

2013 AIA – CAE Fall Conference

Nov. 6-9, 2013



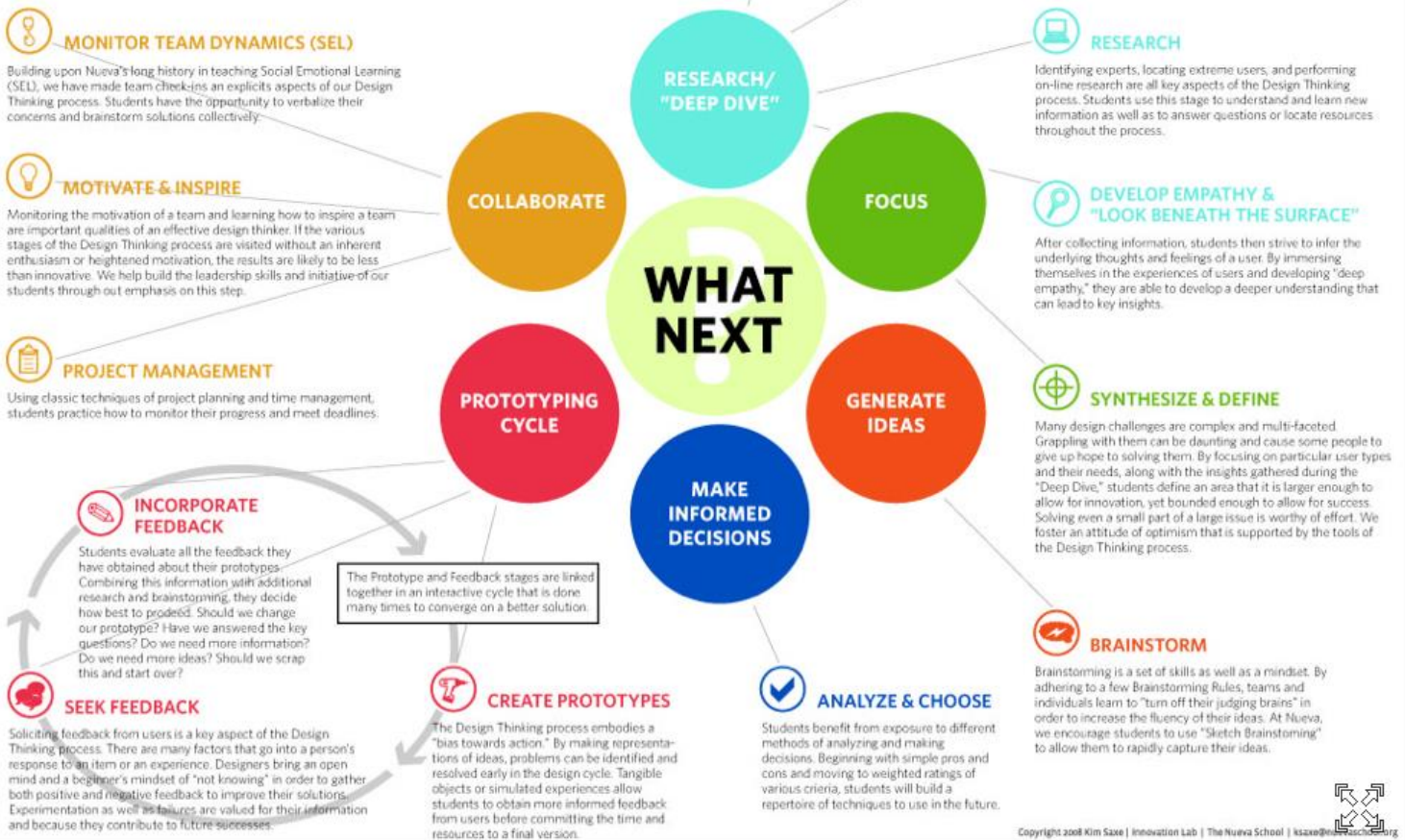
**“School should be
the most engaging
place for a child”**

How can we reimagine learning environments so that they can breathe new life into learning and teaching?

