate within their own communities. Education Reimagined team member, Monica, experienced their 2015 BIF just last week. You can read about her experience on page 2.

“What role will you play in shaping learning for the era of Partners in Code.”

_Future Forecast 4.0_
ON OUR BOOKSHELF

The End of Average: How We Succeed in a World That Values Sameness by Todd Rose

The idea of “average” has become ingrained in the way we relate to everything and everyone. It provides a yardstick against which we can measure ourselves and others. But, according to Todd Rose’s yet-to-be-released The End of Average (January 19th), the assumption that all should be compared to some “norm” is “spectacularly—and scientifically—wrong.” What if we—and our education system—were no longer held hostage by the notion of the “average person”? What if the individuality of every person were embraced and valued?

Redesigning Education: Shaping Learning Systems Around the Globe by Innovation Unit for the Global Education Leaders’ Program

There is no one way—no manual or blueprint—to get you from the education system that you have to the one that you want and need. But, there are communities, cities, and even countries across the globe already on the journey to transform their learning environments. In Redesigning Education, the Global Education Leaders’ Program (GELP) has captured these stories and highlighted the lessons learned from these pioneers.

The Fifth Discipline: The Art & Practice of The Learning Organization by Peter Senge

Dr. Peter Senge’s The Fifth Discipline explores how organizations can use “systems thinking” to become flexible, growth-minded learning organizations. The disciplines themselves emphasize skills like developing a mindset of personal mastery, recognizing mental constructs, building shared vision, and “team learning” to foster genuine team thinking and creativity. A wonderful read for educators or administrators seeking ways to lead toward learner-centered education.

WORTH YOUR TIME

From “Shock and Awe” to Systemic Enabling

With the reauthorization of the ESEA, what can we expect for the future? According to Next Generation Learning Challenges’ Andy Calkins, we can expect a new era for education—one that “will require ecosystems of policy, regulation, investment, and operating structure that enable, rather than dictate.” This piece further illuminates what the changes to come might look like and what new thinking we’ll need to grapple with. Read here

The Most Impactful Leaders You’ve Never Heard Of

Shining a light on those who often work in the shadows, the Stanford Social Innovation Review details how the most effective collaborative networks are powered by bottom-up, trust-based relationships and network entrepreneurs who “balance power with love.” Read here

Call for Applications: Teach to Lead’s Teacher Leadership Summit

With the deadline coming up quickly—December 13, 2015 at 11:59pm ET—don’t forget to submit your application to bring your big idea to Teach to Lead’s Baltimore Summit in February 2016. Apply here
“Tell me and I forget. Teach me and I remember. Involve me and I learn.”

—BENJAMIN FRANKLIN

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PIONEERING: A LEARNER-CENTERED PUBLICATION
www.education-reimagined.org