Last year's Fall Conference in San Francisco was an absolute delight to attend. The conference was action packed and full of inspiration. On Wednesday night Gever Tulley's Keynote "Emergent Architecture for a New Kind of Education" focused on school as a collective imaginative adventure where children have the chance to solve real problems and make meaningful objects and structures along the way. The Brightworks's philosophy is to share the shaping of their space with students. There is a collective belief that the school building is not the boundary of the learning: each student must have a library and a transportation card so they can use the whole city as their school. Gever urged us to shed the old and tired idea of "classrooms" and instead think about "learning environments". How can we reimagine learning environments so that they can breathe new life into learning and teaching?

DESIGN THINKING @ THE NUEVA SCHOOL

By asking 'What do we need next?' and using the stages on this chart, design thinkers craft a unique process for each particular project. As students become more mindful of the process they have used on previous projects, they build confidence in their ability to successfully navigate open-ended challenges.



Nueva Design Thinking Process

Nueva School

At the Nueva School Kim Saxe shared her experience as the director of the Innovation Lab. Conference attendees were impressed with her absolute respect for young children. Kim believes that students need to be in the driver seat in their education.

Kim has a strong conviction that space creates expectation. High ceilings create a the-sky-is-the-limit expectation, which fosters a child's ability to brainstorm a hundred ideas in five minutes. If a child is able to complete two or three projects a year this inevitably snowballs and design thinking becomes part of their ecology of learning.

One lasting impression Kim's presentation had on conference attendees was her passion to incorporate a new attitude of failure into her programs. Like Gever, Kim believes failures can be celebrated and analyzed so that new prototypes and ideas can emerge.

"We encourage a new attitude to failure."



design
thinking
process

Empathize
Observe
Define & redefine
Iterate
Prototype
Test
Reflection
Repeat

"Space creates behavior. We need to be different so that no one knows what to do...the d.school culture is learnt quickly"
~ Adam Selzer, d.School Fellow

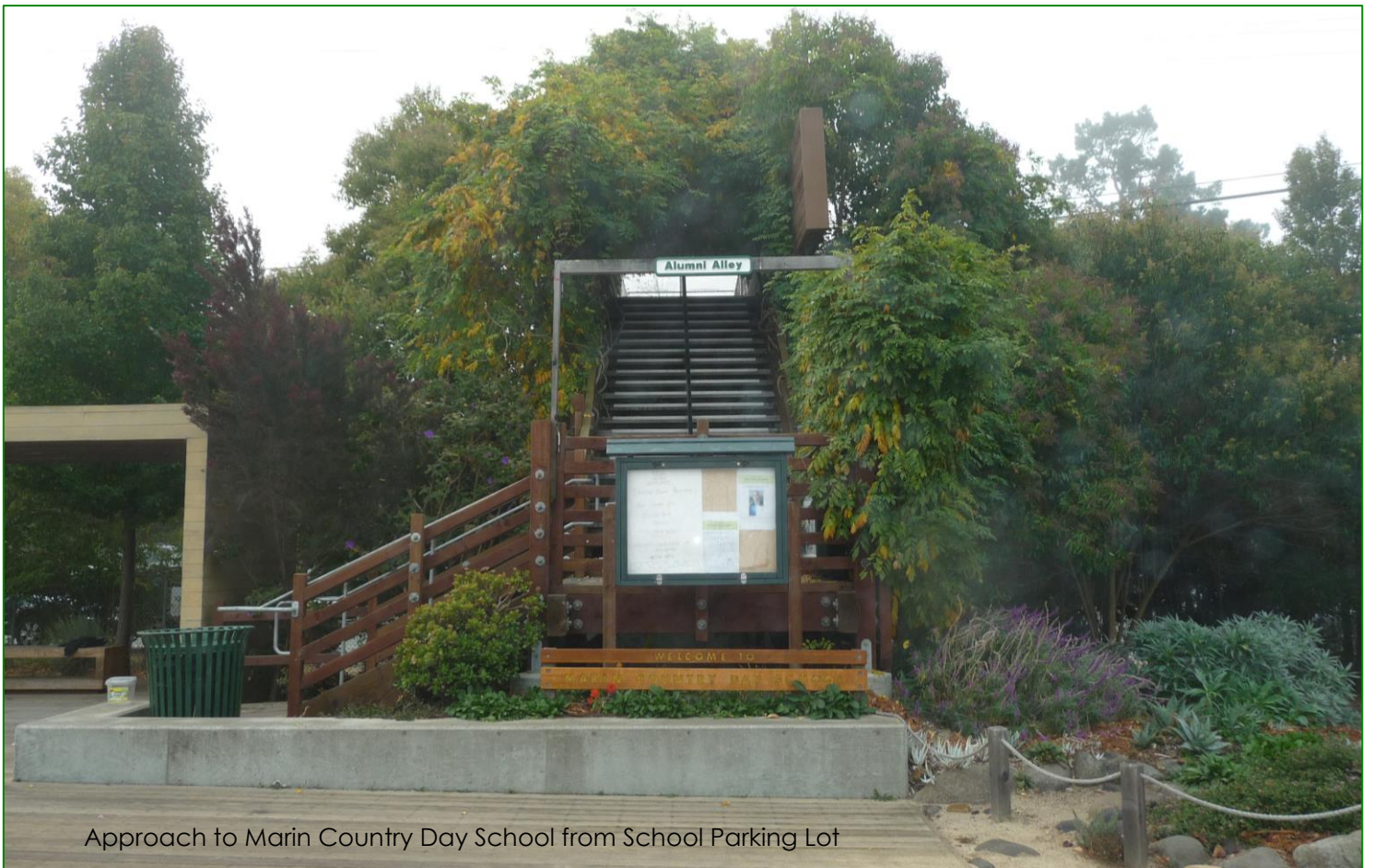
During the panel discussion at Stanford Bill Burnett expressed that clients usually focus on the symptoms and often tell designers the wrong problem. One conference attendee remembered this and decided he would work towards defining the right questions in his practice. Another standout moment for attendees was during the panel when it became clear that at the d.School post-it notes and moveable dry-erase boards trump technology during the brainstorm process.



The design of the Googleplex focuses on the user's needs and inspiring an open and collaborative culture. This was the first of two workplaces that valued a variety of conference or meeting spaces and recharge zones (mini kitchens, yoga spaces, teahouses, pools, gardens, etc.) and the freedom for "googlers" to move between such spaces and their desks at any point in their workday.



I still remember our approach into Marin Country Day School (MCDS). Our bus entered the parking lot, which was across the road from much of the campus of the school. There was a covered sitting area on the left side of the stairs and a small garden on the right side. Lush vines embraced the stairs up to a bridge that took us safely across the road.



Approach to Marin Country Day School from School Parking Lot



Going Up the Stairs of Alumni Alley at Marin Country Day School



Step-Up Square at Marin Country Day School

This entrance was an impressive “thick boundary” that slowed down time just a little and indicated that this was no ordinary school. During the presentation at MCDS we learned that Greta Jones and Willet Moss’s design philosophy was based on the question: how rich can you make these spaces that people come to day after day so the spaces continually have something new to offer as the seasons change? From our tour we saw the evidence of the richness in both the interior and exterior spaces. So much so that students think of the trees as their hallways.



Waiting Area in Cisco-Meraki

We love our third space.
We mix work and play, play with
innovation.

At Cisco-Meraki Primo Orpilla, a principal at Studio O + A, showed us examples of space topologies that he mixes, matches and customizes as desired. Cisco (like Google) believes in mixing work with play and play with innovation and the space reflects that. Some attendees felt like this building was a more mature version of what we saw at the Googleplex. Cisco-Meraki had one conference room for every four people in the building. There were sixty-five meeting spaces, which offered a wide variety in styles, materials and groupings. The freedom of workers to choose what they needed when throughout their day was clearly visible.

Lick-Wilmerding High School

Seeing schools that incorporated design thinking inspired some attendees from the east to incorporate spaces for design thinking such as innovation labs, tinkering and robotics studios into school plans where these spaces haven't yet been embraced as the new normal.



A View Towards the Library at Lick-Wilmerding High School

Many conference attendees were impressed that Lick-Wilmerding High School revisited its master plans and decided it needed to update its learning environments in order to reinvigorate the innovation that is weaved into their curriculum through the study of the technical arts. As you approach the school this high school appears to be much like many other high schools, however, once inside its uniqueness is evident. The hill and the solar panels visible in this picture serve as a few examples of the innovative design at work here.



Giant Wooden Chair and Robotics Studio



Solar Panels on top of Studios

California College of the Arts

Perhaps like all of the other sites we visited California College of the Arts (CCA) valued collaboration and the cultivation of innovation. Cross pollination is invited as there are no walls or doors in many of the learning environments, one has to walk through studios to get to a class, and the computer labs are not specialized for individual disciplines. Learning by doing was stressed here as it was at many if not all of the sites we toured and therefore became a repeated theme throughout the conference. By the end of our time in CCA it was clear that in all the well-designed places we visited there were a few core principles repeated over and over again which served as a relieving confirmation and consolidation of best practices.



The Hallway of the Second Floor at California College of the Arts

Perhaps most memorably Heather Sultz, director of Keyhole Residencies, invited us to use our body as tools and lead us in a sensory and movement exploration of CCA. It is critical to always find new perspectives in order to see the world fresh – and there is no doubt through Heather's help we did just that.



Shawn Lani with Golden Gate Bridge Model



The Tinkering Studio and Clock at the Exploratorium

The Exploratorium, a museum of science, art and human perception, was designed for Tinkerability (and failure and frustration is a part of that) and was designed and constructed with the goal of becoming the largest net-zero energy museum in the United States. Shawn Lani, who directs outdoor exhibition development at the Exploratorium, delightfully brought the outdoor exhibits to life showing us spinning sediment from different shoals captured in a series of interactive installations built into the railing and a moving model of the Bay Bridge with the actual bridge right behind it. Inside Karen Wilkinson, director of the Tinkering Studio, showed us all her favorite exhibits including the clock and toothpick sculpture entitled "Rolling Through The Bay".

As Chris Wasney, Owner of Cody Anderson Wasney Architects Inc., in a conversation on Day Three, said the 2013 CAE Fall Conference was "a perfect conference". One of the most incredible opportunities the CAE conference presents for new attendees is the chance to meet colleagues you have known about for years and for returning attendees the chance to reunite with dear friends and the sense of camaraderie that warms your spirit long after you have returned home.

A Summary of Points that Conference Attendees Valued:

1. Maintaining and Creating Collegial Relationships

2. Concentration and confirmation of best practices

3. Disruption of Status Quo:

- ◆ not "classrooms" but "learning environments"
- ◆ need to build new attitude of failure into programming
 - ~ How do we as Architects build room for celebration and analysis of failure into our learning environments?
- ◆ technology doesn't always trump analog (post it notes and dry erase boards)

4. Importance of Learning by Doing

5. Value of Teachers'/Users' Perspectives of Learning Environments

6. Designs that Reveal More Over Time are worth investing in because of the incredible amount of time students and teachers spend at school

7. Importance of Revisiting School Master/Current Plans to refresh and reinvigorate learning environments

8. Necessary to explore and tease out what we mean when we say innovation

9. Critical to find new perspectives in order to see the world fresh

10. Big Questions:

- ◆ We saw a lovely range of learning environments. In the work environments we visited the need of movement and variety was highly valued whereas schools seemed closed and limiting in comparison. What needs to be changed in school building codes to value students' freedom of movement and need for variety?
- ◆ If collaborative work is vital for success of learners, moving forward, how do we scale up design thinking to permeate publically funded and more traditional spaces?



Indira Dutt is a school design researcher and consultant, an outdoor educator and licensed teacher. She received her joint Architecture and Education Graduate Degree at University of British Columbia. Indira Dutt's work appears in several publications including *Children, Youth and Environments*; *The Ecology of School*; and in *Pathways*, *The Ontario Journal of Outdoor Education*.

Upcoming CAE Conferences and Events:

2014 CAE Spring Conference
April 27-30, 2014, Barcelona, Spain

The Value of Design: Enhancing
Education Through Architecture

Tour: Chicago Schools: Designing for
21st Century Education

June 25th 8:30am-4:30pm
Chicago, U.S.

CAE Events at the AIA Convention
June 26-28, 2014, Chicago, U.S.

See AIA CAE Home Page for more
information.

Questions or comments?

Indira Dutt

indidutt@gmail.com

twitter.com/indira_dutt

Photos except where noted by I. Dutt or public domain.